PSYCHOLOGICAL WELL-BEING: A COMPARATIVE STUDY BETWEEN JAPANESE AND EGYPTIAN STUDENTS

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The present study aimed to identify the differences between Japanese and Egyptian university students in psychological well-being (PWB). Japanese students (n = 138; 87 females and 51 males) and Egyptian students (n = 150; 84 females and 66 males) responded to a psychological well-being inventory. The results indicated that there are significant differences between Japanese and Egyptian students, with Japanese students scoring higher levels in autonomy and personal growth, and Egyptian students scoring higher levels in environmental control, self-acceptance, purpose in life, and positive relationships with others. No significant differences were observed for total psychological well-being score. We conclude that sex has a significant effect on self-acceptance only among the Egyptian samples, but has no significant effect in the Japanese student group. The findings are discussed in relation to psycho-social perspective and other cross-cultural studies.

Key words: psychological well-being, culture, college students

Psychological Well-Being: Concept and Structure

When we reviewed previous studies of psychological well-being, we found that there are two competitive approaches to well-being that have emerged as competing opponents in the research area: subjective well-being (SWB: Diener, 1994; Diener and Lucas 2000) and psychological well-being (PWB: Ryff 1989; Ryff and Singer 1998). A new theory-based construct of SWB, called ontological well-being, OWB, has been developed by adding a whole time perspective into this framework (Simsek, 2008). People have always been interested in the answer to the question: What is a good life? Frequently, the good life is directly connected to well-being and a happy life. Back in the times of the ancient Greeks, Aristotle wrote that the quest for happiness is the most important striving of humankind. Nowadays, we see that the attention to the good life has been increasing as an important realm of research within the social sciences. We will discuss three perspectives for well-being (SWB, PWB, and OWB), although in our present study we directed our focus on the concept and study, in particular, of psychological well-being.
Cognitive and Emotional Perspective on SWB: Hedonistic Approach

In a recent review of the progress and opportunities in assessing subjective well-being, Diener (1994) proposed that people’s well-being must be conceived as, and assessed through measurement of, multiple cognitive (life satisfaction, morale) and affective (positive emotions, negative affects) components, and that such a long-term well-being is a meaningful construct in terms of cross-situational consistencies as well as of temporal stabilities (Diener, 1994). Subjective well-being is generally considered as a component of quality of life scales (Parmenter, 1994). General well-being has also been defined as a balanced nourishment of the mind, body and spirit (Vella-Brodrick and Allen, 1995). According to Veit and Ware (1983), a general positive affect and emotional ties are dimensions of subjective well-being (and not objective well-being usually associated with a quality of life concept). Parmenter (1994), Okun and Stock (1987) define well-being as “an umbrella construct referring to the affective reactions of individuals to their life experiences along a positive-negative continuum”. It should have three subordinate components that involve specific time frame cognitive content: 1) life satisfaction as an evaluation of goal attainment, past-oriented with strong cognitive content; 2) morale condition toward discipline and confidence, future-oriented with moderate cognitive content; and 3) happiness as affective reaction toward daily life founded on positive and negative emotions, present-oriented with low cognitive content. Happiness is then a major component of well-being. It refers to both an affective component expressing a “hedonic level of affect” (pleasant affective experiences outbalancing unpleasant ones) and a cognitive component regarding the sentiment or the perception that wants have been met (Veenhoven, 1994). Others stress the cognitive component of subjective well-being and define it as “a thoughtful appraisal of quality of life as a whole, a judgment of satisfaction with life” (Argyle, 1987). On the whole, research confirms (Diener, 1984) that subjective well-being is based both on an affective (hedonic) component and a cognitive component, namely life satisfaction, defined as “a global judgment that people make when they consider their life as a whole” (Diener, 1994; Masse et al., 1998).

Integration Perspective on PWB: Eudaimonia Approach

This perspective contains two approaches. The first one is the Ryff and Singer approach, with their discussion beginning with Ryff’s (1989) model and measure of psychological well-being, which falls within the eudaimonic tradition and was originally formulated to challenge the prevailing hedonistic view of well-being within psychology. In their paper, Ryff and Singer review work of theorists dating back to Aristotle that informed the development of Ryff’s concept. The reader will see that it derives not only from Aristotle’s view of the highest human good involving virtue and the realization of one’s potential, but also from the work of psychodynamically and humanistically-oriented psychologists such as Jung, Maslow, Allport, Rogers, and self-determination theory (Ryan and Deci, 2000; Deci and Ryan, 2008).

In addition, Ryff incorporated insights from her own research on development during the course of life (Ryff and Keyes, 1995), and on an elaborate overview of philosophical attempts to define the good life (Becker, 1992). She argued that all of these perspectives
contain similar and complementing criteria of positive psychological functioning. An important similarity is that the criteria are all formulated in terms of well-being rather than on illness. In fact, this perspective has generated a new model of health based on the conception of health as “not only the absence of illness but the presence of something positive” (WHO, 1948; Ryff and Singer, 1998). In her model, Ryff distinguished six core dimensions and also developed an instrument that is now widely used by researchers interested in well-being. The theoretically derived dimensions of positive psychological health included Self-acceptance, Positive relations with others, Autonomy, Environmental mastery, Purpose in life, and Personal growth (Ryff, 1989). Thus, her scale of psychological well-being involves assessing these six subscales. Research by Ryff, Singer, and their colleagues has shown that a higher level of psychological well-being is associated with better neuroendocrine regulation, lower cardiovascular risk, and better immune functioning (Van Dierendonck, et al., 2008).

Ryff (1989) explained the six dimensions for psychological well-being as follows:

**Environmental Mastery.** The individual’s ability to choose or create environments suitable to his or her psychic conditions is defined as a characteristic of mental health. Maturity is seen to require participation in a significant sphere of activity outside of self. Life span development is also described as requiring the ability to manipulate and control complex environments. These theories emphasize one’s ability to advance in the world and change it creatively through physical or mental activities. Successful aging also emphasizes the extent to which the individual takes advantage of environmental opportunities. These combined perspectives suggest that active participation in, and mastery of, the environment are important ingredients of an integrated framework of positive psychological functioning.

**Self-acceptance.** The most recurrent criterion of well-being evident in the previous perspectives is the individual’s sense of self-acceptance. This is defined as a central feature of mental health as well as a characteristic of self-actualization, optimal functioning, and maturity. Life span theories also emphasize acceptance of self and of one’s past life. Thus, holding positive attitudes toward oneself emerges as a central characteristic of positive psychological functioning.

**Autonomy.** There is considerable emphasis in the prior literature on such qualities as self-determination, independence, and the regulation of behavior from within. Self-actualizers, for example, are described as showing autonomous functioning and resistance to enculturation. The fully functioning person is also described as having an internal locus of evaluation, whereby one does not look to others for approval, but evaluates oneself by personal standards. Individuation is seen to involve a deliverance from convention, in which the person no longer clings to the collective fears, beliefs, and laws of the masses. The process of turning inward in the later years is also seen by life span developmentalists to give the person a sense of freedom from the norms governing everyday life.

**Personal growth.** Optimal psychological functioning requires not only that one achieve the prior characteristics, but also that one continue to develop one’s potential, to grow and expand as a person. The need to actualize oneself and realize one’s potentialities
is central to the clinical perspectives on personal growth. Openness to experience, for example, is a key characteristic of the fully functioning person. Such an individual is continually developing and becoming, rather than achieving a fixed state wherein all problems are solved. Life span theories also give explicit emphasis to continued growth and the confronting of new challenges or tasks at different periods of life. Thus, continued personal growth and self-realization is a prominent theme in the aforementioned theories. It may also be the dimension of well-being that comes closest to Aristotle’s notion of eudaimonia as described earlier.

**Purpose in life.** Mental health is defined to include beliefs that give one the feeling there is purpose in and meaning to life. The definition of maturity also emphasizes a clear comprehension of life’s purpose, a sense of directedness, and intentionality. The life span developmental theories refer to a variety of changing purposes or goals in life, such as being productive and creative or achieving emotional integration in later life. Thus, one who functions positively has goals, intentions, and a sense of direction, all of which contribute to the feeling that life is meaningful.

**Positive relations with others.** Many of the preceding theories emphasize the importance of warm, trusting interpersonal relations. The ability to love is viewed as a central component of mental health. Self-actualizers are described as having strong feelings of empathy and affection for all human beings and as being capable of greater love, deeper friendship, and more complete identification with others. Relating warmly to others is posed as a criterion of maturity. Adult developmental stage theories also emphasize the achievement of close unions with others (intimacy) and the guidance and direction of others (generatively). Thus, the importance of positive relations with others is repeatedly stressed in these conceptions of psychological well-being (Ryff, 1989).

The second approach in this perspective was produced by Waterman (1993) and is concerned with living well or actualizing one’s human potentials. This conceptualization maintains that well-being is not so much an outcome or end state as it is a process of fulfilling or realizing one’s dimensions or true nature—that is, of fulfilling one’s virtuous potentials and living as one was inherently intended to live. As pointed out in several of the papers in this special issue, the eudaimonic view can be traced to Aristotle (translated by Irwin, 1985) and is aligned with various 20th century intellectual traditions, including humanistic psychology.

**Ontological Well-Being as a Theory-Based Construct of Subjective Well-Being**

This theory is based on whole-time perspective. According to Aristotle (1991a), without time, nothing is meaningful for human beings. Moreover, according to Aristotle (1991b), time is the base for rationality and awareness. Smith (2001), in this respect, stated that eudaimonia is strictly related to rationality and self awareness, by means of which we can locate the proper meaning for every action and goal. The evaluation of life in such a perspective is basically organized by the perception of time and makes it relevant to many conceptualizations in the study of SWB and personality in general. As a result of a whole time perspective, the ‘whole’ in theory refers to one’s life as a personal project. As can be seen from the previous studies, such an evaluation is inevitable for most people
from all age groups. It indicates that there is a strong inclination among individuals to
develop more abstract, evaluative and organized mental activity with regard to life
experiences, whether related to the past, the present, or the future (Bluck and Habermas,
2001; McAdams, 2001; Staudinger, 2001). Finally, Simsek (2008) suggested that six
dimensions are posited: cognitive and affective evaluations of the past, present and future.

On the other hand, a new model of longitudinal well-being was recently advanced by
Lyubomirsky, King, and Diener (2005) and Sheldon and Lyubomirsky (2006). The model
specifies three major determinants of well-being with temporal reference: (1) the person’s
genetic set point or set range (which reflects personality and temperament), (2) the
person’s current circumstances (demographic, geographic, and contextual), and (3) the
person’s current intentional activities (behavioral, cognitive, and affective). Research on
subjective well-being (SWB) has exploded over the last 20 years, with hundreds of
citations per year. A variety of correlates of happiness, positive mood, and life satisfaction
have now been identified (DeNeve and Cooper, 1998). For example, well-being has been
shown to be associated with certain demographic variables (e.g., Argyle, 1999; Diener,
Suh, Lucas, & Smith, 1999), personality traits and attitudes (e.g., Diener et al., 1999), and
goal characteristics (e.g., McGregor and Little, 1998).

Psychological Well-Being and Culture

The major idea behind the cultural approach is that people are socialized in a culture
to have certain values, goals, and behaviors. Carrying out the behaviors that are valued
within the culture is likely to lead to feelings of well-being, because the person has

Figure 1 shows Ryff’s dimensions of psychological well-being:

![Diagram of Ryff's dimensions of psychological well-being.](image)
adopted the cultural goals, and experiences emotions that are socialized to the cultural norms (Diener & Diener, 2002). In cross-cultural studies of well-being, psychologists have shown ways in which well-being or its constituents are tailored by culture (Arrindell et al., 1997; Kitayama, Markus, & Kurokawa, 2000). Some psychologists have taken the fact of cultural variance to imply that there is the universal notion of well-being (Ryan and Deci, 2001). Social psychologists recognized that, because of cultural differences, people’s behavior and subsequent outcomes can vary from culture to culture and thus, particular research on well-being cannot be applied to every individual and every culture (Kwon, 2008). Any study of well-being, however, needs to diversify its sampling of cultures (Kim-Prieto and Eid, 2004). Compared to the large amount of cross-cultural research done on PWB in different countries in East Asia and Western Europe/North America, the field knows very little about other cultures (e.g., African and Arab countries), and we could not find any significant paper devoted to such research in these specific regions. Qualitative data can reveal culture-specific connotations of well-being that are difficult to capture through standard questionnaires (Lu & Gilmour, 2004; Suh and Oishi, 2004), so that such measuring instruments developed for one particular culture-specific study cannot be assumed to be reliable when applied to another.

Some research has reported cross-cultural differences in life satisfaction and subjective well-being (e.g., Park, Huebner, Laughlin, Valois, & Gilman, 2004; Gilman, Asby, Sverko, Florell, & Varjas, 2005). The Geert Hofstede analysis (Hofstede, 2001) for the Arab World, that includes the countries of Egypt, Iraq, Kuwait, Lebanon, Libya, Saudi Arabia, and the United Arab Emirates, demonstrates that the Muslim faith plays a significant role in the people’s lives. Large Power Distance (PDI) of 80, and Uncertainty Avoidance (UAI) of 68, are predominant Hofstede Dimension characteristics for the countries in this region. These societies are more likely to follow a caste system that does not allow significant upward mobility of its citizens. They are also highly rule-oriented with laws, rules, regulations, and controls in order to reduce the amount of uncertainty, while inequalities of power and wealth have been allowed to grow within the society. When these two Dimensions are combined, it creates a situation where leaders have virtually ultimate power and authority, and the rules, laws and regulations developed by those in power reinforce their own leadership and control. It is not unusual for new leadership to arise from armed insurrection—the ultimate power—rather than from diplomatic or democratic change. The high Power Distance (PDI) ranking is indicative of a high level of inequality of power and wealth within the society. These populations have an expectation and acceptance that leaders will separate themselves from the group and this condition is not necessarily subverted upon the population, but rather accepted by the society as their cultural heritage. The high Uncertainty Avoidance Index (UAI) ranking of 68 indicates the society’s low level of tolerance for uncertainty. In an effort to minimize or reduce this level of uncertainty, strict rules, laws, policies, and regulations are adopted and implemented. The ultimate goal of these populations is to control everything in order to eliminate or avoid the unexpected. As a result of this high Uncertainty Avoidance characteristic, the society does not readily accept change and is very risk-adverse. The Masculinity index (MAS), the third highest Hofstede Dimension, is 52, only slightly
higher than the 50.2 average for all the countries included in the Hofstede MAS Dimension. This would indicate that while women in the Arab World are limited in their rights, it may be due more to Muslim religion rather than a cultural paradigm. The lowest Hofstede Dimension for the Arab World is the Individualism (IDV) ranking at 38, compared to a world average ranking of 64. This translates into a collectivist society as compared to Individualist culture and is manifested in a close long-term commitment to the member ‘group’, that being a family, extended family, or extended relationships. Loyalty in a collectivist culture is paramount, and quite often overrides most other societal rules. (Hofstede, 2001). For Arab and Muslim cultures (Inglehart, 1997) on the World Values Survey, which conducts global opinion polls on a wide range of attitudes across an 84-country sample and publishes an index of psychological well-being derived from responses to two questions, one asking respondents to assess their personal happiness and another to score their life satisfaction, there is a correlation between national scores on subjective assessments of well-being and per capita income, but it is far from perfect. Controlled for income, there is some evidence that Muslims are usually happy after controlling for their countries’ level of development and other factors. On other hand, most of the Arab countries surveyed fall into the category labeled “medium-low,” with the one exception being Saudi Arabia falling into the category “medium-high”. Egyptian people have a high level of psychological well-being, and Egyptian studies on happiness, life satisfaction and well-being referred to the fact that there were many reasons for this, such as life satisfaction, social competence, altruism (Khalf Allah, 2005), social support (Ali, 1998), extroversion, openness to experience, agreeableness and level of religiosity (Haredy and Shawky, 2002). Although Egyptian people have high levels of life stress and daily hassles, they do have some positive traits such as optimism, positive coping and sense of humor as mediator variables, helping them to stay healthy and to have high levels of life satisfaction (Mohammed, 1999, 2002).

However, Hofstede referred to the Buddhist society of Japan (89% Buddhist and 9% other religions) as having Long Term Orientation (LTO) as the most closely correlating dimension, with its LTO score of over 80 and ranked 4th among a group of 23 countries (Hofstede, 2001). The IDV in Japan is ranked at 43, compared to a world average ranking of 64, PDI is 50 and UAI at 88, with MAS at 91 (Hofstede, 2009).

Japanese tend more toward the collectivist side for the IDV, as they are integrated into strong, cohesive in-groups, often comprised of extended families (with uncles, aunts and grandparents) who continue protecting them in exchange for unquestioning loyalty. According to Markus and Kitayama (1991), normative social behavior and cultural models of the self might also shape the desirability of certain emotions. In collectivist cultures, emotions resulting in forms of sympathy and humility may feel good because they are consistent with the cultural goals of interdependence. Kitayama, Markus, and Matsumoto (1995) found that among Japanese college students, the frequency of experiencing generalized forms of good feelings, such as happiness and elation, is strongly correlated with the frequency of experiencing socially engaged forms of good feeling in respect for others.

On the other hand, Yamamoto and Wallhagen (2002) reported that to describe the
state of psychological well-being, the Japanese often use the word *ikigai* which refers to 1) specific experience that creates a sense of worth and happiness, 2) the resultant cognitive evaluation that finds one’s life meaningful because of the experience, and 3) the sense of fulfillment and joy that is derived from the cognitive evaluation. Kwon (2008) referred to major conflicting criteria in evaluation of one perspective of well-being for East Asians, in the recognition of standards of normative behavior: East Asian culture identifies with collectivism, and people in a collectivist culture develop “other-focused” emotions such as shame and sympathy. Yamamoto and Wallhagen (2002) referred to The Japanese Self as characterized by its emphasis on situationality and relativity, in order to maintain harmony in interpersonal relationships, where the presentational self becomes situation-specific and relational to the interactants. Qing, Shono, and Kitamura (2009) referred to PWB dimensions that were moderately correlated with depression and anxiety among Japanese university students. This was supported by Asakawa (2010) who concluded that Japanese college students were more likely to report active coping, higher self-esteem, sense of fulfillment and greater satisfaction with their lives.

Other studies (Suh, Diener, Oishi, & Triandis, 1998; Kuppens, Realo, & Diener, 2008) referred to differences between Japanese and Egyptian college students on Life Satisfaction scores (Japanese, Mean of LS = 3.81, $SD = 1.97$ and Egyptian, Mean of LS = 5.36, $SD = 3.35$), and no differences were found between Japanese and Egyptians on rating of Individualism-Collectivism (Japanese rate on I-C = 4.30, Egyptian rate on I-C = 4.40), with positive correlation found between affect balance, and positive and negative affect for both Japanese and Egyptians. Pew Research Center, in its Pew Global Attitudes 47-Nations Survey (2007), referred to the fact that while levels of personal satisfaction vary considerably across the world, they are often associated with wealth, i.e. people in richer countries tend to express more satisfaction with their lives than do those in poorer countries. 43% of Japanese participants indicated a high level of personal well-being, and 8% indicated a low level of personal well-being. This can be compared to Egyptians, where 25% of Egyptian participants expressed a high level of personal well-being, and 14 % indicated a low level of personal well-being.

The present study aimed to examine the differences between Japanese students and Egyptian students in the dimensions of psychological well-being, according to the model of Ryff’s Six Dimensions of psychological well-being (Ryff, 1989; Ryff and Singer, 1998, 2000, 2005). The current study belongs to the area of positive psychology. The recent theoretical developments in the field of psychology declare the need for focusing not only on the challenges individuals face, but also on the strengths and positive processes that can lead to enhanced well-being. In other words, focusing on the search for the psychological strengths of human beings, rather than on their weaknesses (Seligman and Csikszentmihalyi, 2000).

Many studies in recent years have been concerned with positive variables such as life satisfaction, happiness, optimism, and other positive traits. But there has been less interest in cultural differences between Arab and Asian countries, especially between Japanese and Egyptian psychological variables in general, which has led to the development of this study in order to seek comparisons between Japanese and Egyptian students, and
specifically, to try to identify whether there are differences in psychological well-being which can be attributed to their cultural differences. As a further consideration, this study also attempts to determine the role of sex differences on the level of psychological well-being. And more concisely, the current study aims to answer the following questions:

1. Are there differences between Japanese and Egyptian students at the level of psychological well-being?
2. Are there differences between male and female groups of both countries in psychological well-being?

**METHOD**

Subjects: Two sample groups were used in this study. The first sample from Egypt consisted of undergraduate students ($n = 150$; 84 females and 66 males) from El-Minia University, from the Faculty of Arts and Faculty of Education. The second sample were Japanese students ($n = 138$; 87 females and 51 males) of the Faculty of Education, Iwate University. Ages ranged from 18 to 22 for both samples.

Scale and Procedures: The instrument used was the Psychological Well-Being (PWB) Inventory (Ryff, 1989). The six dimensions are self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. The original questionnaire form contained 20 items per dimension measured on a 6-point Likert-type scale. In this study the shortened version (psychological well-being questionnaire) proposed by Spangler and Palrecha (2004) was used. It contains 30 items, with 5 items per dimension and each with a 5-point answering scale, ranging from 1 (totally disagree) to 5 (totally agree). We used a Japanese version, and an Egyptian version translated into Arabic by the first researcher. Using back-translation method, we found that there was a high degree of matching between the original scale language (English) and our translations into Japanese and Arabic. We evaluated internal consistency for PWB at sub-samples from current basic samples, 100 Japanese and 100 Egyptian students, as Table 1 shows.

Table 1 shows a significant level of internal consistency in psychological well-being for both Japanese and Egyptian students (all Pearson correlation values were significant at $P < 0.01$). We evaluated the reliability of the psychological well-being scale for Egyptian and Japanese students via Cronbach’s alpha

<table>
<thead>
<tr>
<th>Psychological well-being</th>
<th>Total PWB (Japanese Students)</th>
<th>Total PWB (Egyptian Students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total ($N = 100$) Male ($N = 40$) Female ($N = 60$)</td>
<td>Total ($N = 100$) Male ($N = 43$) Female ($N = 57$)</td>
</tr>
<tr>
<td>Environmental control</td>
<td>0.59** 0.57** 0.61**</td>
<td>0.60** 0.69** 0.57**</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>0.53** 0.58** 0.49**</td>
<td>0.66** 0.43** 0.72**</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.44** 0.48** 0.40**</td>
<td>0.55** 0.48** 0.59**</td>
</tr>
<tr>
<td>Personal growth</td>
<td>0.34** 0.30** 0.39**</td>
<td>0.37** 0.39** 0.37**</td>
</tr>
<tr>
<td>Purpose in life</td>
<td>0.50** 0.40** 0.58**</td>
<td>0.48** 0.50** 0.47**</td>
</tr>
<tr>
<td>Positive relationships</td>
<td>0.35** 0.36** 0.33**</td>
<td>0.51** 0.48** 0.52**</td>
</tr>
</tbody>
</table>

** $P < 0.01$
reliability. Both Japanese and Egyptian scores of the psychological well-being scale have high Cronbach’s alpha reliability, ranging between 0.85 and 0.80 for Japanese, and between 0.82 and 0.75 for Egyptians. Ryff reports that the correlations between the original form of the PWB and the shorter version of the PWB range from 0.97 to 0.98. The reliability of the PWB is high with coefficient alphas for the scales ranging from 0.87 to 0.93 (Ryff, 1989) and 6-week test-retest reliability coefficients for the six scales ranging from 0.81 to 0.88. Ryff and Keyes’ (1995) findings supported construct validity for the psychological well-being (PWB) when they used a confirmatory factor analysis to discover a predicted global PWB factor that encompassed all six dimensions.

**RESULTS**

To compare data between Japanese and Egyptians we used the t-test and one way ANOVA. Table 2 shows differences between Japanese and Egyptian means on psychological well-being.

Table 2 shows the differences between Japanese and Egyptian students in all six dimensions of psychological well-being: environmental control, self-acceptance, autonomy, personal growth, purpose in life and positive relationships with others. But no significant differences in total scores of psychological well-being were found. Japanese students rated higher than Egyptian students in score means of autonomy and personal growth ($t_{[286]} = 3.95 & 7.22; P < .001$). On the other hand, Egyptian students rated higher than Japanese students in score means of environmental control, self-acceptance, positive relationships with others ($t_{[286]} = 4.93, 4.87 & 3.29; P < .001$) and purpose in life ($t_{[286]} = 2.03; P < .05$).

To evaluate the differences between Japanese and Egyptian students in terms of male and female, we performed one-way ANOVA, as Table 3 shows:

The results in Table 3 show that there are significant differences between the Japanese and Egyptian male and female groups in environmental control, self-acceptance,
autonomy, personal growth ($f(3, 284) = 8.15, 12.06, 6.51 & 17.64; p < .001$), and positive relationships with others ($f(3, 284) = 4.11; p < .01$). The means and standard deviations of psychological well-being dimensions by the four groups show that there are significant differences between Egyptian males/females and Japanese males on environmental control (EM/EF > JM/JF; means = 18.84, 18.73, 16.63 & 16.41; mean difference, EM & JM = 2.22, EF & JM = 2.11, EM & JF = 2.43, EF & JF = 2.32; $P < 0.05$). These results indicate that both Egyptian sex groups were higher than Japanese males and females in environmental control. Egyptian students scored higher than their Japanese male and female counterparts in positive relationships (EM > JF/JM; means = 20.04, 18.48, 18.07; mean difference, EM & JM = 1.97, EM & JF = 1.56; $P < 0.05$) and self-acceptance (EM > JF/JM; means = 18.75, 18.48, 18.07; mean difference, EM & JF = 3.86, EM & JM = 3.60; $P < 0.05$); but Egyptian males scored higher than Egyptian females on self-acceptance (EM > EF; means = 18.75, 16.41; mean difference = 2.34; $P < 0.05$). On other hand, we noted other differences between groups based on culture, wherein both Japanese sex groups scored higher than Egyptian males and females on autonomy (JM/JF > EM/EM; means = 16.90, 15.48, 14.09, 14.06; mean difference = JM & EF = 2.80, JM & EM = 2.84, JF & EF = 1.38, JF & EM = 1.42; $P < 0.05$), and personal growth (JM/ JF > EF/EM; means = 21.14, 21.46, 18.48, 18.01; mean difference = JM & EF = 2.64, JM & EM = 3.12, JF & EF = 2.97, JF & EM = 3.44; $P < 0.05$). The results point to no significant differences found between groups for total psychological well-being scores.

<table>
<thead>
<tr>
<th>Psychological Well-being</th>
<th>Japanese Male ($n = 51$)</th>
<th>Japanese Female ($n = 87$)</th>
<th>Egyptian Male ($n = 66$)</th>
<th>Egyptian Female ($n = 84$)</th>
<th>$F$ ($df = 3, 284$)</th>
<th>Post-hoc LSD test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental control</td>
<td>16.63 (3.96)</td>
<td>16.41 (3.81)</td>
<td>18.84 (3.05)</td>
<td>18.73 (4.63)</td>
<td>8.15***</td>
<td>EM/EF&gt;JM/JF</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>15.15 (4.32)</td>
<td>14.89 (4.65)</td>
<td>18.75 (2.47)</td>
<td>16.41 (4.68)</td>
<td>12.06***</td>
<td>EM&gt;EF&gt;JF/JM</td>
</tr>
<tr>
<td>Autonomy</td>
<td>16.9 (4.32)</td>
<td>15.48 (4.19)</td>
<td>14.06 (3.94)</td>
<td>14.09 (4.07)</td>
<td>6.51***</td>
<td>JM/JF&gt;EM/EF</td>
</tr>
<tr>
<td>Personal growth</td>
<td>21.14 (3.89)</td>
<td>21.46 (3.35)</td>
<td>18.01 (3.42)</td>
<td>18.49 (3.8)</td>
<td>17.64***</td>
<td>JM/JF&gt;EM/EF</td>
</tr>
<tr>
<td>Purpose in life</td>
<td>16.74 (4.97)</td>
<td>16.06 (5.05)</td>
<td>17.9 (3.77)</td>
<td>17.1 (4.99)</td>
<td>1.95</td>
<td></td>
</tr>
<tr>
<td>Positive relationships</td>
<td>18.07 (4.32)</td>
<td>18.48 (3.91)</td>
<td>20.04 (2.69)</td>
<td>19.44 (3.16)</td>
<td>4.11**</td>
<td>EM&gt;JF/JM</td>
</tr>
<tr>
<td>Total Well-being</td>
<td>104.64 (17.71)</td>
<td>102.8 (17.17)</td>
<td>107.63 (9.22)</td>
<td>104.28 (13.4)</td>
<td>1.38</td>
<td></td>
</tr>
</tbody>
</table>


*** $p < .001$ ** $p < .01$
The results showed that there are differences between Japanese and Egyptian students in environmental control, self-acceptance, autonomy, personal growth, purpose in life and positive relationships with others. No significant differences were observed in total psychological well-being. The results showed that sex has a significant effect on self-acceptance only among the Egyptian samples, but no significant effect among Japanese students. Why were Japanese scores higher than Egyptians on autonomy and personal growth? And why did Egyptian students score higher than Japanese on environmental control, self-acceptance and positive relations with others? We suggest that these differences are due to different socialization styles of Japanese and Egyptians. Self-determination theory (SDT) (Deci & Ryan, 2000; Ryan & Deci, 2003) maintains that autonomy is a highly compatible, innate human need. Moreover, the theory suggests that, when satisfied, the need for autonomy should explain independent variance in adjustment among all individuals. Valery (2009) conducted regression analysis predicting psychological well-being (PWB) by the level of relative autonomy both within and across samples. As he predicted, in all samples, the higher level of autonomy, the higher were scores of participants’ well-being. We reported that results of previous studies (Deci & Ryan, 2000; Ryan & Deci, 2003) supported the SDT idea that autonomy is a basic psychological need which promotes PWB regardless of the cultural context. The previous results also indicated that both individualistic and collectivistic practices may be enacted more or less autonomously, demonstrating that autonomy as an attribute of behavior regulation is different from individualism/collectivism, which is a set of socially constructed meanings and practices (Valery, 2009). Kishida et al. (2004) reported that Japanese university students have high levels of autonomy, and relationships with romantic partners were linked with greater autonomy, and that experiences which enhance self-esteem were linked with greater personal growth. Japanese students in this study had high levels of personal growth, and these results differed from those results of Markus and Kitayama (1991), who argued that self-enhancing tendency is associated with independent Western cultural constructs of the self. Studies with Japanese participants have shown a tendency towards other-enhancement rather than self-enhancement, particularly when “other” refers to important people such as family and friends (Markus and Kitayama, 1991). On the other hand, previous studies appeared to show that Japanese people place more importance on positive relationships and harmony with others, striving to integrate with others “rather than being the nails that stand out and get hammered down.” People with an interdependent view of self highly value their ability to work cooperatively and have positive interpersonal relationships. Traditionally, Japanese people have been viewed as having an interdependent self. Thus, a primary aim is to fit in, to engage, to belong, or to become part of the relevant social relationships (Markus and Kitayama, 1991).

In contrast, Egyptian students scored higher than Japanese students in environmental control, self-acceptance and positive relation with others. Myers and Diener (1995) reported that personality is a strong predictor factor of subjective well-being. We suggest...
that, in accordance with Myers and Diener (1995), and in relation to our previous study (Mohammed, Unher, & Sugawara, 2009), these differences are most likely due to personality traits, with Egyptian students having less neuroticism than Japanese students, and Egyptian students showing more emotional stability included in traits such as self-acceptance, environmental control and positive relations with others. We can interpret these results from a psycho-social perspective (Darwesh & Hober, 2002), with reference to collectivistic societies characterized by cooperation, strong social relations, friendship values, and having high levels of happiness; but individualistic societies characterized by individual values, independence which reflected loneliness and decrease of cooperation behaviors, tend to have lower levels of happiness. However, Veenhoven (1999) presented differing results when he studied 43 countries, and found that individualistic countries tended to have higher levels of happiness, especially in wealthier and more educationally-advanced societies. We refer in this case to high levels of autonomy and personal growth for Japanese students, and high levels of environmental control, self-acceptance and positive relation with others among Egyptian students, due to both Japanese and Arabian countries being collectivistic societies (Hofstede, 2001). But we think that Japanese students with a more modernized society showed lower levels of collectivism, as Triandis, Bontempo, Villareal, Asai, and Lucca (1988) noted, than might be seen in societies with long traditions where the collectivism elements may persist although the societies have become very complex (e.g. Japan). However, one would expect to observe shifts toward individualism as complexity increases. Diener and Oishi (2000) referred to collectivist cultures of Japan and South Korea that, despite their economic development, are outliers of social anxiety and have low SWB scores.

Yoshida, Sauer, Tidwell, Skager, and Sorenson (1997) studied 747 native Japanese subjects located in three different countries: the United States (375), Egypt (72) and Japan (350). The results demonstrated significant differences between the three groups. Japanese in the United States were generally more satisfied than a comparable group living in their home country, and two groups were more satisfied than Japanese subjects living in Egypt, indicating these differences in life satisfaction are due to different cultures. Arabian studies on happiness or psychological well-being concluded that personality traits such as optimism, self-confidence, level of religiosity, age and positive affect were strong predictors of happiness among Kuwaiti college students (Abdel-Khalek & Mourad, 2001; El-Anzy, 2001) and among Egyptian adults (Haredy & Shawky, 2002; Shalaby & Digham, 2003). In addition, there are positive correlations between psychological well-being and satisfaction of basic needs (need of competence, need of autonomy and need of relatedness) among samples of Egyptian adults, and positive correlations between psychological well-being and values among samples of Egyptian students (Mohammed, 2005, 2009). Other Egyptian studies showed that other factors can be used to predict happiness, altruism and social competence among samples of married Egyptian adults (Khalaf Allah, H., 2006). These above results obtained from Egyptians and Kuaitis reflected two Arabian countries as collectivist societies, having high levels of psychological well-being components such as self-acceptance, environmental control and positive relations with others. Other political factors predict well-being in Arabian
countries, especially Egypt, which have so far succeeded in extending social safety nets to parts of the population, and available data suggest an acceptable degree of equality. Abu-Rayya (2005, 2008) conducted studies to show there are differences between Arabian heritage and European heritage. Arabian heritage is concerned with higher levels of desirable well-being correlates (self-esteem and positive relations with others), whereas European heritage is concerned with higher levels of self-esteem and low levels of depression. Abu-Rayya and Abu-Rayya (2009) further examined relationships between ethnic identification, religious identity, and psychological well-being among Muslim and Christian Palestinians in Israel. The participants were 854 indigenous Israeli Palestinians: 520 were Muslim and 334 Christian students. The results showed that the students had high levels of religious identity linked to higher degrees of positive indicators of well-being.

Compared to the high number of findings from East Asia and Western Europe/North America, the field knows very little about other cultures (e.g., African and Arab countries). We found that they corresponded to general aspects of PWB. For instance, researchers have analyzed the cultural and societal differences in the levels of SWB (e.g. Diener & Diener, 1995) or the cultural specificity of factors influencing SWB (e.g. Veenhoven & Ehrhardt, 1995; Veenhoven, 1998; Suh, Diener, Oishi, & Triandis, 1998; Diener & Lucas, 2000; Tesch-Romer, Motel-Klingebiel, & Tomasik, 2008). Previous studies showed that Asian collectivist cultures typically show lower mean levels of well-being compared to western cultures, and Diener and Diener (1995) demonstrated specifically that national well-being in Singapore is considerably lower than national well-being in the U.S. Consistent with the irreducibility hypothesis and with past SWB findings (Diener et al., 1995), Sheldon and Hoon (2007) added that a cultural group would have its own main effects upon SWB, independently of the other five predictors which include personality traits, psychological needs, social relations, goals and self. Based on previous research on the inter-correlations of culture, personality, and well-being (Diener et al., 1999), cultural membership should still have an effect on SWB even after all of the lower-level effects have been accounted for.

Concerning the differences between Japanese and Egyptian groups in the present study, Egyptian males scored higher than Egyptian females only on self-acceptance, but there were no differences between Japanese males and Japanese females on the six dimensions of psychological well-being. These findings indicate that the differences between both samples are due to different cultures, with no effect regarding sex. These results differ from other studies, and we asked: Are gender differences in psychological well-being similar in different cultures? Empirical data from previous studies showed a consistent disadvantage of women in respect to negative affect and subjective health: Women have higher rates of negative affect and depression and poorer subjective health than men (Nydegger, 2004). In some studies, life satisfaction and positive affect are also lower for women (e.g. Shmotkin, 1990). Arabian studies showed no differences between male and female college students on subjective happiness (El-Anzy, 2001) and psychological well-being (Mohammed, 2009), by using different measures from those employed in the present study. The measures included life satisfaction scale, positive
affect and negative affect schedule. The results of the present study indicated no differences between both sexes on five dimensions of psychological well-being, while there were significant differences between the Egyptian male and female groups only as far as self-acceptance, which was not included in measures used with previous Arabian studies.

Finally, the current study concluded that there are significant differences between Japanese students and Egyptian students in sub-dimensions of psychological well-being and no gender differences were apparent. The gender differences found only between Egyptian male and female students were on self-acceptance. The present study concluded that psychological well-being in total score is similar between Egyptian and Japanese students, but the reasons and components of psychological well-being were different. Competence and personal growth lead Japanese students to score higher levels of psychological well-being, and environmental control, self-acceptance, purpose in life and positive relations with others give Egyptian students higher levels of psychological well-being. Both Japanese and Egyptian students have higher scores of psychological well-being than average.

Unfortunately, we could not find any previous studies that compared Japanese and Egyptian samples on PWB. In future research we intend to investigate why components of psychological well-being were different, and compare these factors between groups in more than one country, while choosing other types of samples such as adults and school children.

REFERENCES


