

## INFLUENCE OF CULTURAL VALUES ON EMOTION REGULATION AND WELL-BEING: A STUDY OF THAI UNIVERSITY STUDENTS\*

Shimon Zohar<sup>1</sup>

**Abstract:** Several strategies can be employed in face of an event that requires one to change the resulting emotion. It was suggested that the choice of a strategy is influenced by one's culture and may also influence one's well-being (Matsumoto, 2007). Findings demonstrate that in response to emotional eliciting event individuals of Asian cultures do not exhibit emotion that may disrupt the status-quo. This suppression of emotion was found to be detrimental to one's well-being. Poles apart, when facing a similar event, individuals of American and European cultures change the way they think about the event. This reappraisal of the event was found to be beneficial to one's well-being (Gross & John, 2003). In line with recent studies that suggest suppression may not be detrimental to well-being when it takes place in a culture where it is the norm, the purpose of the current study was to examine the influence of Thai cultural values on the choice of an emotion regulation strategy and well-being. Lack of instruments that allow the measurement of these variables for the Thai population, a preliminary study that consisted of a translation and validation of suitable instruments was performed. Results demonstrate the specific characteristics of Thai cultural values and cognitive emotion regulation strategies. While suppression was found to have a detrimental influence on well-being it was relatively minor, therefore suggesting that cultural norms do in fact play a role in this process.

**Keywords:** Cultural Values, Emotion Regulation, Well-Being

### Introduction

Societies can be differentiated from each other along a number of cultural dimensions (Markus & Kitayama, 1991; Triandis, 1989). One such differentiation is the manner in which one relates to others in the society. This pattern of relationship between the individual and the collective (such as a family group, work group, tribal group, etc.) is termed 'collectivism versus individualism' (Hofstede, 1980; Markus & Kitayama, 1991). A basic assumption of individualism is that the individual is independent from others (Oyserman,

Coon, & Kimmelmeier, 2002). Rights are assumed to be more important than duties, self-fulfillment and personal autonomy are desired, and the concern is for oneself and the immediate family (Hofstede, 1980). This worldview puts the individual in the center in terms of personal control, personal uniqueness, and personal goals (Markus & Kitayama, 1991; Triandis, 1995). A basic assumption of collectivism is that groups bind and mutually obligate individuals (Oyserman, Coon, & Kimmelmeier, 2002). Social units with common fate, common values, and common goals are in the center, and the individual may be seen as a component of these units (Triandis, 1995). This worldview focuses on a social way of being and an orientation towards the group one belongs to.

It was suggested that culture provides a meaning and information system with regards to the expected norms and behaviors by way of developing *cultural values*, such as the dimension of collectivism versus individualism (Matsumoto, 2007). This cultural value, which received added attention in early studies, was conceptualized as a continuum and operationalized by comparing European American culture as representing one pole and Asian culture as representing the opposite pole (Hofstede, 1980, Hui, 1988). Accordingly, Asian cultures were characterized as collectivistic and in order to comply with the above mentioned social demands its individuals were said to try and control their emotion in order to exhibit the required emotional response (Matsumoto, et al., 2008). This ability to modify emotion or control its expression in order to achieve a desired outcome is known as *emotion regulation*. Gross (2007) proposed a process model of emotion regulation that has been widely accepted as one of the foundations for the theoretical framework describing cultural values influence on emotion regulation. The model identifies five stages (originally termed categories) of emotion regulation creating an emotion regulation sequence: (a) Situation selection, referring to taking action to achieve a desirable emotion; (b) Situation modification, referring to efforts to modify the situation in order to change emotion; (c) Attention deployment, referring to paying attention to a certain aspect of the situation in order to change emotion; (d) Cognitive change, referring to changing one's appraisal of the situation in order to change emotion; and (e) Response modulation, referring to decreasing the emotion expressive behavior.

The cognitive change and response modulation stages received added attention and were each

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<sup>1</sup> Ph.D. Candidate in Counseling Psychology, Graduate School of Psychology, Assumption University, Thailand  
shimonthailand@gmail.com

represented in studies by a single strategy (Matsumoto, 2006; Markus & Kitayama, 1991) in the form of either reappraisal or suppression. Reappraisal is a specific strategy of the cognitive change stage. It refers to how individuals construct an experience that evokes emotion in order to bring about a change in its effect on the emotional experience. When reappraising an experience that provokes emotion, individuals change the content of their thoughts by re-evaluating the experience. For example, rather than being angry because of a rude remark made by a colleague, one might think that the colleague may be tired and that this was not a personal attack. Suppression is a specific strategy of the response modulation stage. It refers to the decreased expression of emotion. When suppressing emotion, individuals neutralize or control the emotional behavior. For example, one may try to be seen as being unaffected by a rude remark, although feeling anger inside.

A number of studies have found different cultural preferences relative to these two emotion regulation stages. As reviewed earlier the first association was found to be between collectivistic cultures and suppression, as shown by display rules studies (Matsumoto, 1992). Display rules are assumed to be rules learned at a young age that assist individuals in changing their emotional expressions according to social circumstances. For example, Japanese participants in comparison to American participants rated the expression of feelings (including disgust, sadness, and anger) as less appropriate to exhibit in public (Matsumoto, 1990). It was suggested that because collectivistic cultures place great importance on harmony, they may be characterized by a decrease in display of emotion that might disrupt the balance (Scherer, 1997). The association was found between individualistic cultures and reappraisal. For example, Filipino women with lower levels of education rated themselves higher on collectivistic descriptors, while those with higher levels of education rated themselves higher on individualistic descriptors. The authors suggested that this might represent a different cultural perspective and that using reappraisal to try and make a constructive change may be a form of problem-focused coping, which was found to be preferred by European Americans authors (Roseman, Dhawan, Rettak, & Naidu, 1995).

Most individuals experience both positive and negative emotions in the course of daily life. These emotions change in their prevalence, magnitude, and span, and are a result of environmental circumstances as well as the individual's ability to adapt and regulate the emotion. A transient negative emotion is usually countered by an adaptive regulation of emotion that is aimed at returning the individual to a normal mood. When the adaptive regulatory process is not activated,

depressed mood increases. When the negative emotion is not countered to return the individual to a normal mood, the individual may cross the assessment threshold and be diagnosed as having a depressive episode (Gross & Muñoz, 1995). Accordingly, studies associate successful emotion regulation (e.g., the ability to modify one's emotion to achieve a desired outcome) with higher levels of well-being and unsuccessful emotion regulation with lower levels of well-being as well as possible mental disorder (Gross & John, 2003; Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). This makes the choice of an emotion regulation strategy an important variable in the quality of human life.

### **Statement of the Problem**

Firstly, the conceptualization of collectivism and individualism as opposites was commonly characterized by a Japan-United States comparison, mainly due to the relatively high amount of studies examining these countries' differences and similarities across psychological processes, including those that relate to emotional experience (Matsumoto, 1992). Disparities in the conceptualization of cultural values, such as the use of dimensions that may not adequately capture and measure cultural values implies that current literature cannot account for the variables that are active on the individual level, thus resulting in ambiguous cultural differences. Moreover, other than a study by Hofstede (1980), which measured national level values, there has not been any study that examined Thai cultural values thoroughly within the context of emotion regulation. Thus, it is evident that there is a need to empirically measure cultural values at the individual level while capturing the specific dimensions of the culture that is being studied, and not contrast countries using the early dimensions (Hofstede, 1980). The current study addresses this limitation by culturally adopting the AAVS-M (Asian American Values Scale-Multidimensional; Kim, Li, and Ng, 2005) that was designed to measure Asian cultural values, namely: conformity to norms (not deviating from society's norms), family recognition through achievement (attributing the individual's success to the family), humility (being humble and modest), collectivism (prioritizing the group's goal over the individual's), and emotional self-control (showing self-restraint). By culturally adopting the instrument, and in light of the lack of prior research on those key variables, it is assumed to significantly contribute towards intercultural psychology research. Furthermore, it is anticipated to be an important source of information for future researchers interested in cultural values, their antecedents and consequences, by accurately measuring Thai cultural values.

Secondly, and perhaps a result of the described dichotomous distinction, the exclusive focus on the cognitive strategy of reappraisal constitutes a limitation of former studies. Although it was shown that certain cultural values are more associated with the use of this strategy, it is one of nine possible strategies in the same stage. The current study will use the CERQ (Cognitive Emotion Regulation on Questionnaire; Garnefski, Kraaij, and Spinhoven, 2002) that allows to measure several cognitive emotion regulation strategies, rather than focusing solely on the strategy of reappraisal, namely: blaming oneself (blaming oneself for an experience), blaming others (blaming others for an experience), rumination (thinking about the experience), catastrophizing (thinking how terrible the event was), reappraisal (giving positive significance to the event), acceptance (taking responsibility for the event), refocus on planning (thinking about how to handle the experience), putting into perspective (thinking in terms that decrease the event's seriousness), and positive refocus (thinking more positive thoughts). While reappraisal was found to be beneficial to one's well-being, rumination, catastrophizing, blaming oneself, and blaming others were consistently associated with detrimental outcomes to well-being (Garnefski et al., 2003). The cognitive emotion regulation stage is assumed to be conscious and dynamic; measuring it may offer insight as to how cultural values influence thought processes and preferences associated with emotion that needs to be regulated, with a view to increasing individuals' level of well-being.

Finally, while prior research focused mainly on either the influence of cultural values on emotion regulation strategies or the influence of emotion regulation strategies on variables of mental health, the current study integrates the three conceptual areas by proposing a model in which cultural values directly influence the choice of an emotion regulation strategy and indirectly influence well-being. Well-being was assessed by the Thai version of the Depression Anxiety Stress Scales 21 (DASS-21), developed by Lovibond and Lovibond (1995) which, as the name suggests, measures an individual's levels of depression, anxiety, and stress. The current study also used the Thai version of the General Health Questionnaire 12 (GHQ-12), developed by Goldberg and Williams (1988), which measures general health and temporary decrease in well-being and not major clinical disorders. This fits the framework of the study as the AAVS-M was originally used in the context of help-seeking behavior which may occur when an individual experiences increase in depression, anxiety, or stress levels or a relative decrease in well-being in the form of general health.

To that end the research was conducted in two stages: (1) translation and production of an equivalent Thai version of the instruments, and (2) statistical analysis aiming to measure the influence of the said about variables.

### Methodology

The current study used instruments that were not necessarily intended for cross cultural research (AAVS-M, CERQ). In this case a short translation may not be appropriate. In order to ensure that the produced Thai versions will be equivalent, a combination of back translation and committee approaches was used in the following manner: (a) the instruments were translated into Thai by a bilingual translator; (b) independently, another bilingual translator back-translated the instruments to the original English language from Thai; (c) the two versions (the original English and the English back-translated instruments) were compared by the researcher; (d) consultation meeting between the researcher and the translators was held to resolve disparities between the original and the back-translated English versions. Upon completion of the described process a satisfactory version of each questionnaire in the Thai language was generated and administered to Thai undergraduate university students. Construct validity was tested using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Internal reliability was tested using Cronbach's alpha. Path analysis was conducted to test the influence of Thai cultural values on emotion regulation strategies and well-being.

### Instruments

**AAVS-M.** This 42-item questionnaire measures adherence to Asian values and constitutes of five dimensions: (1) conformity to norms, (2) collectivism, (3) emotional self-control, (4) family recognition through achievement, and (5) humility. Items range from 1 (*strongly disagree*) to 7 (*strongly agree*). The internal reliability as measured by coefficient alphas at Time One for the AAVS-M total, collectivism, conformity to norms, emotional self-control, family recognition through achievement, and humility were .92, .86, .84, .86, .91, and .80, respectively. At Time Two (two weeks later), the coefficient alphas were .94, .86, .90, .89, .95, and .86, respectively. The test-retest reliabilities were .92, .73, .76, .92, .92, and .81, respectively.

**CERQ.** This 36-item questionnaire measures emotion regulation by way of thinking differently about an event and constitutes of nine dimensions: (1) self-blame, (2) acceptance, (3) rumination, (4) refocus in planning, (5) positive refocus, (6) reappraisal, (7) putting into perspective, (8) catastrophizing, and (9)

blaming others. Items range from 1 (almost never) to 5 (almost always). The internal consistency of the subscales, as measured by Cronbach's alpha across diverse populations, was found to be 'good to very good' (in almost all of the cases above .70, and for some above .80). Most item-total correlations were well above  $r = .40$ . The test-retest reliability was measured by administering the CERQ twice to adults from the general population in a 14-month interval. Test-retest correlations ranged from  $r = .48$  (refocus on planning) to  $r = .65$  (blaming others), suggesting that, indeed, the styles are reasonably stable.

SQ. Suppression was measured using the 6-item Suppression Questionnaire or SQ. Four items were adopted from the Emotion Regulation Questionnaire or ERQ (Gross & John, 2003) and two were designed for the purpose of the study. Each item is rated from 1 (*strongly disagree*) to 7 (*strongly agree*).

DASS-21. This 21-item questionnaire measures core symptoms of (1) depression, (2) anxiety, and (3) stress. Items range from 0 (did not apply to me at all) to 3 (applies to me much or most of the time). The DASS-21 was developed using non-clinical samples and is commonly used to measure psychological distress for university students (Lovibond & Lovibond, 1995), as is the case in the current study. It is also efficient for measuring anxiety and stress, not only depression. The internal consistency of the DASS-21 for anxiety, depression, stress, and the total scale was .88, .82, .90, and .93, respectively. The internal consistency of the Thai version as measured by Cronbach's alpha ranged from  $r = .69$  to  $r = .87$  (Zohar, 2012).

GHQ-12. This 12-item questionnaire measures well-being. Items range from 0 (*better than usual*) to 5 (*much less than usual*). Studies examining the GHQ-12 reliability reported high levels ranging from .79 to .91 (Goldberg & Williams, 1988). The Thai version of the GHQ-12 was found to have good reliability and validity. The internal consistency as measured by Cronbach's alpha ranged from  $r = .86$  to  $r = .95$ . Sensitivity ranged from 78.1% to 85.3% and specificity ranged from 84.4% to 89.7%. It was found to be a satisfactory instrument in detecting psychiatric disorders for Thai respondents (Nilchaikovit, Sukying, & Silpakit, 1996).

### Participants

The participants consisted of 526 Thai university undergraduates who were given the questionnaires while attending class and were asked to answer them anonymously and voluntarily. Their age ranged from 17 to 29 years, with a mean age of 19.87 years (median=20.00 years). The majority of the student participants reported majoring in Business Administration (28.1%), English (18.6%), and

Economics (18.3%). The Dissertation Committee as well as the Chairperson of Management Department at ABAC University gave institutionalized approval for the study. In order to comply with the necessary ethical standards the participants received information sheets that included: (a) introduction to the general purpose of the research; (b) an assurance that their identity will be kept anonymous; (c) their contact details to receive the research results later on; and (d) contact details should unforeseen results from the study occur.

### Design and Analysis

Participants were divided randomly into two groups. The data from the first group of participants were analyzed by exploratory factor analysis (EFA) in order to explore the underlying factors for each specific instrument. The data from the second group were analyzed using confirmatory factor analysis (CFA) in order to test if items loading on the factors identified by the EFA are suitable measures of those latent constructs (Ho, 2006). Internal reliability was tested using Cronbach's alpha and path analysis to assess the direct influence of cultural values on cognitive emotion regulation and emotion suppression strategies as well as indirect influence, through these strategies, on well-being.

### Results

#### *Translation and Equivalence*

When conducting the translation and back translation with each translator independently, the study's equivalence challenges were evident, as seen in the different wordings obtained from each translator separately. To clarify these possible differences, committee discussion was performed. The discussion revealed that, although several sentences looked different from the original sentences, the differences reflected the use of several words that were similar in meaning. Although this makes the sentence appear very different from the original sentence, it did not reflect any difference in the concepts or a culturally specific issue.

#### *EFA*

Unlike the factors structure of the DASS-21 and GHQ-12 that were identical to the original scale (additionally SQ was found to have one main factor labeled suppression), the results indicate that the factor structures that underlie the original English instruments of the AAVS-M and CERQ were not replicated for the Thai sample.

The participants' responses to the Thai AAVS-M items were subjected to principle components analysis, followed by a varimax rotation. Inspection of the

results revealed that loaded factors had eigen-values greater than 1.00. However, examination of the items that loaded on these 12 factors indicated that only the first five factors were interpretable. In conjunction with results obtained from the scree-plot, these findings suggested a five-factor solution. These five factors accounted for 15.96%, 8.30%, 4.93%, 4.67%, and 3.57% of the total variance, respectively, for a combined total of 37.43%. In order to clarify these five factors, varimax rotation, limited to five factors was then conducted. From the obtained rotated factor matrix, a total of 31 items were retained, using the criteria of selecting items with factor structure coefficients greater than or equal to 0.40 and no significant cross-loadings. Thus, the factor structure of the Thai version of the AAVS-M scale appears to be somewhat different from that of the original scale, in that the factor of “conformity to norms” is not represented in the Thai AAVM, and “family recognition through achievement” was divided into “as valued by the family” and “as reflecting on the family.”

Participant’s responses to the CERQ items were subjected to a principal components analysis, followed by varimax rotation. Inspection of the results revealed that eight factors had eigen-values greater than 1.00. However, examination of the items that loaded on these 8 factors indicated that only the first three factors were interpretable. In conjunction with the results obtained from the scree-plot, these findings suggested a three-factor solution. These three factors accounted for 23.71%, 12.48%, and 4.16% of the total variance respectively, for a combined total of 40.35%. In order to clarify these three factors, varimax rotation, limited to three factors was conducted. From the obtained rotated factor matrix, a total of 28 items were retained, using the criteria of selecting items with factor structure coefficients greater than or equal to 0.40 and no significant cross-loading. Thus, the factor structure of the Thai version of the CERQ appears to be different from that of the original scale, in that the original nine factor structure (self-blame, rumination, acceptance, refocus on planning, positive refocus, reappraisal, putting into perspective, catastrophizing, blaming others) has been reduced to just three factors that were named according to their main theme and estimated influence on well-being: negative oriented strategies (comprised mainly of catastrophizing, rumination, self-blame, and other blame), positive active oriented strategies comprised mainly of reappraisal, positive refocus, and refocus on planning), and positive passive oriented strategies (comprised mainly of acceptance).

#### *Reliability Analysis*

Prior to computing the 13 scales (recognition through achievement as valued by the family, recognition through achievement as reflecting on the family, collectivism, emotional self-control, humility, negative oriented strategies, positive active oriented strategies, positive passive oriented strategies, suppression, psychological well-being, depression, stress, and anxiety), reliability analysis was conducted on the items that represent the 13 scales. The purpose of the reliability analysis was to maximize the internal consistency of the 13 measures by identifying those items that are internally consistent (i.e., reliable), and to discard those items that are not. Two criteria were used to eliminate items from these measures. First, an item was eliminated if the inclusion of that item resulted in a substantial lowering of Cronbach’s alpha (Walsh & Betz, 1985). Second, an item was considered to have an acceptable level of internal consistency if its corrected item-total (IT) correlation was equal to or greater than 0.33 (Hair, Anderson, Tatham, & Black, 1997). Items were retained to represent the measure of stress, 6 items were retained to represent the measure of anxiety, 6 items were retained to represent the measure of depression, 12 items were retained to represent the measure of psychological well-being/general health, 5 items were retained to represent the measure of collectivism, 9 items were retained to represent the measure of family recognition as valued by the family, 6 items were retained to represent the measure of family recognition as reflecting on the family, 5 items were retained to represent the measure of emotional self-control, 5 items were retained to represent the measure of humility, 10 items were retained to represent the measure of negative oriented strategies, 12 items were retained to represent the measure of positive active oriented strategies, 6 items were retained to represent the measure of positive passive oriented strategies, and 4 were retained to represent the measure of suppression. The computed Cronbach’s alpha coefficients for the factors ranged from .58 (suppression) to .87 (positive active oriented strategies; stress). Each of the 13 factors were computed by summing across the items that make up that factor and their means calculated.

#### *CFA*

Confirmatory factor analysis (CFA) was carried out to evaluate the adequacy of the factor structures identified in the exploratory factor analysis (EFA) of the Thai instruments. CFA, unlike EFA, allows the researcher to explicitly posit an *a priori* model (e.g., on the basis of the factors identified through exploratory factor analysis) and to assess the fit of this model to the observed data. Based on Hair et al.’s (1997) suggestion that three is the preferred minimum

number of indicators to represent a construct, it was decided to limit the number of indicators to three for each of the model's latent construct. This was achieved by using "item parcels" to represent the original number of items for each latent construct. This technique involves summing responses to individual items and then using scores on these summed parcels in the latent variable analysis. For example, on the basis of the reliability analysis of the 12 items representing the latent cognitive coping strategy of "positive active oriented strategies," the items were divided into three parcels, and the items in each parcel were then summed to form three measured variables to operationalize the latent construct. Adapting the procedure described by Russel, Kahn, Spoth, and Altmaier (1988), the development of these item parcels involved the following steps: (1) A reliability analysis in the 12 items assessing positive active oriented strategies factor was conducted; (2) The items were rank-ordered on the basis of their corrected item-total (I-T) correlation coefficients; and (3) Items were assigned to parcels in a way that equated the average I-T coefficient of each parcel of items with the factor.

For the Thai AAVS-M a chi-square goodness-of-fit (via statistical program AMOS 18; SPSS Inc., 2010) was employed to test the null hypothesis that the sample covariance matrix was obtained from a population that has the proposed model structure. Results indicate that the model fitted the data well. Although the overall chi-square value was significant,  $\chi^2(df=79) = 320.80, p < .001$ , the incremental fit indices (Normed Fit Index – NFI, Incremental Fit Index – IFI, Tucker-Lewis Index – TLI, Comparative Fit Index – CFI) are close to 0.90 (range: 0.80-0.88). These fit indices indicated that the model provided a good fit relative to a null or independent model (i.e., the posited model represented between 80% to 88% improvement in fit over the null or independent model), and supports the hypothesized structure of the posited five-factor model. The RMSEA value of 0.07 is also within the range (.04-.08) suggested by Browne and Cudeck (1993) and indicates that the model fits the population covariance matrix well. The standardized regression coefficients (factor loadings) for the measurement indicators were all positive and significant by the critical ratio test, (C.R.  $> +1.96, p < .001$ ). Standardized loadings ranged from 0.51 to 0.81 ( $M = 0.63$ ). These values indicated that the indicator variables hypothesized to represent their respective latent constructs did so in a reliable manner. The percentage of residual (unexplained) variance for the 15 indicator variables ranged from 34% (i.e. 66% of the variable explained) to 84% (i.e. 16% of the variance explained).

For the Thai CERQ a chi-square goodness-of-fit

test was employed to test the null hypothesis that the sample covariance matrix was obtained from a population that has the proposed model structure. Results indicated that the model fitted the data well. Although the overall chi-square value was significant,  $\chi^2(df=24) = 75.13, p < .001$ , the incremental fit indices (Normed Fit Index – NFI, Incremental Fit Index – IFI, Tucker-Lewis Index – TLI, Comparative Fit Index – CFI) are close to or above 0.90 (range: 0.88-0.91). These fit indices indicated that the model provided a good fit relative to a null or independent model (i.e., the posited model represented between 88% to 91% improvement in fit over the null or independent model), and support the hypothesized structure of the posited three-factor model. The RMSEA value of 0.09 is slightly over the range (.04-.08) suggested by Browne and Cudeck (1993) and indicates that the model fits the population covariance matrix relatively well. The standardized regression coefficients (factor loadings) for the measurement indicators were all positive and significant by the critical ration test, (C.R.  $> +1.96, p < .001$ ). Standardized loadings ranged from 0.48 to 0.71 ( $M = 0.63$ ). These values indicated that the indicator variables hypothesized to represent their respective latent constructs did so in a reliable manner. The percentage of residual (unexplained) variance for the 9 indicators variables ranged from 50% (i.e., 50% of the variance explained) to 77% (i.e. 23% of the variance explained).

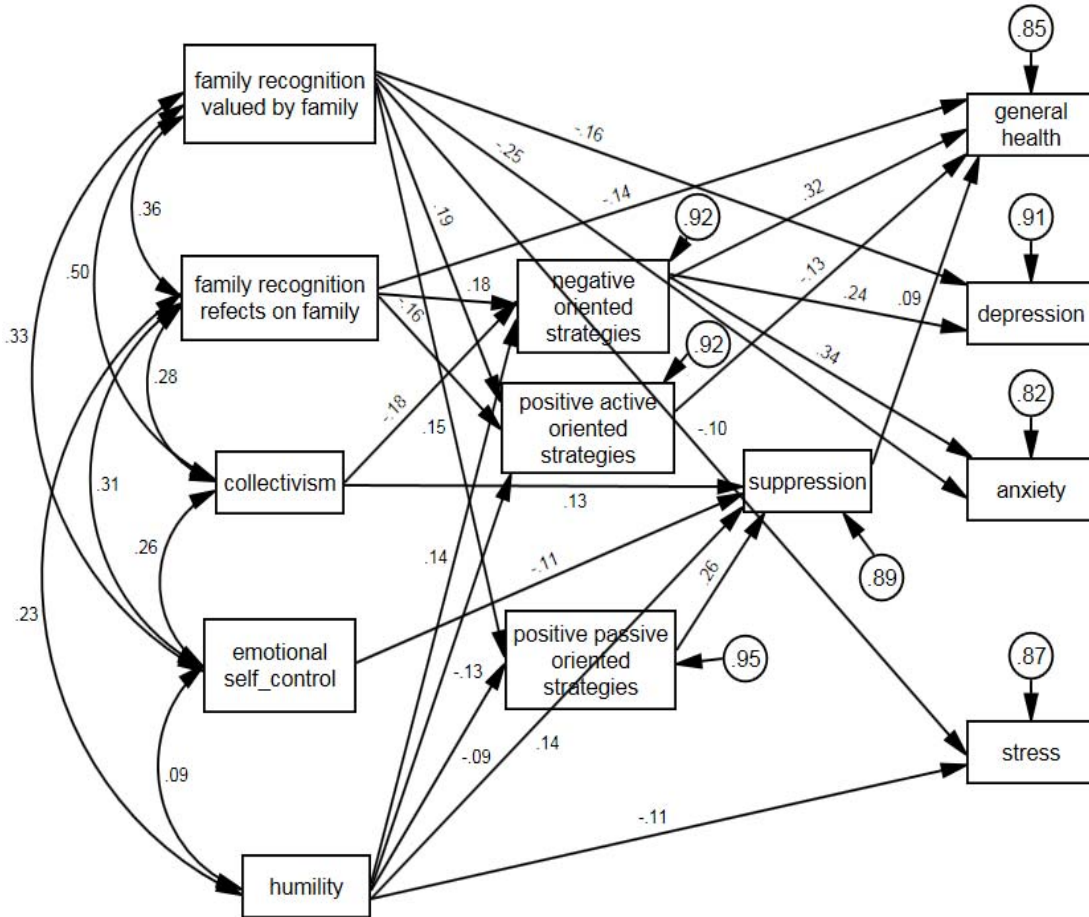
#### *Path Analysis*

Using the statistical program AMOS 18.0 (SPSS Inc., 2010) which analyzed the covariance matrix generated from the model's measurement variables, although the overall chi-square goodness-of-fit value was significant,  $\chi^2(df=3)=38.84, p < .001$ , the incremental fit indices (NFI, IFI, CFI) are all above 0.90 (range: .980-.982). These fit indices indicated that the model provided a good fit relative to a null or independent model (i.e., the posited model represented 98% improvement in fit over the null or independent model), and support the hypothesized structure of the path model for general health. The model's coefficients provide an estimate of proportion of variance in each endogenous variable not predicted by the model and subtracting these values from 1.00 indicates the proportion of variance predicted by the model. These coefficients indicated that the posited model accounted for 8% of the variance in the variable of negative oriented strategies, 8% of the variance in the variable of positive active oriented strategies, 5% of the variance on the variable of positive passive oriented strategies, 15% in the variable of general health, 9% of the variance in the variable depression, 18% of the variance in the variable anxiety, and 13% of the variance in the

variable stress. The following figure shows the path model for predicting well-being with significant standard regression coefficient and significant correlations:

regulation approaches, rather than nine separate strategies, may better represent Thai university student preferences.

Previous studies have shown that emotion regulation in the form of suppression is not beneficial



**Figure 1: Path Model for Predicting Well-Being with Significant Standard Regression Coefficients and Significant Correlations (p < .05)**

**Discussion**

Results demonstrate that while some similarity exists between the factors of the Thailand English AAVS-M and CERQ, they are assembled differently and that may point to different cultural priorities. A possible explanation for this difference of the Thai AAVS-M is that the English version AAVS-M was designed to measure a wide range of Asian cultures that would best fit several ethnic Asian American values and not one specific ethnic value. This may suggest that the Thai AAVS-M better captures Thai cultural values. Additionally, the factor of “conformity to norms” that was omitted in the Thai version may be represented by one of the two “family recognition through achievement” factors, thus pointing to the role of the family as the unit that conforms to norms rather than the individual. A possible reason for the grouping of the Thai CERQ is that three general emotion

(Matsumoto, 1992). The results show that the correlation of suppression is well-being and is low, especially in relation to the negative oriented strategy group. This may suggest that keeping emotions bottled inside may not be as bad to a Thai as thinking about it in a negative way. It may be that thoughts of how severe the event was or the blame that one or others deserve necessarily makes one face the event, while suppressing it allows for avoidance by ignoring the emotion and its consequences. Such avoidance done at the individual level may also allow for avoidance of conflicts at the group level and as such play a role in preserving the status quo. Perhaps it is easier to reach a smooth interpersonal relationship with others if one can keep the emotion hidden and not express it. This supports recent findings that suggest suppression will not necessarily have a detrimental outcome if it is normative in the culture.

The results also demonstrate that in addition to the use of suppression, Thai university students also use positive active strategies that include the strategy of reappraisal. This unexpected and positive result requires further research.

### Limitations

This study was not conducted without limitations. Thailand is a multi-ethnic country, with more than 30 ethnic groups that include Chinese throughout the country, Khmers along the border with Cambodia, and Malays in the south. Several hill tribes also reside in the south (e.g., Moken, Semag), northeast and central (e.g., Mon, Kui), and north (e.g., Hmong, Akha, Karen), adding to the heterogeneity. Furthermore, while the Thai questionnaires were found to be adequate measures of the relevant levels of cultural values, emotion regulation strategies and well-being, they cannot necessarily be generalized to the entire Thai population. Hence, it is recommended that future studies using the same instruments on different Thai populations ensure that the translated version is adequate for the specific Thai population under study. Despite these limitations, nonetheless, it is evident that an exploratory study of this nature would bridge the knowledge gap with respect to the direct and indirect influences of cultural values on emotion regulation and well-being, a perennial topic of interest that spans across developmental transitions not only among Thais but, quite possibly, amongst other people throughout the world.

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