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# TOTAL WELLNESS OF TURKISH INTERNATIONAL STUDENTS IN THE U.S.: PERCEPTIONS AND INHERENT GROWTH TENDENCIES

A

## DISSERTATION

Presented to the Faculty of the Graduate School of

St. Mary's University in Partial Fulfillment

of the Requirements

for the Degree of

## DOCTOR OF PHILOSOPHY

In

Counselor Education and Supervision

by

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# TOTAL WELLNESS OF TURKISH INTERNATIONAL STUDENTS IN THE U.S.:

### PERCEPTIONS AND INHERENT GROWTH TENDENCIES

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#### Abstract

# TOTAL WELLNESS OF TURKISH INTERNATIONAL STUDENTS IN THE U.S.: PERCEPTIONS AND INHERENT GROWTH TENDENCIES

Mehmet Avci

St. Mary's University, 2017

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The international student population in the United States has increased exponentially over the past decade. Students are coming from many countries including Turkey who often face stressors proper of migration such as cultural uprooting, family disruption and identity challenges that might influence their wellness while in America. The total impact that this academic adventure has on Turkish's international students is not well known as there is a dearth of scientific data addressing their total wellness and specially their psychological wellbeing from a holistic perspective. This research study examined the perceived total wellness of Turkish students living in the USA. Survey Research Design with a purposive sampling of 179 was used to analyze participants' perception on wellness, level of self-determination, and basic psychological needs. The following four psychometrically sound instruments were utilized to gather the data: Perceived Wellness Scale, Perceived Competence Scale, Self-Determination Scale and Basic Psychological Needs Scale. The collected data were analyzed using IBM SPSS 24 for descriptive and inferential values. The results indicated that the perceived total wellness of Turkish international students was slightly low. In terms of the relationship between wellness and basic psychological needs, the results showed that autonomy, competence, and relatedness significantly predict Turkish international students' wellness. Additionally, results displayed a strong association between self-determined way of functioning and Turkish international students' overall wellness.

#### Acknowledgements

"There are no incurable diseases-only lack of will.

There are no worthless herbs- only the lack of knowledge."

(Avicenna, trans., n. d.)

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iv

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ABSTRACT	iii
CHAPTER ONE : THE PROBLEM AND JUSTIFICATION OF THE STUDY	1
INTRODUCTION	1
STATEMENT OF THE PROBLEM	5
RESEARCH QUESTIONS	7
SIGNIFICANCE OF THE STUDY	8
LIMITATIONS OF THE STUDY	9
DEFINITION OF TERMS	10
ORGANIZATION OF REMAINING CHAPTERS	10
CHAPTER TWO: REVIEW OF LITERATURE	
INTERNATIONAL STUDENTS	12
TURKISH INTERNATIONAL STUDENTS	16
TURKISH CULTURE AND CHARACTERISTICS	21
WELLNESS	
Social Wellness	34
Emotional Wellness	
Physical Wellness	
Intellectual Wellness	37
Spiritual Wellness	
Psychological Wellness	41
PERCEIVED WELLNESS MODEL	43
SELF-DETERMINATION THEORY	44
BASIC INNATE PSYCHOLOGICAL NEEDS	45
The Need for Competence	46
The Need for Autonomy	47
The Need for Relatedness	49
SUMMARY OF THE CHAPTER	52
CHAPTER THREE: METHODOLOGY	53
PURPOSE OF THE STUDY	53
RESEARCH QUESTIONS	53

THEORETICAL FRAMEWORK	54
RESEARCH DESIGN	54
Strengths and Limitations of Research Design	55
SUBJECTS	56
INSTRUMENTS	57
RESEARCH METHOD	61
RESEARCH PROCESS	61
Axiology	62
STATISTICS	63
SUMMARY OF CHAPTER THREE	63
CHAPTER FOUR: RESULTS	65
INTRODUCTION	65
RESULTS	65
DISCUSSION	77
Interpretation of Findings	79
CHAPTER FIVE: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS	
SUMMARY	91
LIMITATIONS	95
IMPLICATIONS AND RECOMMENDATIONS	97
REFERENCES	103
APPENDICES	119
APPENDIX A: CONSENT FORM	119
APPENDIX B: DEMOGRAPHIC FORMS	
APPENDIX C: PERCEIVED WELLNESS SCALE (PWS)	
APPENDIX D: BASIC PSYCHOLOGICAL NEEDS SURVEY	
APPENDIX E: SELF-DETERMINATION SCALE	
APPENDIX F: PERCEIVED COMPETENCE SCALE	125
	THEORETICAL FRAMEWORK

# List of Tables

Table 1. Demographic Characteristics of the Study Sample    67
Table 2. Descriptive Analyses for Total Wellness and Six Dimensions    68
Table 3. Analysis of Variance Comparing Wellness by Demographics
Table 4. Correlations between Perceived Total Wellness and Basic Psychological Needs
Subscales74
Table 5. Multiple Linear Regression Analyses of Basic Psychological Needs on Perceived Total
Wellness
Table 6. Summary of Simple Regression Analyses for Autonomy, Competence, and Relatedness
Predicting Perceived Total Wellness76
Table 7. Correlations between Perceived Total Wellness and Self Determination Subscales 77
Table 8. Multiple Linear Regression Analyses of Self Determined Way of Functioning on
Perceived Total Wellness

#### **Chapter One: The Problem and Justification of the Study**

#### Introduction

The overall purpose of this study was to examine the perceived total wellness of Turkish international students in the United States. Also, this study examined to what extent Turkish international students' basic psychological needs were related to their perceived total wellness and the relationship between a self-determined way of functioning and wellness among them.

Wellness is one of the main goals in human life. There seem to be a consensus about the definition of wellness in the literature that has considered wellness as the balance of body, mind, and spirit instead of just focusing on the absence of illness (Adams et al., 1997; Ardell, 1977; Dunn, 1977; Edlin, 1988; Lafferty, 1979; Teague, 1987; Harari, Waehler, & Rogers, 2005). The World Health Organization (WHO, 1967) defines wellness as an optimal state of health for single individuals or groups of people. The consideration of a person's wellness includes different existential dimensions such as physical, social, psychological, spiritual, relational, and community involvement (Smith, Tang, & Nutbeam, 2006).

The early studies on wellness were carried out by Dunn (1959, 1977), who suggested that wellness and fitness needed to be understood from a holistic perspective. He also added that in the process of maximizing a person's full potential, social context and environment need to be taken into consideration. Hettler (1976) viewed wellness as an active process where the individual chooses to have a more successful existence. In this perspective wellness as a multidimensional phenomenon encompasses the mental, spiritual and environmental aspects of the human existence. Thus, he emphasized the importance of integrating these six dimensions of wellness: physical, intellectual, emotional, social, occupational and spiritual.

Although the definition of health could be ambiguous, Egbert (1980) stated key characteristics to maintain health in a person's life. She suggested that integration of personality with clear self-identity, having a reality-oriented perspective, having clear meaning and purpose in life, the ability to cope creatively with life situation, being inspired by hope and being capable of open, creative relationships, are positive elements to define a healthy person rather than focusing on negative aspects. Egbert (1980) also stated that people should be evaluated in terms of their abilities, experiences, culture, and individual goals in order to maintain wellness.

The literature also shows the notion of wellness includes ideas of physical, mental (Myers & Sweeney, 1999), and spiritual well-being (Larson, 1999; Myers, Sweeney, & Witmer, 1998). Wellness also depends on social relationships and satisfaction with one's surroundings (Egbert, 1980; Larson, 1999). Harari, Waehler, & Rogers (2005) also emphasized that constructive reflection on the process of enhancing quality of life by integrating and balancing one's physical, mental, and spiritual wellbeing accurately describes the sense of wellness.

Social wellness is critical and correlates with the individual's satisfaction with their role in society (Hettler, 1980). According to Hettler (1980), several factors contribute to the concept of social wellness, including sexual and non-sexual intimacy with other individuals, the quality of communication with others, and the degree to which and individual is integrated into a community. People tend to support and encourage each other in different ways, and they perceive support given by others quite differently. From that perspective, Adams et. al. (1997) determined social wellness by focusing on interpersonal relationships among individuals and the level of support they give to each other. Durlak (2008) determined several positive effects of social wellness in people's lives, including higher senses of altruism, belongingness, and assertiveness, as well as decreases in violence, social isolation, and social anxiety.

Emotional wellness represents an ongoing process of self-awareness, controlling emotions, having a positive view on life and an adequate self-assessment (e.g., challenges, risks, and conflicts are viewed as healthy and as opportunities to develop further) (Hettler, 1980). The definition of emotional wellness by Adams et. al., (1997) focuses on self-esteem, in that emotionally well people have a secure identity and positive sense of self.

Physical wellness is understood as the degree to which an individual maintains good flexibility, strength, and overall health through regular physical activity. It also involves maintaining a healthy diet as a way of achieving body balance and harmony (Hettler, 1980). Adams et al. (1997) view physical well-being as a positive perception of overall physical health. In their studies, the authors were more focused on the evaluation of physical wellness. They talked not about behavioral patterns of wellness, but rather about its perceptual nature. For instance, if a certain individual is sure to be physically healthy, then he/she is recognized to be physically well.

Intellectual wellness is defined as the degree to which a person engages his/her mind in activities that promote creativity and stimulate the person to expand his/her knowledge and improve skills that he/she already has (Hettler, 1980). Similar to the Hettler's definition, Adams et al. (1997) stated that the state of intellectual wellness can be achieved through maintaining an optimal capacity of intellectually stimulating activity.

Spiritual wellness is conceptualized by Hettler (1980) as an individual's perception of the world that gives him/her unity, understanding of one's place in society, and reason for being. Moreover, the author emphasized that the concept of inner and relational balance with other individuals and the universe as a whole is an inevitable part of the notion of spiritual well-being. Adams et al. (1997) referred to spiritual wellness as a positive perception of purpose in life. The

authors also associated this concept with an acceptance and recognition of unifying force that exist between the human body and mind. Moreover, the authors explained how the sense of coherency and optimistic perception of life act as mediators in response to perceived wellness and experience.

The Perceived Wellness model emphasizes the psychological dimension as central to wellness. Adams et al. (1997) conceptualized psychological wellness as one's sense of optimism that he/she will get a positive experience as a result of events that have taken place in his/her life. The scholars agree that the primary reason for the existence of psychology is to contribute to a human perception of psychological well-being and to improve their ability to realize it (Walsh and Shapiro, 1983).

According to the PWM, Adams et al. (1995) referred to wellness as a way of living life that goes in line with all the physical, psychological, social, spiritual, intellectual, and emotional dimensions of human existence. All the dimensions within the PWM model are chosen in accordance with this holistic perspective of wellness, as well as different aspects of the human mind, body, and spirit.

The Perceived wellness model is unique in that it is not aimed just at addressing psychological, behavioral, and clinical manifestations of disease, but is instead more focused on perceptions of wellness. Such a focus is significant for several reasons. First and foremost, as experience has shown, subjective perceptions are strong indicators of long-term health objectives. Secondly, they can serve as filters through which data can pass. There is a consensus about the importance of perceptions that precede physical responses and behaviors. Therefore, perceptions are seen as the core of health theories and models. PWM is based on three

principles, namely multidimensionality, balance among dimensions, and salutogenesis (focusing on causes of health instead of illness) (Adams et al., 1997).

The literature indicated the importance of the self-determined way of functioning and behaviors on wellness. Self-determination theory states that people do not react to the environment in a passive way; indeed, they go through a process of adaptation to their surroundings. Within the SDT, the three basic psychological needs that are innate and universal are competence, autonomy, and relatedness. When these needs are consistently satisfied, the individual tends to develop and function in healthy or optimal ways (Deci & Ryan, 2000). SDT recognizes factors that motivate individuals by focusing on the level of an individual's internal resources and behavioral management, which are vital for human development (Deci & Ryan, 1985; Ryan & Deci, 2000; Deci & Ryan, 1991).

According to the SDT, there are several explanations for human behaviors, feelings, and attitudes. First, people are inherently proactive with their perception of personal growth and the mastering of their emotions and motivators. Second, people are intrinsically motivated towards personal growth and integrated functioning. Third, even though people possess all these inherent tendencies towards development and growth, these processes do not occur automatically. SDT also emphasizes people's natural desire for personal growth and states that if people are not nurtured by their social environment, they are less likely to find their basic needs fulfilled (Ryan & Deci, 2000).

#### **Statement of the Problem**

In today's world, colleges and universities try to increase recruitment of international students. Therefore, it is important to understand current international students' wellness in specific life areas in order to boost their academic achievement and success (McCormack, 2007).

The literature documented that enhancing students' wellness in their academic life has long been a concern for professors and administrative staff because this period consists of developmental and behavioral threats to health (Adams et al., 2000; Myers & Sweeney, 2005). In addition, there is a growing international student population that experiences more problems than native students (Poyrazli & Lopez, 2007).

According to the literature, the lives of the international students are marked by many difficulties associated with social and economic status, such as living in an unfamiliar culture (Bektas, 2004; Kagitcibasi, 1987; Pedersen 1991; Poyrazli, 2001; Ye, 2005), separation from family and friends (Sandhu, 1997; Sandhu & Asrabadi, 1994), English proficiency (Bektas, 2004; Hayes & Lin, 199; Poyrazli. 2001; Sandhu, 1997), psychological and personal (Bektas, Demir, & Bowden, 2009; Duru & Poyrazli, 2007; Lee et.al., 2004). These difficulties tend to have negative consequences on international students' wellness, health and academic achievement (Kilinc & Granello, 2003).

In relation to the challenges of international students, individual, situational, and group level differences have been studied, namely age, gender, marital status (Aycan &Berry, 1996; Lee, 1999; Leung, 2001; Yeh & Inose, 2003), maintained cultural distance, length of time in the host culture (Guan and Dodder, 2001) discrimination (Duru & Poyrazli, 2011), coping attitudes, and social support (Chung et. al., 2000; Mena et.al., 1987; Ward & Rana, 2000)

Research on the international students mostly focuses on adjustment and acculturation issues rather than the wellness of specific cultural groups of international students. Moreover, there is no research on perceived total wellness of international students based on their selfdetermined attitudes, feelings, and behaviors. International students in the United States are more stressed than when they study in their home countries due to several conditions such as diverse

teaching methods, two-way interaction with professors in the classrooms, more classroom and group activities, more assignments, more speech requirements, and more after class studying (Zhai, 2002). These conditions might have a negative impact on students' wellness. Therefore, there is a need to examine international students' wellness sufficiently. An individual's wellness has been seen as one of the key elements for a healthy society. Although wellness has been studied in a wide range of research, there is insufficient culturally specific wellness research focused on international students.

#### **Research Questions**

The following research questions were used to shape the current study:

Research Questions One: What is the total perceived wellness of Turkish international students in the United States?

Research Questions Two: What is the total perceived wellness of Turkish international students as relates to gender, age, length of stay in the United States, level of degree, and religious/spiritual orientation?

Research Questions Three: To what extent Turkish international students' basic psychological needs related to their perceived total wellness?

Research Questions 3a: To what extent Turkish international students' autonomy is related to their perceived total wellness?

Research Questions 3b: To what extent Turkish international students' competence is related to their perceived total wellness?

Research Questions 3c: To what extent Turkish international students' relatedness is related to their perceived total wellness?

Research Questions Four: What is the relationship between a self-determined way of functioning and wellness among Turkish international students in the United States?

#### Significance of the Study

The results of the current study could contribute to understanding the concept of international students' wellness. Because international offices, faculty, staff, and counselors help international students who are dealing with various problems as a result of being in a foreign and unfamiliar environment, the results of the study could help colleges and universities provide effective wellness programs for their international students. Similarly, the results could further the understanding of the potential contribution of wellness to different cultural groups. Furthermore, the results of the study would produce more questions for future research that could focus on positive strategies and interventions to improve international students' wellness.

Previous researchers in wellness have discussed the role of culture in the understanding of wellness (Constantine & Sue, 2006; Deiner, 1984). However, there is no culturally specific research on the wellness of international students, and comprehensive research on the wellness of international students is also lacking in the literature. Therefore, this study will allow researchers to understand the concept of wellness of international students' lives and the relationship between wellness and basic psychological needs of international students. It will add to the current research on the wellness of international students by offering insights about their academic and social development. Researchers agree that there are myriad benefits of having an international student population in the U.S. academic environment, which suggests there is a need for expanded research related to improving the well-being of international students (Heng-Yu Ku et al., 2008). In addition, Granello (1999) claimed wellness as an important element for students' academic achievement. He also stated that students' wellness, which is more than just physical health, affects students' overall success. This study could provide support to colleges and universities to improve their policies regarding international students' academic and social needs. Moreover, counselors, professors, advisors, and international student offices will benefit from understanding the wellness of international students while they establish pedagogical approaches and curriculum.

One of the reasons for choosing the population of Turkish international students for this study is that Turkish international students represent a large amount of international students in the U.S. (IIE, 2015). Another reason is Turkish international students show similar characteristics to other international students in the adjustment process, such as limited resources, lack of social support, language difficulties, and economic problems (Duru & Poyrazli, 2007). Also, Turkish students have both individualistic and collectivistic characteristics of culture (Goregenli, 1997). Turkish culture has a mix of individualistic and collectivistic characteristics; it is a decent representation of international students as a whole.

#### Limitations of the Study

The self-reporting data collection procedure was utilized in this study. Accordingly, the participants' responses to questionnaires might be biased. Another limitation is that the study is cross-sectional. Respondents take the survey in one time, so there might be other factors such as having an unconventional day in which they take the survey. Thus, it may not be totally possible to describe total wellness in relation to other variables. To achieve a greater validity of generalized inferences, a large sample size should be included. Accordingly, another possible limitation might be the unrepresentative sample size of the overall population. In addition, even if one of the tools we use, there are always errors in measurement that limit the tool's usefulness.

#### **Definitions of Terms**

In this section, conceptual and operational definitions of the major terms in this study are presented. The definitions of terms are following:

Wellness. Wellness is not just the absence of illness, but rather the healthy balance of the body, mind, and spirit (Adams et al., 1997; Ardell, 1977; Dunn, 1977; Edlin, 1988; Lafferty, 1979; Teague, 1987; Harari, Waehler, & Rogers, 2005).

**International Student.** An international student is identified as an individual who is studying at an institute of higher education in a country that is not their home country.

**Self-Determination Theory.** Self-determination Theory (SDT) recognizes factors that motivate individuals by focusing on the level of an individual's internal resources and behavioral management, which are vital for human development (Deci & Ryan, 1985; Ryan & Deci, 2000; Deci & Ryan, 1991).

**Competence.** Ryan & Deci (2002) define the need for competence as a need to feel confident and productive in one's activities.

Autonomy. Ryan, Deci, and Grolnick (1995) referred to this need as "self-rule" or a certain action initiated and performed by one's self.

**Relatedness.** Self-determination theory describes relatedness as the feeling the individual experiences when he/she finds social connection with his/her family members, friends, and any other people who care about that individual (Baumeister & Leary, 1995; Deci & Ryan, 2000).

#### **Organization of Remaining Chapters**

Chapter I briefly described the purpose of the study, research questions, basic characteristics of international students and wellness, a statement of problem, and the

significance of study. Chapter II presents an extensive review of the literature and describes what international students' problems are and how their wellness has previously been studied. Chapter III describes the research methodology, including the rationale for utilizing a quantitative design, participant recruitment, data collection via online survey, data analysis procedures, and possible ethical issues.

#### **Chapter Two: Review of the Literature**

#### **International Students**

With the growing interdependence of countries and the changes in today's societal awareness in the importance of the higher education, studying abroad becomes an important component of our society's fabric. As a result, international student population has been increasing in the developed countries. The Institute of International Education (IIE, 2016) reported that during the 2015-2016 academic year, 1,043,839 international students enrolled in U.S. institutions of higher education. Students are mostly enrolling from China, India, Saudi Arabia, South Korea, Canada, Vietnam, Taiwan, Brazil, Japan, and Mexico. The number of international students has increased by 10 percent in 2015-2016 from 2013-2014 (IIE, 2016). As the number of international students grows, the need for culturally specific research becomes ever more apparent. Cheng, Leong, and Geist (1993) stated that international students need to be examined in different cultural groups in order to identify specific experiences. The path of the international student consists of hurdles and disadvantages, and the level of difficulties is determined by demographics such as age (Mori, 2000), gender (Hanassab & Tidwell, 2002), cultural identity and background (Trice, 2004). Hence, there is a need for understanding of international students' wellness in all aspects, as well as sustained research efforts focused on the specific problems of international students.

Shih and Brown (2000) determined that the top five problems for international students are lack of English proficiency, inadequate financial resources, and problems in social adjustment, problems in daily living, and loneliness or homesickness. The authors also pointed out that these adjustment problems influence the wellness of international students in areas such as academic performance, mental and physical health, level of life satisfaction, and attitudes

toward the host culture and environment. Nevertheless, international students do not ask for help from counseling services because of unfamiliarity and negative misunderstanding of the term "counseling" in the host culture (Misra & Castillo, 2004; Olivas & Li, 2006).

In their comparison study, Misra and Castillo (2004) found that international and domestic students experience similar stressors, but international students' culture-specific challenges directly impact their wellness as regards interpersonal and intrapersonal communication. In addition, when compared to domestic students, the physical-medical reactions of international students toward stressors include loss of appetite, headaches, fatigue, lethargy, anxiety and depression. Therefore, international students are most likely to seek medical services only for their physical well-being (Misra & Castillo, 2004). In addition to psychological and physical well-being, stress also affects social wellbeing, which is a strong predictor of success in the adjustment process (Poyrazli et. al., 2001; Yeh & Inose, 2003).

Tseng & Newton (2002) categorized four major adaptation areas for international students, which are general living, academic, sociocultural, and personal-psychological. The general living area includes food, living environment, climate, transportation, financial, and healthcare. The academic adaptation area consists of proficiency of English, knowledge of the U.S. education system, and learning skills. Third, the concerns of sociocultural adaptation are defined as culture shock, culture fatigue, perceived discrimination, and new customs. Fourth, homesickness, loneliness, isolation, frustration and loss of identity are included in the personal-psychological adaptation area. Wellness can play a key role in increasing international students' awareness and early detection of psychological, social, and academic problems. However, cultural factors and recognition of the significant diversity among international students should

be integrated into wellness concept in order to comprehend the specific situations of international students.

The literature also shows that some key characteristics of the home culture and demographics have positive and negative effects on the adjustment process to a new culture (Lee et. al., 2004; Yeh & Inose, 2003). In a study, Poyrazli and Lopez (2007) compared international and domestic students in the U.S (n = 439). Results revealed that while younger international students experience higher level of homesickness, older students experience higher level of perceived discrimination.

Wellness of international students has become an important issue in universities all over the world. Rosenthal, Russell, and Thomson (2008) examined 979 undergraduates, graduate and postgraduate international students' wellness at an Australian university. The self-reported surveys were given to international students to evaluate their mental health, physical health and wellbeing. Results indicated that a low number of international students reported studying in an unfamiliar country has hazardous effects on their wellbeing. Also, a few students reported that risky health behaviors such as drug use, smoking, gambling, and unprotected sexual intercourse had increased after they came to the host country. On the contrary, students made positive evaluations in specific areas of wellness, namely, physical and mental health. For example, the majority of students (64.7%) reported their general physical health was good, while 2.6% international students evaluated their physical health as poor. Students ranked their depression (M = 8.7), anxiety (M = 7.6), and stress (M = 11.7) levels at a maximum score of 21. Within group differences, single students reported a higher level of anxiety than students with spouses or partners. There were no significant differences between male and female international students except that female students reported a higher level of distress as well as a higher amount

of physical and sexual abuse than male students. The study also showed that cultural differences play a crucial role on depression anxiety, and stress levels. For example, a comparison between Asian and non-Asian students showed that Asian international students had significantly higher scores than non-Asian international students (t = 2.70, p < .01).

The literature documented that various variables may contribute to international students' success in the U.S. universities. Akobirava (2011) examined the effects of engaging in social and academic activities on international doctoral students' academic success (n = 427). Engagement and social activities included 11 subgroup variables such as time spent on academic work, active collaborative learning, student-faculty interaction, supportive campus environment, attitudes toward socializing, attendance of various events, and technology usage. In measuring academic gains, six dependent variables were identified. These variables were defined as acquisition of academic knowledge and skills, writing skills, satisfaction, preparation for future, publishing research, and presenting research. Results revealed that attendance and supportive campus environment were to be main elements contributing to international doctoral students' academic achievements. In addition, supportive campus environment, high quality of faculty-student relationship, presenting and publishing research were significantly associated with each other. Regarding acquired social support, the majority of international doctoral students (58.4%) reported a small amount of collaborative working with their counterparts. International students (54%) also stated unsatisfactory and poor relationships with domestic students. This result showed a correlation with the negative socializing attitudes. Overall, research indicated that less than half international doctoral students (42.6%) were content about their academic gains throughout their doctoral studies.

Banjong (2015) investigated the challenges of international students such as language, financial, and psychological issues and coping strategies among 344 international students in the United States. The sample of international students included individuals from four different continents North America, Asia, Europe, and Africa. Results revealed that there was a negative correlation between English proficiency and academic success (r = -.46). In addition, the feeling of loneliness and homesickness displayed a significant negative correlation with academic success (r = -.325). This result indicated that students who felt depressed, lonely or lacking in social support were unable to concentrate on their academic life. Economic difficulties and academic success were found negatively correlated among international students in the U.S. (r = -.24). On the other hand, students who used campus resources such as writing and counseling services reported better outcomes in their school success. For example, visiting writing center (r = .371) and seeking help from counseling center (r = .15) were found to positively correlated with the higher academic success (Banjong, 2015)

#### **Turkish International Students**

Turkey was one of the top ten countries sending students to the United States until 2013, but the number of international Turkish students has decreased by 0.3 percent in 2016 (IIE, 2016). Despite the decrease in influx of Turkish international students, the change in their total population in the U.S. is not significant. Some nominal research has been completed on Turkish international students in the United States. Gungor and Tansel (2002) reported that Turkish international students' described less satisfaction in the social aspects of their lives than anticipated. On the other hand, Kilinc and Granello (2003) found that life satisfaction of Turkish international students is high, while homesickness is one of the most common psychological problems among Turkish international students. The National Educational Ministry of Turkey (2005) has been sending more students to other countries to improve their language skills and to get their master's or Ph.D. degrees since 2005. The number of Turkish international scholars is about 4000 that mostly prefer the U.S. to get a better education. To earn their scholarship, those students have to pass an English exam such as TOEFL or IELTS and other exams like GRE and GMAT within a one-year timeframe. Additionally, to retain their scholarship these students must represent high performance in their academic fields; therefore, they might feel added stress in their lives which other students do not experience.

Poyrazli and colleagues (2001) examined what kind of issues Turkish college students face in the U.S. during their adaptation process (n = 79). Results showed that if students had a high level English proficiency when they arrived in the U.S., these students also presented better adjustment in the U.S. Poyrazli and colleagues (2001) pointed out that younger Turkish students and students who had higher English proficiency reported better adjustment. In addition, student who had a scholarship from their government reported higher adjustment problems than students who did not receive scholarship from government.

In order to obtain better understanding of international students' wellness, evaluation of peers in their home country is crucial. Aygun (2004) examined Turkish students' self, identity, and emotional well-being at a large Turkish University (n = 205). The study also investigated the importance of cultural characteristics on students' life such as independence, interdependence, relatedness, individualism, collectivism, and gender roles and stereotypes. In addition, socio-economic status and parents' education level were included to examine students' self, identity, and well-being that high education level of parents was correlated with high level of well-being. Relational concern, inner-outer harmony, achievement, openness and creativity, social

influenciability, and traditionalism were identified as descriptors of self. Results revealed that female Turkish students (M = 3.11) had higher negative emotional experiences than male students (M = 2.93). Results also indicated a significant positive correlation between positive feelings and personal, social, and collective identity. This data indicates balance and quality in relationships mattered in a Turkish setting. Additionally, this study showed that there is a shift from collectivistic characteristics of culture to individualistic characteristics of culture among Turkish students.

In a cross-cultural study, Eroglu (2012) investigated the subjective well-being of Turkish (n = 120) and international (n = 120) students in Turkey. The main objective of the study was to compare subjective well-being of international and Turkish students and how subjective well-being differentiated in terms of gender. Result revealed that subjective well-being of international students was reported as being higher compared to Turkish students in Turkey. Regarding gender differences, female international students reported higher level of subjective well-being than male students. Eroglu (2012) discussed the results of study from the perspective of socio-economic status of students. He argued that foreign students were mostly coming from rich countries. Also, in western cultures, males and females have equal and extensive freedom compared to males and females in eastern cultures. Therefore, their sense of comfort had an impact on international students' subjective well-being (Eroglu, 2012).

Duru and Poyrazli (2007) examined acculturative stress and its relationship to English proficiency, various demographics, social interactions with others and personality traits of Turkish international students (n = 229) in the United States. The sample included 59% male, 39% female, 63% single, 34% married students, and the average mean score of age was 26.37 years. Majority of students were from doctoral (55%) and master's (23%) programs.

Demographic results were consistent with previous research on international students. For example, there were no within group differences between male and female students. However, marital status showed a significant increase in married Turkish international students' stress level compared to single Turkish international students' acculturative stress level (F(1,220) = 5.889). Similarly, English proficiency (F(5,211) = 3.632) and social connectedness (F(7, 209) = 10.688) were found to significantly contribute to the students' acculturative stress. Overall, English proficiency, feeling of connectedness with others, willingness toward new experiences, and being vulnerable were found the predictors of acculturative stress among Turkish international students in the U.S. (Duru and Poyrazli, 2007).

Similarly, Bektas, Demir, and Bowden (2009) conducted a study with 124 Turkish international students to investigate influence of acculturation elements such as self-esteem, perceived social support from both Turkish and American friends, and attitudes on psychological adjustment. Results showed that perceived social support and self-esteem predicted the psychological adjustment of Turkish international students in the U.S. This research also showed similar results to other studies in that there was no gender difference on the psychological adaptation process. In terms of Turkish culture, isolation from the host culture and community was found common among Turkish international students regarding the negative effects of the manner of separation on their adjustment to the surroundings (Bektas, Demir, & Bowden, 2009).

In another study, Duru and Poyrazli (2011) investigated the impact of perceived discrimination, social connectedness, quality of social interaction, and demographics on challenging adjustments experienced by Turkish international students (n = 229). The main objective of the study was to examine the relationship between perceived discrimination, duration of academic experience in the U.S., level of social connectedness, and adjustment

difficulties. In addition, researchers aimed to explain how these variables predict adjustment problems among Turkish students in the U.S. For the main objective of the study, results indicated a positive association between adjustment difficulties and perceived discrimination (r =.24,). In addition, adjustment difficulties were found negatively associated regarding the interaction with others (r = -.40), English proficiency (r = -.19), and length of stay in the U.S. (r = -.13). Lee (2005) pointed out that perceived discrimination is one of the most important elements on international students' wellness. Comparing Lee's findings to Duru's and Poyrazli's (2011) study, the wellness of the Turkish international students was low due to perceived discrimination during their study in the U.S.

Culture shock has been defined as an important element in the acculturation process (Lowinger, He, Lin, & Chang, 2014). Oberg (2006) defined culture shock by stating that it is inevitable for people who go to a new country in which the culture, social life, language, relationships, and foods that are different than their own countries to experience a kind of psychological collapse. Therefore, they need to cope with the culture shock immediately to ensure a positive response. Culture guides Turkish people's lives in via culturally resident attitudes, behaviors, beliefs, relationships, and family structures; that is why as Kagitcibasi (1978) stated culture shock is unavoidable for Turkish international students.

There is a little research about the wellness of international students, but it does not focus on culturally specific populations to examine wellness. The world of an international student abounds in so many challenges that they may easily feel discouraged. Kilinc and Granello (2003) emphasized that Turkish international students choose to talk to a friend for psychological assistance instead of using counseling or professional services. Researchers pointed out students

who are from collectivistic cultures mostly prefer talking to friends, rather than seeking counseling services.

The literature shows that students in general are at risk for depression. In a cross-cultural study, Steptoe and colleagues (2007) examined 17,348 university students from 23 high, middle, and low income countries. Personal and environmental factors such as age, gender, SES, individualistic and collectivistic characteristics of culture were also assessed in the study. Results showed that there was a modest positive relationship between depression and socio-economic status that students from poorer countries reported higher level of depression. Regarding cultural differences, students had collectivistic characteristics of culture displayed higher levels of depressive symptomology than students from individualistic cultures. This, however, is only one of the cultural aspects that can play a role in international students' wellness. Researchers also pointed out that there is a huge need for culturally specific research on the wellness of students (Steptoe et. al., 2007).

#### **Turkish Culture and Characteristics**

The denotation of culture is mostly used for tribes or ethnic groups, for nations, and for organizations, although social classes, genders, and generations are included as particles of culture. Thus, there are a variety of definitions of culture. Hofstede (2001) defined culture as "the collective programming of the mind distinguishing the members of one group or category of people from another" (p.9). In this definition, the mind is host for the head, heart and hands, which means thinking, feeling, and acting, with consequences for beliefs, attitudes, and skills. Recently, research on culture indicated people's health and well-being are affected by the characteristics of culture (Corin 1995; Eckersley, 2001; Helman, 2007). Therefore, it is

important to specify cultural characteristics when examining the total wellness of a particular population.

Turkey is a bridge between Europe and Asia in which different cultures and traditions meet and mixed. The influence of Turkish culture on societal values and members' behaviors should be examined in an all-inclusive manner in order to understand the total wellness of Turkish international students. In his seminal studies about culture and its dimensions, Hofstede (1980, 1991, 2001) described the characteristics of cultures and compared them across 76 countries and regions.

Power and inequality are interesting facets of any society in today's world. The first dimension of Hofstede's definition is power distance, which means "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally". A high level of power distance signifies inequality between lower status and higher status individuals, with the suggestion that this inequality is supported by the followers as much as by the leaders. The power distance dimension impacts family structure, child rearing strategies, perceived teaching style, hierarchy, and religion (Hofstede, 2011).

In his study, Hofstede (2011) found Turkey has high power distance with a score of 66. The high level of power distance is demonstrated by the dependence, the fact that superiors are often inaccessible and the ideal boss is the paternal figure. The communication style is indirect within the family. In large power distance societies, older people are respected and feared; parents teach children obedience to authority figures (Hofstede, 2011). In Turkey, elder and important persons make decisions for the benefit of other group or family members. A father who is managing the household is anticipated to determine what and how other members will perform. However, more recently, there are dominant, educated, independent mothers and a

growing number of single women due to the increased divorce rates, which is changing the structure of family. Nevertheless, the male is still seen as the authority figure in Turkish families. From the educational perspectives, larger power distance cultures indigenize teacher-centered education. This is an obvious fact in Turkish culture, in which teachers are respected by both students and parents. All these large power distance characteristics might have an impact on the psychological, physical, and spiritual well-being of an international student depending on how close or familiar they are with the host culture.

The second dimension of Hofstede is called uncertainty avoidance. In this dimension, society's tolerance for ambiguity specifies if and how the members of the culture feel either uncomfortable or comfortable in unstructured situations. Surprising, unknown, unusual, and uncommon situations are not welcomed in high uncertainty-avoidant societies. The effects of these situations are reduced by laws, rules, and firm behavioral codes. Ambiguity stirs up people's anxiety, stress and security in life become a concern for people in societies high in this dimension. From this perspective, members' health and well-being might be sensitive to this ambiguity. Research also indicates that people who are from uncertainty avoiding societies show more emotional characteristics. Specifically, the characteristics of strong uncertainty avoiding cultures includes higher stress, emotionality, anxiety, neuroticism, lower scores in subjective health and wellbeing, the tendency to remain at unsatisfactory jobs, and the unquestioned authority of the teacher (Hofstede, 1991, 2011).

Turkey shows higher uncertainty avoidant characteristics with a score of 85. According to these results, Turkish people highly need rules and laws to alleviate anxiety and stress (Hofstede, 1991; 2011). Of course, Turkey cannot be discussed without speaking about Islam. Religion has a vital role in Turkish society because 99 percent of the population is Muslim

(Library of Congress, 2008). Islamic and traditional regulatory patterns are seen to decrease the amount of tension by how they alleviate the stress and anxiety of uncertainty (Hofstede, 1991; 2011.). Therefore, religion might have a positive influence on people's spiritual well-being and health.

Individualism vs. collectivism is a fundamental cultural dimension for nation on earth (Hofstede, 2011). In individualistic cultures, individual rights are greatly emphasized and the goals of individuals are primary. Collectivist societies, on the other hand, put the emphasis on other members of the group rather than the self, and the central themes are harmony and conformity (Hofstede, 1980; Triandis, Mc Cusker, & Hui, 1990). According to Hofstede (2011), members of collectivistic cultures need the feelings of belongingness and harmony, which must always be maintained by group members.

Turkey is a collectivistic culture in that "we" is central. People belong to families, clans, or organizations in which they look after each other in an exchange of loyalty (Aycan et al., 2000; Goregenli, 1997; Hofstede, 1991, 2001, 2011). Relationships are indirect and open conflicts are always avoided. These characteristics can be seen explicitly in Turkish family structure and the father as a caring, superior and dominant person (Kagitcibasi& Aycan, 2005). Family is the most important part of the Turkish society, and family members are emotionally dependent each other. Aycan et. al. (2000) found that the more senior figure is responsible for providing guidance and nurturance in collectivistic Turkish culture. Turkish people who have reached adulthood generally have sufficient personal finances to meet daily needs, but they choose to live with their families until marriage. Loyalty to the sense of being part of "we" offers both financial and emotional support (Cagiltay & Bichelmeyer, 2000). Based on the given collectivistic Turkish culture, the patterns of relationships, belonging to family and group, and

support from family may have an influence on social, emotional, and environmental wellness of individuals.

Gender roles and responsibilities are major facets of all societies. The masculinity/femininity dimension emphasizes the emotional and social role differentiation between genders. In masculine cultures, there is a clear distinction between genders, where assertiveness, toughness, and focusing on material success are the characteristics of men, while women are modest, tender, and responsible for quality of life. In masculine cultures, fathers always deal with facts, whereas mothers associate with feelings (Hofstede, 2011).

According to the literature, although Turkish society is in the feminine realm, most of the traditionally masculine characteristics and gender inequalities are nonetheless present in Turkish culture (Turetgen, Unsal, & Erdem, 2008). According to the United Nations (2000), education level, income level, and participation in the decision making process are mostly in favor of men, so that women are underprivileged in Turkish society. However, there are no significant gender differences in university attendance (www.osym.gov.tr). In traditional Turkish culture, while mothers' responsibilities are primarily running the house, cooking, cleaning, and serving and taking care of the children, fathers/men are the providers of the family and are not expected to do housework (Karakurt, 2012). On the contrary, Moghadam (1993) stated women have a strong influence on Turkish society, in which they have equal legal rights with men. With respect to given characteristics, Turkey remains in between masculine and feminine culture. In summary, Turkish culture shows strong uncertainty avoidance, larger power distance and higher collectivistic characteristics (Kabasakal & Bodur, 1998; Hofstede, 1980).

#### Wellness

The definition of "wellness" is a subject of ongoing debate. However, one thing the scholars are sure about is that wellness is the healthy balance of the body, mind, and spirit, not just the nonappearance of illness (Adams et al., 1997; Ardell, 1977; Dunn, 1977; Edlin, 1988; Lafferty, 1979; Teague, 1987; Harari, Waehler, & Rogers, 2005).

According to the World Health Organization (WHO, 1967), the term "wellness" can be defined as the optimal state of health of single individuals or groups of people. Generally, there are two central pillars to the concept of wellness. The first one is the realization of the fullest potential of an individual in regards to his/her social economic, physical, spiritual well-being, and the second is the fulfillment of role expectations in the family, community, place of worship, and workplace (Smith, Tang, & Nutbeam, 2006).

#### The Development and Evolving of Wellness

The term "wellness" was originally introduced to the literature in late 1950s, but it started to develop in early Greek and Orientalism that sophisticated observations by physicians and philosophers composed fundamental standards of a healthy life (Capra, 1982). The physicians and philosophers explored the effects of social and environmental interactions on health in people who became socialized and adapt to their surroundings and found these well adapted people had higher life satisfaction and well-being (Capra, 1982).

Throughout the literature, the early standards of health are considered the cornerstone of wellness and are seen in all wellness models. Breslow (1972) also differentiated the concept of wellness from the other health-related concepts, which traditionally concentrate their attention on the individual's illness status. There are several distinct differences between good health and wellness. Bruhn and colleagues (1977) pointed out the distinctions between good health and

wellness. First, good health represents a state of balance, whereas wellness is an ongoing process. Second, good health is independent of an individual effort. However, the process of wellness is dependent on a person's level of development, motivation, effort, and perception. Also, these characteristics are affected by social, cultural, spiritual, psychological, and environmental resources. Third, wellness is associated with the growth and wisdom. In the process of learning, a person may enhance his or her level of wellness by integrating healthy life strategies, altering cognitive dysfunction, and by being motivated. Fourth, clinical symptoms may occur, even when a person is experiencing wellness at the same time. For instance, a headache, and muscle and joint pain might be seen while a person is experiencing wellness in the nonphysical perspective of his life. Therefore, wellness is the comprehensive approach that comprises all characteristics of a person's health (Bruhn, et. al., 1977).

The early studies on wellness were carried out by Dunn (1959). The researcher was among first who defined wellness as a combination of fitness and well-being. Dunn also stated that wellness is an integral part of functioning, aimed at maximizing the full potential of an individual within the environment in which he/she is living (Dunn, 1977). Three different conditions for well-being can be identified. The first is some kind of movement in the direction of a higher level of functioning. The second is presence of an open-ended and ever-expanding tomorrow, otherwise understood as recognizing all the challenges to achieving the state of wellbeing and taking the maximum advantage of opportunities. Finally, the last condition is a favorable combination of an individual's body, mind, and spirit working together in the functioning process (Dunn, 1977).

The National Wellness Institute (NWI), advocates for Hettler's (1980) definition of wellness, as it is more comprehensive in that it makes an effort to explain the concept as a

process by which people make choices towards a more effective and successful way of living. Hettler (1980) has developed own model of wellness, which consists of six dimensions including physical, social, intellectual, emotional, occupational and spiritual. Hettler has also paid a great deal of attention to examining and assessing the level of wellness of the college-aged students. The author was convinced that such examinations would enhance the students' academic performance as well as the quality of their daily life (Garcia, 2011).

Johnson (1985) asserted wellness as a dynamic process wherein positive behaviors and health related attitudes and feelings must be included in people's lives in order to enhance health and satisfaction of life.

Wellness is a context for living, a stage of being, a place from which to come as individuals commit themselves to improve life for all humanity.... As a context for living, wellness is not limited to getting something more for oneself; rather, it becomes the possibility the one's life, health, and well-being contributes to the health and wellbeing of others (Johnson, 1985, p.130).

From the holistic perspective, to be a totally healthy person, wellness should contain internalized healthy habits, namely, balance of adequate nutrition, exercise, rest, positive thoughts, and spiritual gratitude (Johnson, 1986). In addition, life satisfaction is to be fulfilled by these habits that motivate individuals in emotional, spiritual, physical, and intellectual areas in order to cope with the challenges of life. Johnson (1986) also claimed that the development of wellness is different for each person in that it is molded in childhood through observing and modeling parents. In adolescence, people start to face the challenges of life such as dissatisfaction, ambiguous situations, career choices, and financial apprehension. Therefore, their health and well-being are easily affected by conscious thought process, priorities in life,

awareness of values, and beliefs that also help to make major decisions in order to pursue a healthy life. Correspondingly, making arrangements with dignity and purpose in life endorse people to constitute balanced mind, body, spirit, and environment to pursue a healthy life.

As a summary of definitions, regarding the main tenets of wellness, NWI along with the leaders in the field concur on these main points in the definition of wellness:

Wellness is a conscious, self-directed and evolving process of achieving full potential.

Wellness is multidimensional and holistic, encompassing lifestyle, mental and spiritual well-being, and the environment, and

wellness is positive and affirming (retrieved July 8, 2015, from

## http://www.nationalwellness.org/?page=Six\_Dimensions).

Woodyard and Grable (2014) studied the relationship between charitable activity and perceived wellness with using secondary data by the National Opinion Research Center at the University of Chicago (n = 715). Most of participants are married (50%), female (%52), non-Hispanic white (80.8%), and employed full time (56.5%). In this study, independent variables were determined as socio-economic status, education level, religious orientation, and charitable orientation. The total perceived wellness has been identified as dependent variable. Results showed that charitable activity and total perceived wellness were correlated (r = .20, p < 0.001) that indicates increased charitable activity is positively correlated high level of perceived total wellness. Religious orientation and total perceived wellness displayed a positive relationship (r = .35) that high frequency of religious involvement is positively associated with the total perceived wellness. Results also indicated that there was a positive relationship between socio-economic status (r = .41), education level (r = .26) and perceived total wellness (Woodyard & Grable, 2014).

As regards the counseling perspective, Myers, Sweeney, and Witmer (2000) made a definition of wellness as:

A way of life oriented toward optimum health and well-being in which body, and spirit are integrated by the individual to live more fully within the human and natural community. Ideally, it is the optimum state of health and well-being that each individual is capable of achieving (p. 252).

In their definition, Myers and colleagues (2000) emphasized optimal health, the integration of body, mind, and spirit. In another study, Myers and Sweeney (2005) reviewed the various extant definitions and concluded that wellness is both an "outcome" and a "process." They also highlighted the multifaceted aspect of wellness. Foster and Keller (2007) stated that the perception of an individual's position in life, context of the culture, and value systems, goals, expectations, and standards are included as determinants of wellness.

Considering the wellness of the college students, Granello (1999) conducted a study with 100 undergraduate students to investigate the relationship between empathic ability, social support networks, level of happiness and total wellness. The results revealed no strong association between empathic ability (r = .07), perceived social support (r = .14) and total wellness of students. However, happiness was correlated with total wellness (r = .62). In addition, happiness and dimension of spirituality (r = .35), friendship (r = .43), self-regulation (r = .56), and total wellness (r = .56) were significantly correlated.

Regarding the life of college students and their wellness, Garcia (2011) investigated the influence of collage years on specific wellness dimensions. The sample of this study included 30 senior students in order to explore the impact of whole collage years on six dimensions of wellness, namely, physical, social, spiritual, intellectual, emotional, and occupational. According

to the results of the study, all dimensions are equally influenced by experiences during the collage years. Specifically, intellectual wellness was reported the most concerned dimension by all the students. In addition, intellectual wellness was related to other wellness dimensions and interdependent to social, personal, and environmental circumstances. For example, students reported that their career (occupational wellness) was positively affected by advisors' suggestions, academic performance and intellectual well-being. Regarding the dimension of spiritual wellness, students showed that they developed a sense of connection with God, faith, gratitude, and acceptance during collage life (Garcia, 2011).

In their comparison study, Myers and Mobley (2004) examined the total wellness of traditional and nontraditional undergraduate students (n = 1,567). While the traditional students represent the age of 24 years and under, the nontraditional students represents the age of 25 years and over. Results showed that traditional and nontraditional students have low levels of wellness when compared to the non-student adult population with respect to age, gender, and ethnicity. Nontraditional students showed higher levels of spiritual wellness and realistic beliefs than traditional students. On the other hand, traditional students higher scores in physical and leisure areas of wellness. The study also pointed out gender differences on wellness that male students reported high level of wellness in the areas of physical, exercise, stress management, and sense of worth. On the contrary, female students' love and essential self of wellness areas were higher than male students. From the ethnicity perspective, Caucasian students showed higher social and physical wellness scores than minority students.

The literature indicated that there is an influence of culture in the life of adolescents and well-being. In their cross-cultural study, Tatar and Myers (2009) investigated the wellness of children in the United States and Israel (n = 869). The results indicated that Israeli middle school

students showed higher wellness on "coping self (the combination of elements that regulate our responses to life events and provide a mean for transcending their negative affects) and social self (social support through connections with others in our friendships and intimate relationships, including family ties)" (p.21). Conversely, students in the United States reported higher level wellness on Essential self that represents our meaning making process in relation to life, self, and others. Researchers highlighted the importance of examining wellness holistically in terms of contributing factors that culture is one of the key variables to examine total wellness of different populations.

It has been suggested that students' wellness differ along with their level of education and field of study. Myers, Mobley, and Booth (2003) investigated the total wellness of counseling students (n = 263). The researchers also examined the influence of gender, graduate status, and ethnicity variables on wellness. The results showed that counseling students reported higher wellness in all areas than the general population. On the other hand, researchers found inter-group differences among counseling students that entry level students reported lesser wellness in all areas than doctoral students. Considering the effect of gender, female counseling students showed higher level on the wellness of gender identity than male counseling students.

Wellness has also been identified an important factor on first year of the college students' academic success. In a study, Ballentine (2010) examined the relationship between wellness and academic success. The study also showed how wellness affected by gender, field of study, and ethnicity. A group of 67 first year students were recruited for the study from different departments. According to the Chi-squared analysis, the sample represents the population that the sample was homogenous in terms of their gender, ethnicity, or academic department. The results indicated that there was a significant association between grade point average (GPA) and

overall wellness regarding to gender, ethnicity, and field of the study. Male participants showed more negative relationship between wellness and GPA more than female students. Results also specified that men have lower physical wellness score than women (F(62) = 6.91, p < .05). Ethnicity was another variable that minority students showed inverse relationship between social wellness and GPA. However, minority students showed higher essential self of wellness than Caucasian students. The results of the study stated that influence of wellness varies by field of study and ethnicity.

Considering the international graduate students in the United States, Hamza (2014) studied the well-being profile of 79 international students regarding to their gender, age, perceived social support, and language, religious/spiritual orientation in the Mid-South of the U.S. Results revealed that the total wellness of the international students were significantly lower than norm groups in most areas such as social, self-care, friendship, and leisure. In contrast, international graduate students' reported higher cultural identity that international students attach importance to their values, norms about life and its difficulties in host country. In addition, results revealed significant differences within international graduate students. For example, international students who contact their family everyday showed higher total wellness scores than international students who contact their family monthly.

Rajab and colleagues (2014) assessed the level of acculturative stress among 378 international undergraduate students in Malaysia. International students were given 36-item acculturation scale that measures perceived discrimination, homesickness, perceived hate, fear, stress due to change/culture shock, miscellaneous, and guilt. The results indicated that acculturative stress is moderately experienced by the majority of international students.

Specifically, stress due to change/culture shock, homesickness, and perceived hate were found most common stressors among international undergraduate students.

Majority of scholars agree that wellness is a complex concept and, therefore, it is better to consider different types of wellness as the specific dimensions, which help regulate total wellness of an individual (Adams et. al., 1997; Hettler, 1980). The notion of wellness consists of physical, mental (Myers & Sweeney, 2005), and spiritual well-being (Larson, 1999; Myers, Sweeney, & Witmer, 2000). In addition, wellness also includes social relationships and satisfaction with the surroundings (Egbert, 1980; Larson, 1999). Harari, Waehler, and Rogers (2005) also emphasized that constructive reflection on the process of enhancing quality of life by integrating and balancing one's physical, mental, and spiritual well-being accurately describes the sense of wellness.

## **Social Wellness**

Hettler (1980) suggested that all individuals are connected to both each other and the environment they live in. From this perspective, people with a high level of social wellness are likely to be satisfied with their role in society. Hettler has also identified several factors that contribute to the concept of social wellness, including sexual and non-sexual intimacy with other individuals, the quality of communication with others, and the degree to which an individual is integrated into a community. Additionally, social wellness differs from the other forms of wellness as it involves some altruistic factors. For example, people tend to support and encourage each other in different ways, and they perceive support given by others quite differently. Accordingly, Adams et. al. (1997) determined social wellness by focusing on interpersonal relationships among individuals and the level of support they give to each other.

The positive effects of social wellness on people's lives are namely altruism,

belongingness, and assertiveness, as well as decreases in violence, social isolation, and social anxiety (Durlak 2008). Moreover, social wellness has positive influences on students' educational lives. Szulecka, Springett, and Pauw (1987) also found a strong link between the students' academic performance and their level of social wellness. As it turns out, those students who are emotionally and socially healthy are also likely to show a higher level of achievement, higher commitment, non-isolation, fewer drop outs, and less alienation (Elias, Arnold & Hussey 2002). In regard to the influences of social wellness on individuals' lives and its effects on students' achievement, international students may experience significant difficulties in their schooling as well as adjusting to an unfamiliar host society.

## **Emotional Wellness**

Hettler (1980) referred to emotional wellness as an ongoing process of self-awareness, controlling emotions, having a positive view on life and an adequate self-assessment (e.g., challenges, risks, and conflicts are viewed as healthy and as opportunities to develop further). The author viewed the concept of emotional wellness as one's ability to accept feelings in one's self as well as in other individuals and then controlling, expressing, and integrating these feelings with behaviors. According to Hettler (1980), those capable of staying flexible, open to learning new things and aware of their weaknesses are considered to be emotionally well. In an attempt to assimilate the concepts of social and emotional wellness, Hettler concluded that the relationships held by emotionally well individuals are based on respect, mutual commitment, and trust. The definition of emotional wellness by Adams et. al., (1997) focuses on self-esteem, meaning that emotionally well people have a secure identity and positive sense of self.

Similarly, to Hettler and Adams, Renger et al. (2009) were convinced that the concept of emotional wellness can be defined with regard to one's level of self-assessment, self-awareness, and optimism. Emotionally well individuals are more likely to experience satisfaction and have a positive perception of the future compared with those who do not achieve the state of emotional well-being. Leafgren (1990) stated that emotional wellness is the acceptance or awareness of emotions and feelings, as well as an individual's ability to cope with stress and daily challenges. Crose and colleagues (1992) had the similar opinion that emotional wellness includes coping styles and patterns, attitudes toward emotion and disclosure, self-image and self-awareness.

To conclude, the researchers above managed to achieve consensus regarding the definition of emotional wellness. According to the scholars, emotional wellness is characterized by an individual's perspectives on life, which should be realistic and positive. Such individuals should also be able to cope with stress effectively, manage their feelings, maintain healthy relationships with others, and have a positive view on their current living condition and the future as well (Crose et. al., 1992; Hettler, 1980; Leafgren, 1990; Roscoe, 2009).

# **Physical Wellness**

From Hettler's (1980) perspective, physical wellness is recognized as the degree to which an individual improves or maintains his/her flexibility, strength, and overall health through regular physical activity. It also involves keeping a healthy diet as a way of achieving body balance and harmony. Therefore, Hettler's definition of wellness is based on the assumption that self-care, regular physical activity, specific nutritional rules, and the use of appropriate medical services are vital for achieving the state of physical well-being. While Hettler's definition focuses on one's attention to these individual factors, Adams et al. (1997) view physical wellbeing as a positive perception of overall physical health. In their studies, the authors were more

focused on the evaluation of physical wellness. They talked not about behavioral patterns of wellness, but rather about its perceptual nature. For instance, if a certain individual is sure to be physically healthy, then he/she is recognized to be physically well. Renger et al. (2009), on the other hand, referred to physical wellness as an individual's level of nutrition, fitness, and the ability to avoid harmful habits. Similarly, to Hettler, the authors considered that for an individual to be physically healthy he/she needs to use various medical services. According to Renger et al. (2009), physical wellness also means the early recognition and prevention of different kinds of health problems. As well as his predecessor, namely Hettler (1980), Leafgren (1990) viewed physical wellness through the maintenance of regular physical activity along with the implementation of a healthy diet. Leafgren's view of physical wellness stands against the use of drugs, unhealthy food, tobacco, and the excessive use of alcohol. At the same time, the authors support the use of medications and appropriate self-care.

To sum up, Roscoe (2009) emphasized that most scholars agree that physical wellness is the continuous activity focused on maintaining the optimal level of physical activity, making smart dietary choices, and fostering self-care (Adams et. al., 1997; Hettler, 1980; Renger et. al., 2009). The level of physical wellness is also influenced by an individual's perception of his/her personal fullest potential. It means that everyone, even those individuals with a certain kind of physical disability, can achieve physical wellness by moving towards their optimal level of wellbeing (Hettler, 1980; Renger et. al., 2009; Roscoe, 2009).

## **Intellectual Wellness**

From Hettler's point of view, intellectual wellness can be defined as a degree to which a person engages his/her mind in activities that promote creativity and stimulate the person to expand his/her knowledge and improve skills that he/she already has. Hettler's definition is

concentrated on the development, practical application, and acquisition of critical thinking. The author states that the concept of intellectual wellness is characterized by a commitment to study new things during the whole life of an individual and the willingness to share knowledge with other people.

Adams et al. (1997) shared this definition of intellectual wellness. Just like Hettler, they were convinced that the state of intellectual wellness can be achieved by maintaining an optimal capacity of intellectually stimulating activity. From another perspective, Renger et al. (2009) referred to the intellectual well-being as an individual's orientation and the progress he/she made towards gaining knowledge, promoting personal growth, and developing creativity. The authors also associated the significance of knowledge with the events that take place in a certain location or globally. As well as Hettler (1980), Leafgren considered intellectual wellness the ongoing processes of encompassing creative and innovative activities. The author suggested that in order to be intellectually well, a person needs to use available resources to improve, expand, and share skills and knowledge (Leafgren, 1990).

Summarizing the above-mentioned definitions of intellectual wellness, Roscoe (2009) concluded that the concept can be defined as an individual's perception and willingness to maintain the optimal level of intellectually stimulating activity (Roscoe, 2009). This optimal level can be reached by means of continual acquisition, practical application, and the sharing of knowledge with others for individual purposes and society as a whole (Adams et al., 1997; Hettler, 1980; Leafgren, 1990; Roscoe, 2009).

### **Spiritual Wellness**

Spiritual wellness is conceptualized by Hettler (1980) as a perception of the world that gives unity, understanding of one's place in society, and reason for being. The author states that

spiritual wellness also involves the appreciation of belief, of the depth of our universe, and of death. The concept of inner and relational balance with other individuals and the universe as a whole is an inevitable part of the notion of spiritual well-being. Hettler (1980) is convinced that a person who is spiritually well is trying to create a universal value system.

Spirituality and religious activities might also enhance positive emotions and decrease negative emotions. In his study, Idler (1987) examined the effects of religious involvement and its relation to the level of disability and depressive symptomology (n=2,811). Results revealed that there is a negative correlation between higher levels of religious involvement and lower levels of functional disability. In addition, participants who were much more involved with religion were less likely to be depressed and functioned much better. In the case study of religious beliefs in women versus men, the women reacted much better as they became much more involved. In conclusion, respondents that are much more immersed spiritually have a much higher sense of well- being (Idler, 1987).

At the same time, the researchers documented that religious involvement and spirituality can have impact on students' happiness and wellness. Ellison (1991) investigated the relationship between religiosity and outcomes of religious activity on health and well-being. Results presented the affirmative influence of religiosity and religious practices on wellness. Participants with much more religious activity reported high levels of happiness, greater levels of life satisfaction, and less negative influence of stressful life events. As the literature has demonstrated, spirituality has potential implications for the wellness of an individual, but there is still a lack of research on the religion and wellness of international students.

Adams et al. (1997) referred to spiritual wellness as a positive perception of purpose in life. The authors also associated this concept with an acceptance and recognition of a unifying

force that exists between the human body and mind. Also, spirituality has been identified as an important variable of wellness that needs inclusion with the other three variables of physical, mental, and social well-being (Larson, 1999).

Adams et al. (2000) expanded the meaning of the term spiritual wellness by joining such matters as a personal sense of purpose and meaning in life; the degree to which an individual recognizes him/herself as a part of "something bigger"; the ability of a person to connect him/herself to the environment or higher power; and an individual's acceptance that there is a special unifying life force. Moreover, the authors explained how the sense of coherency and optimistic perception of life act as mediators in response to perceived wellness and experience.

Similarly, to the above mentioned scholars, Renger et al. (2009) recognized spiritual wellness as finding one's purpose in life and the desire to move towards this purpose. The authors also consider this concept as one's ability to love others and receive love from others, as well as an individual's desire to help others. Like the other authors, Renger et al. (2009) were trying to describe the link between the self, others, and the universe. In their view, to be spiritually well one has to be aware of his/her identity in relationship to others and the universe as a whole.

Taking into account the previous definitions of the concept of spiritual wellness, Roscoe (2009) summarized that spiritual well-being is seen as the innate and ongoing process of finding purpose in life, as well as accepting one's current position in the complex universe. People, who are spiritually well, are also likely to experience a strong feeling of community with others, the universe, and the so-called "higher power" (Adams et al., 1997; Hettler, 1980; Leafgren, 1990; Renger et al., 2009). In addition, spiritual wellness is a constant development of personal values,

forgiveness, hope, connectedness, sense of freedom and beliefs within an individual (Ingersoll, 1998; Westgate, 1998).

# **Psychological Wellness**

The final concept of wellness, namely psychological wellness, is conceptualized by Adams et al. (1997) as one's sense of optimism that he/she will get a positive experience as a result of events that took place in his/her life. Among the scholars who discussed the concept of wellness, Adams et al. (1997) seem to be the only ones who took into account the psychological dimension. However, there is no a big difference between psychological and emotional dimensions of wellness. In fact, Hetller's (1980) perception of social wellness is very close to what is described by Leafgren (1990) and Renger et al. (2009) about emotional wellness.

The movement towards positive psychology goes along with a shift towards the study of psychological wellness. The scholars agree that the primary reason for the existence of psychology is to contribute to a human perception of psychological well-being and to improve their ability to realize it (Walsh and Shapiro, 1983). Bradburn (1969) is convinced that a person's degree of psychological wellness is defined by his/her position on the two dimensions of positive and negative effect. Cower (1994) has the same opinion as Bradburn in regard to psychological wellness. The author pointed out that one dimension of wellness is concentrated on the hypothetical continuum while another one on pathology.

In spite of the increased interest in the concept of psychological wellness, little is known about how various psychological dimensions are associated with overall wellness. Moreover, the scholars have not yet managed to figure out how psychological well-being can be measured (Jahoda, 1958). According to Van Eeden (1996), there is not consensus between all these theories and models of psychological wellness. The authors conclude that more research needs to

be done in order to fulfill the existing gap in the study of psychological wellness (Adams et al., 2000).

In a study, Fritz, Chin, and DeMarinis (2004) compared international and North American students' anxiety, acculturation, and adjustment levels (n=246). The main purpose of the study was to seek if international students have higher anxiety and stress level due to being apart from family and friends, difficulties in school, language barriers, and financial issues than domestic students in the United States. In this study, researchers distinguished international students in two groups that are Asian and European students. Turkish international students were included in European group. The results revealed that there was no significant difference between international and domestic students' anxiety and stress level. However, international students reported more difficulties in language, unfamiliarity of social content, and work status. Within the international student groups, significant differences were found between European and Asian students that Asian students experienced higher anxiety and stress than European students. The results of help seeking behaviors indicated that Asian students appealed for help from a psychologist at least one as compared to domestic and European students.

In a meta-analytic study, Wang and colleagues (2014) reviewed 18 articles from 2000 to 2011 to assess psychological well-being of East Asian international students in the United States. The total sample of these studies included 3,434 students. The results of this systematic review revealed that the psychological well-being of East Asian international students are related to their English proficiency, approach for seeking help, levels of depression and acculturation, and how long they stay in host country. 17 longitudinal studies and one cross-sectional study showed that depression is most common psychological problem among East Asian international student.

#### **Perceived Wellness Model (PWM)**

The theory of Gestalt emphasizes the importance of immediate perceptual, sensational, behavioral, and emotional experiences to comprehend the wellness of an individual (Beisser, 1970). Accordingly, a healthy person is capable of direct awareness of his perceptions and feelings, and has a clear understanding of self and surroundings in harmony (Beisser, 1970).

Adams, Bezner, & Steinhardt (1995) developed their own multidimensional framework of wellness and called it the "Perceived Wellness Model". According to the PWM, Adams et al. (1995) referred to wellness as a way of living life that goes in line with all the physical, psychological, social, spiritual, intellectual, and emotional dimensions of being human. All the dimensions within the PWM model are chosen in accordance with the holistic perspective of wellness, as well as different aspects of human mind, body, and spirit.

The Perceived Wellness Survey (PWS) is unique as it is not aimed just at addressing psychological, behavioral, and clinical manifestations of disease, but is instead more focused on perceptions of wellness. Such a focus is significant for several reasons. First and foremost, as experience has shown, subjective perceptions are strong indicators of long-term health objectives. Secondly, they can serve as filters through which data can pass. There is a consensus about the importance of perceptions that precede physical responses and behaviors. Therefore, perceptions are seen as the core of the health theories and models (Adams et al. 1997, 2000).

The bidirectional PWM covers physical, social, emotional, intellectual, spiritual, and psychological dimensions that are unified with a balance. According to the literature about social support and wellness, perceptions of internal resources help people cope with stress and thrive under conditions of extreme stress. PWM is based on three principles namely,

multidimensionality, balance among dimensions, and salutogenesis (focusing on causes of health instead of illness) (Adams et al. 1997).

#### **Self-Determination Theory**

SDT is another one theory of human motivation, but, unlike many others, it states that people do not react to the environment in a passive way; instead, they go through a process of adaptation to their surroundings. Three basic psychological needs can be identified within the theory, including the need for autonomy, the need for competence, and the need for relatedness. The circumstances allowing satisfaction of all of these psychological needs promote intrinsic motivation (Ryan, Deci, & Grolnick, 1995).

On the other hand, the theory of self-determination (SDT) recognized factors that motivate individuals by focusing on the significance of an individual's internal resources and behavioral management, which are vital for human development (Deci & Ryan, 1985; Ryan & Deci, 2000; Deci & Ryan, 1991). According to SDT, a key factor of motivation is a desire to meet one's innate needs. A great deal of attention in SDT is paid to the external factors that undermine personal well-being and hinder self-motivation. Therefore, the theory of selfdetermination is not just about the nature of some positive development tendencies, but rather it takes into account different environments that are antagonistic towards these tendencies.

Over the last four decades, numerous studies have continued to support SDT. For example, the study conducted by Deci et al. has demonstrated how intrinsic motivation helps people to do their work more effectively and efficiently (McDaniel, 2011). The researchers have managed to create a working environment that promotes employee motivation through two basic means, including controlled motivation, when the employees are doing their job because they feel pressured by other forces, and autonomous motivation, when the employees are doing their

job because it is intrinsically consistent with their values. As it turns out, the type of motivation was more significant than the amount of motivation when supervisors were trying to predict how the employees would do their job. McDaniel (2011) states that autonomous motivation has to be a key factor when it comes to promoting SDT, as it contributes to the increased critical thinking, problem-solving, and high-quality learning. The author notes that employees have great satisfaction in their work when their motivation is intrinsic.

For people to be self-determinate, they have to decide for themselves how to act in a particular environment. Though it might seem counterintuitive, the individual's needs will never be fulfilled as long as his/her basic psychological needs are met automatically without his/her own input (McDaniel, 2011). The above-mentioned assumptions of SDT are intended to explain this idea. First and foremost, people are inherently proactive with their perception of personal growth and the mastering of their emotions and motivators. Secondly, they are intrinsically motivated towards personal growth and integrated functioning. Thirdly, even though people possess all these inherent tendencies towards development and growth, these processes do not occur automatically. SDT emphasizes people's natural desire to personal growth and states that if people are not nurtured from the social environment, they are less likely to fulfill their basic psychological needs (Ryan & Deci, 2000).

### **Basic Innate Psychological Needs in SDT**

As mentioned earlier, SDT differs from the other theories of motivation as it is more oriented on the inclusion of basic psychological human needs. According to SDT, the needs for autonomy, competence, and relatedness are the fundamental variables when it comes to defining the level of individuals' motivation (Deci & Ryan, 1985).

## The need for competence

Deci and Ryan (2000) emphasized that competence leads people to seek challenges that are above and beyond their capability in an attempt to enhance their skills and maintain their capacities through activity. Competence is not assumed to be an attained skill or ability, but rather a perception, which necessarily influences social behavior. Hence, confidence and action are affected by competence (Deci and Ryan, 2000).

Ryan & Deci (2002) defined the need for competence as a need to feel confident and productive in one's activities. The authors are convinced that the more competent a person perceives him/herself in a certain activity, the more motivated he/she becomes in this activity. In terms of students' behavior, the need for competence can be interpreted as a desire to feel confident in the knowledge and skills that are required for academic achievement. Ryan & Deci (2002) pointed out that in order for students to maintain a high level of competence, they must look for challenges that are in line with their current level of knowledge and skills.

Self-perception has been identified as a core element of student motivation (Atkinson, 1964; Bandura, 1977; Ryan & Deci, 2000).Wilkinson (2009) emphasized that if a student believes that they are successful then they are more likely to do better, versus a student that doesn't believe that they are successful. Students that feel that they are much more competent are then more likely to be motivated to complete tasks. In other words, there is a reciprocal relationship between motivation, self-perception and achievement in students' life (Wilkinson, 2009).

Motivation provides energy for an activity even if the person thinks the activity is not interesting. It has also been suggested that intrinsic motivation can lead to optimal performance (Deci & Ryan, 2000). Painter (2011) stated that if the task allows the person to improve their

performance and skills, then they are more likely to select it and be attracted to it. If the skill is too easy, has already been mastered, or is extremely difficult, then the student will not perform at their optimum level. On the other hand, researchers have pointed out that motivation can be achieved if the difficulty of the task is appropriate (and appropriately challenging) to the students' ability. The student's perceived competence is important, then, because if they perceive that the task is too easy or too difficult, it will undermine their motivation and, reciprocally, their competence (Painter, 2011).

Competence is clearly an important element in academic success. Research shows that cognitive ability and motivational processes are the strongest predictors of high school student's achievement, ambition, engagement and test scores (Lau & Roeser, 2002). In their study, Lau and Roeser (2002) found that students aspired to pursue science-related college majors and careers when they were able to aware of their cognitive skills and competence. As a result, classroom engagement and science achievement have been enhanced by higher levels of cognitive ability and perceived competence.

### The need for autonomy

Autonomy is best understood as the core of a person, which is their own internal sense of motivation and drive for a healthy way of functioning. Essentially, people are the authors of their own core, of their own behavior, desires, and intentions (Deci & Ryan, 2000). Researchers investigated the relationship between being autonomous and its effects on motivational support for people's positive functioning. Deci and Ryan (2000) found that more autonomous people reported high levels of functioning in areas such as engagement, learning, and performance. In addition, results showed that autonomy is significantly related to the elements of well-being such

as positive affect, self-esteem, mental health, and vitality. Hence, the basic psychological need of autonomy is also an essential concept in the wellness.

Many scholars describe autonomy as an individual's ability to make choices that are consistent with their own free will (Deci & Ryan, 1985, 2000). Ryan, Deci, and Grolnick (1995) referred to this need as a "self-rule" or a certain action initiated and performed by the self. Another description of the need for autonomy given by the authors is the degree to which people perceive themselves as initiators of their behavior. SDT emphasized that "whether collectivist or individualist, male or female, people function most effectively and experience greater mental health when their behavior is autonomous rather than controlled" (Chirkov, Ryan, Kim & Kaplan, 2003).

The positive effects of autonomy can be seen in all areas of life, whether social, economic, psychological, or academic. Miquelon and Vallerand (2008) examined the influence of autonomous goals in academic life. Results revealed that when academic life became stressful, autonomous goals increased the level of happiness and self-realization of the students. Accordingly, students' achievement increased, while drop-out rates decreased.

Autonomous behavior is regarded differently cultures. Especially in eastern cultures, autonomy is not valued, and being autonomous has not been embraced. Vansteenkiste and colleagues (2005) examined the optimal functioning, well-being, and autonomy in eastern collectivistic cultures. Studies were conducted on Chinese students and found that, despite cultural pressures to the contrary, autonomy was a strong predictor of academic success, adaptive learning attitudes, and high levels well-being. In addition, Chinese students with greater levels of autonomy in their lives reported greater levels of vitality and psychological wellness

(Vansteenkiste et. al., 2005). Hence, autonomy is an essential psychological need in students' academic life both in individualistic and collectivistic cultures.

## The need for relatedness

Self-determination theory describes relatedness as the feeling the individual experiences when he/she finds social connection with his/her family members, friends, and any other people who care about that individual (Baumeister & Leary, 1995; Deci & Ryan, 2000). Ryan and Deci (2002) refer to it as a psychological sense of being part of a community. This definition shows that people need to belong to some group of individuals or to a certain community. For example, the study conducted by Skinner and Belmont (1993) has shown that when students consider their teachers to be affectionate and warm, they are more likely to be happy and are more enthusiastic in class. Another study carried out by Ryan, Stiller, and Lynch (1994) demonstrated that the relationships between teachers and parents has a significant impact on students' academic performance. Therefore, when it comes to human motivation, the need for relatedness is an essential factor.

Motivation, self-attribution, and support systems are all key factors contributing to how a person grows. This growth interacts such critical factors as self-esteem, ambition, mentality, and spirituality. Also, social systems can benefit a person's well-being by acting as nutrients that will help them to become happier and healthy. Lack of a supportive social system can also be harmful to a person's well-being (Deci & Ryan, 2000). To sum up, Self-Determination Theory states that the satisfaction of basic psychological needs is fundamental for growth, integrity, and wellness regardless of culture.

Cross-cultural studies have shown that people from different cultures may experience diverse social relationships. Markus and Kitayama (2003) stated that people from collectivistic

cultures are embedded in social networks and build strong relationships with each other. As a result, people from individualistic cultures show more autonomous characteristics than people from collectivistic cultures. However, studies have also shown that students that come from collectivistic cultures tend to have a better sense of relationships, adjustment and well-being. They tend to adapt better and are much more social. It may also lead to better relationships with teachers, peers and parents, thus enhancing academic achievement overall (Markus & Kitayama, 2003).

Researchers have suggested that the perception of belongingness is a universal human need (Baumeister & Leary, 1995). Ryan and Deci (2000) posited that humans experience higher levels of functioning and emotional connectedness when the need for belongingness is fulfilled. Intimate relationships with different people are evaluated by the quality of perceived warmth and connection\. In a relationship one may experience instrumental support yet have a perception of little emotional warmth (Ryan & Deci, 2000). Therefore, the quality of significant relationships in students' lives might impact the wellness of the students.

Furrer and Skinner (2003) suggested that there are three important relationships in a young person's social world, namely parents, teachers and peers. These relationships may include diverse characteristics in different cultures. Fuligni (2001) emphasized that parental relatedness is the center of one's life which is therefore much more important than that of teachers and peers in collectivistic cultures. In their comprehensive study, Bergin and Bergin (2009) studied the quality of parent-child relationships and found that children who had a closer sense of relatedness with their parents achieved higher grades and scored better in standardized tests than those who had an insecure attachment with their parents. In addition, Granot and Mayseless (2001) found that insecure children struggle in school with their studies, test scores,

reading comprehension, and verbal ability, and are less curious in school. Consistent with other results, further studies have demonstrated that having high levels of relatedness with parents forecasted good adjustment to school, high satisfaction in school, greater ability to concentrate, and higher academic achievement (Elmore & Huebner, 2010; Larose, Bernier, & Tarabulsy, 2005). Overall, the aforementioned studies have shown that supportive and caring relationships with parents predict students' motivation, success in their academic studies, and wellness.

Teacher-student relationships may also be a factor affecting students' wellness in various academic outcomes. In their study, Crosnoe, Johnson, and Elder (2004) found that where teachers were supportive of their students, the students ended up with higher scores on both achievement tests and general academics. Additionally, teacher-student relationships predict students' wellness and emotional adjustment during the learning process in university years, so that those students with good relationships showed better outcomes in self-efficacy, intrinsic motivation, and sense of social acceptance (Freeman, Anderman, & Jensen, 2007).

Peer relationships are another factor in students' academic wellness. Steinberg, Dornbusch, and Brown (1992) stated that "peers are the most potent influence on their [student's] day to day behaviors in school (e.g., how much time they spend on homework, if they enjoy coming to school each day, how they behave in the classroom)" (p. 727). In their study, Nelson & De Backer (2008) investigated the relationship between perceived peer relationships and achievement motivation, self-efficacy, and adaptation. Results showed that students who had supportive friends and good quality of relationship were more likely to have higher expectations of success, better self-regulation, higher ambition, and increased perceptions of competence.

# Summary

A review of literature indicates that international students are facing many challenges in their journey. The importance of the self-determined way of functioning and basic psychological needs on wellness has been studied extensively but not included particularly Turkish international student population. The understanding of total wellness and influencing factors continues to be lack of empirical studies, specifically the association with the basic psychological needs and self-determined way of functioning for particular populations.

## **Chapter Three: Methodology**

# Introduction

The overall purpose of this study was to examine the perceived total wellness of Turkish international students in the United States. Also, this study examined to what extent Turkish international students' basic psychological needs are related to their perceived total wellness and the relationship between a self-determined way of functioning and wellness among them. The following chapter presents the methodology that was used to conduct this study. This chapter explains methodology including: (a) the research questions and the hypotheses, (b) theoretical framework, (c) the research design, (d) the population and sampling, and the instrumentation, (g) the data collection procedures, and the data analyses, and (h) ethical considerations.

# **Research Questions**

The following research questions will be used to shape the current study:

Research Questions One: What is the total perceived wellness of Turkish international students in the United States?

Research Questions Two: What is the total perceived wellness of Turkish international students as relates to gender, age, length of stay in the United States, level of degree, and religious/spiritual orientation?

Research Questions Three: To what extent Turkish international students' basic psychological needs related to their perceived total wellness?

Research Questions 3a: To what extent Turkish international students' autonomy is related to their perceived total wellness?

Research Questions 3b: To what extent Turkish international students' competence is related to their perceived total wellness?

Research Questions 3c: To what extent Turkish international students' relatedness is related to their perceived total wellness?

Research Questions Four: What is the relationship between a self-determined way of functioning and wellness among Turkish international students in the United States?

# **Theoretical Framework**

One of the most studied wellness theories is the Perceived Wellness theory, which provided the theoretical framework for this study. In this multidimensional model, levels in different dimensions of wellness need to be considered simultaneously. This theory defines wellness as an individual's optimal health and balance between dimensions, so that one dimension influences and is influenced by the movement of other dimensions. For example, in a perfect wellness condition, an increase in one or more dimensions can apply an outward wellness force on each of other dimensions. Conversely, an extreme condition such as could produce a concomitant change in one or more of the other dimensions. To sum up, this multidimensional, bi-directional Perceived Wellness model states that wellness needs to be measured and interpreted with an integrated system view (Adams et. al., 1997)

Another theoretical framework for the current study was Self-Determination Theory, which provides that motivation may also affect the total wellness of international students. According to the Self-determination theory, competence, autonomy, and relatedness are innate and universal. When these needs are consistently satisfied, the individual tends to develop and function in healthy or optimal ways (Deci & Ryan, 2000)

#### **Research Design**

This study incorporated a survey approach to obtain self-reporting data of Turkish international students in the United States. In order to answer the research questions, nonexperimental cross-sectional survey methodology was utilized. Babbie (2015) stated that "survey research is probably the best method available to the social scientist interested in in collecting original data for describing a population too large to observe directly" (p. 244). Also, attitudes and orientations of a large population can be described sufficiently with survey research design (Babbie, 2015).

Survey design has a vital role when determining existing community conditions and characteristics of a population. Specifically, survey design provides "(a) accurate definition of existing conditions in a community or region, (b) comparing groups of communities, (c) documenting community opinion, and (d) significant amount of data" (Babbie, 2015; Guyette, 1983). The gathered information from Turkish international students were utilized in order to provide a more comprehensive understanding of what the total wellness of Turkish international students is and their basic psychological needs in the current study. In the current study, the design was not expected to derive causality but rather to examine the degree to which the criterion variable (Total Wellness) can be predicted from the predictor variables (basic psychological needs, awareness, and perceived choice).

# **Strengths and Limitations of Research Design**

First and foremost, survey design can allow for the generalizability of the collected data from a sufficiently large sample, which remains the best method to obtain a representative picture of attitudes and characteristics of a large population. Second, using standardized tests provides identical questions and phrases for all participants leading to a more reliable method of inquiry. In other words, well-phrased questionnaire design allows researchers to obtain reliable results. Third, versatility of surveys allows them to be used in all professions to describe specific population. Lastly, in the online survey research design, respondents tend to give more accurate

information. To sum up, survey research design is generalizable, reliable, and versatile (Babbie, 2015; Reis & Judd, 2000).

Validity is one of the limitations of survey design. Because the survey questions are standardized, people might interpret every question differently. Therefore, survey results may not provide accurate and comprehensive information about the population. To eliminate this limitation, reliable and validated instruments were utilized for the current study.

# Subjects

# **Population**

Gall and colleague (2007) defined two types of populations in quantitative research: target and accessible populations. Target population includes "all the members of a real or hypothetical set of people, events, or objects to which researchers wish to generalize the results of their research". Accessible population refers to "all individuals or objects which realistically can be reached for sampling" (p. 166). The target population for this study is Turkish international students in the U.S.

As explained in Chapter 2, the literature documented that college, masters, and doctoral students face various psychological, social, economic, and physical problems (Sandhu & Asrabadi, 1994; Poyrazli et al., 2001). Because the literature has shown no information about the total wellness of Turkish international students and its relationship with the basic psychological needs, it makes theoretical sense to target this population.

# Sampling

For this study, convenience sampling method (also known as availability sampling) was used. In this sampling method, the researcher tries to reach participants who are eligible and suit the purpose of the study (Gall et al., 2007). Thus, for this study, the college, masters, and

doctoral students in the U.S. who are eligible for the study was contacted and asked to participate. Warner (2013) indicated that to assure power and strength of relationship between variables, 100 or more sample size is needed. In their study, Tabachnick and Fidell (2007) advised a rule to have the power in regression analysis that one hundred and four cases plus number of predictor and criterion variables are needed. For the current study, the total number of Turkish international students was 179, which is considered adequate sample size based on previous research (Tabachnick & Fidell, 2007; Warner, 2013).

### Instruments

# **Demographic Questionnaire**

The researcher created the demographic questionnaire to gather participants' demographic information. This self-administered instrument seeks information about participants' basic demographic characteristics of gender, age, degree, field of study, length of stay, relationship status, spirituality and religious involvement, and socioeconomic status.

### **Perceived Wellness Scale**

Wellness of the international students will be measured with the Perceived Wellness Scale. Perceived Wellness Survey includes a 36 items. The format of the survey is Likert-style in that the rating of this scale is a 6-point range from 1 = very strongly disagree to 6 = very strongly agree. Perceived Wellness Scale has six dimensions, so that the perfect score for each dimension is 36. The total score for the whole survey is 216, which represent a highest wellness score. Lower score in any of the six dimensions is generally seen as an indication of a low sense of perceived wellness in that area. In addition, sum of all the six dimensions' scores indicates the total perceived wellness scale. In his studies (Adams et al., 1997, 1998), the reliability score for the Perceived Wellness Survey ranged from .73 to .81 with an internal consistency reliability alpha (r = .91). The internal consistency of this instrument of measurement has a reliability coefficient alpha that ranges from .88–.93. Harari and Colleagues (2005) conducted confirmatory factor analysis to measure construct validity of the wellness scale for each of the six subscales of the wellness scale. Psychological wellness ranked highest (r = .70) as the highest determinant of general sense of perceived wellness. Emotional wellness ranked second at (r = .67), followed by spiritual wellness at (r = .61). Emotional wellness ranked second at (r = .67), followed by spiritual wellness at (r = .61). Social wellness received a score of (r = .56), then intellectual wellness received a score of (r = .53). The reliability score for the Perceived Wellness Survey ranges from (r = .73-.81) with an internal consistency reliability alpha (r = .91).

In addition, Harari, Waehler, and Rogers (2005) examined the psychometric properties of the perceived wellness scale and its relationship to psychological functioning in two university samples (n=317). Participants were given Perceived Wellness Scale (PWS), Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), Hopkins Symptom Checklist-21 (HSCL-21, and Balanced Inventory of Desirable Responding Version Six: Impression Management Scale (BIDR-6). Bivariate correlations for the emotional, intellectual, physical, psychological, social, and spiritual dimensions and total score were significantly and positively correlated with each other. The hierarchical regression analyses indicated significant relations between total wellness and BDI with F value of 85.1, BAI with F value of 25.2, and HSCL-21 with F value of 54.2 (df = 2,314). The criterion validity results also showed that the Revised PWS total lower scores are negatively correlated with the BDI, BAI, and HSCL-21. The reliability score for the Perceived Wellness Survey was .89 in the current study.

## **Self-Determination Scale**

To assess participants' sense of self and feelings about a sense of choice with respect to their behavior, the study will utilize the Self-Determination Scale (Sheldon & Deci, 1996). The Self-Determination scale measures individual differences in how people tend to function in a self-determined way. The 10-item survey was basically created to measure self-contact and perceived choice in actions. Participants indicate which of two statements feels more true for them. For example, "I feel that I am rarely myself" versus "I feel like I am always completely myself" are self-contact items and "I am free to do whatever I decide to do" versus "What I do is often not what I'd choose to do" are perceived choice in actions items. Self-Determination Scale showed good internal consistency (alphas range from .85 to .93. The survey has a good test-retest reliability with r = .77 over an 8-week period. The scale has been shown to be a strong predictor of a wide variety of psychological health outcomes such as self-actualization, empathy, and life satisfaction (Sheldon & Deci, 1996), creativity (Sheldon, 1995), and resistance to peer pressure (Grow, Sheldon, &Ryan, 1994). The reliability score for the Self-Determination scale was .80 in the current study.

#### **Basic Psychological Needs Survey**

The Basic Psychological Needs Satisfaction survey is a 21-item measure. The survey assesses the satisfaction of basic psychological needs in general. In this survey, participants indicate how true they feel each statement is of their life and respond on a scale of 1 (Not at all true) to 7 (Very true). Higher scores indicate of a higher level of satisfaction of needs. Basic Psychological Needs Satisfaction Scale includes autonomy, relatedness, and competence factors. A sample autonomy item is: "I feel like I am free to decide for myself how to live my life"; a sample relatedness item is: "I get along with people I get in contact with"; and a sample competence item is: "In my life I do not get much of a chance to show how capable I am" (reverse-scored). The dimensions have good levels of internal consistency (alpha 0.74 for relatedness, 0.75 for competence, 0.63 for autonomy), and the overall need satisfaction scale with the alpha 0.84 averaged across all 21 items. Although, there are similar scales to assess need satisfaction specifically such as work (Ilardi, Leone, Kasser, & Ryan, 1993), the current study is not interested in just one specific life context but in more general life. The reliability score for the Basic Psychological Needs survey was .86 in the present study.

### **The Perceived Competence Scale**

According to self-determination theory, competence is one of the essential psychological needs, and the perception of competence is important in the facilitation of an individual's goal attainment. In addition, the feeling of competence provides a sense of need fulfillment as they develop a positive approach in the engaged activities (Deci and Ryan, 2005). Therefore, assessing students' level of competence is important in order to predict their maintained behavior change, efficient performance, and internalization of immersive values.

Within self-determination theory, the Perceived Competence Scale (Williams, Deci, & Ryan, 1999) is one of the face valid instruments in order to assess people's feelings of competence in specific healthy behavior. The scale includes four items with four healthy behaviors, namely not smoking, eating a healthy diet, exercising regularly, and using alcohol responsibly. Examples of questionnaire items are "I feel confident in my ability to quit smoking", "I am able to maintain a healthy diet now", or "I feel confident in my ability to exercise regularly". Participants respond to items on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Across four studies, the perceived competence scale

showed excellent alpha reliability with .90. The reliability score for the Perceived Competence Scale was .89 in the current study.

# **Research Method**

In this study, four instruments were utilized. These instruments measure perceived wellness, basic psychological needs, perceived competence, and individual differences in the extent to which people tend to function in a self-determined way. In addition, a Demographic Questionnaire was used in order to gather information about participants' gender, age, degree, field of study, length of stay, relationship status, spirituality and religious involvement, and socioeconomic status. Each participant was given a complete packet which includes all the instruments for a single collection of data. The packet contained a full set of the following items for each prospective participant:

- 1. Description of the study, including an Informed Consent form (Appendix A).
- 2. Demographics questionnaire (Appendix B).
- 3. Copy of the Perceived Wellness Survey (Appendix C)
- 4. Copy of the Basic Psychological Needs Survey (Appendix D)
- 5. Copy of the Self-Determination Survey (Appendix E)
- 6. Copy of the Perceived Competence Scale (Appendix F)

# **Research Process**

# **Data Collection**

The study used an Internet based survey questionnaire to collect data. Approval from the St. Mary's University's Institutional Review Board (IRB) was obtained before starting the data collection procedures, and all ethical research practices were followed. After receiving IRB approval, the distribution of survey began. Regarding online data collection, the researcher

created an online Qualtrics survey. In the beginning of the survey participants were informed about the study with providing informed consent. If they agree to participate in the study, they click to continue button. Participants of the study were recruited through Turkish Students Associations of various colleges in U.S., Facebook groups of Turkish students who live in U.S., and Turkish Student Societies. Also, researcher contacted with the Turkish Educational Attaché of Houston division. The attaché was asked to announce the study to the Turkish students.

In this study, the internet based survey questionnaire were used and data collected based on the instruments, namely a demographic variable questionnaire prepared by the researcher, Perceived Wellness Scale (Adams et al., 1997), Basic Psychological Needs Survey (Deci&Ryan,1991), Self-Determination Scale (Sheldon & Deci, 1996), and Perceived Competence Scale (Williams, Deci, & Ryan, 1999). Before collecting any data, the authors' permission to use each instruments were obtained. All data will be collected during 2016 fall and 2017 spring semesters.

# Axiology

The following ethical steps were implemented:

1. An approval from the St. Mary's University's Institutional Review Board (IRB) was obtained before data collection.

2. Before data collection, all programmatic permissions were obtained such as permissions from Turkish Educational Attaché.

3. All IRB ethical regulations were followed before data collection (i.e., informing participants about their rights and withdraw anytime from the study without negative consequences).

4. Permissions to use surveys were attained from developers of each instrument.

5. To ensure the confidentiality of participant responses, data were collected anonymously.

6. Data were collected from only volunteer participants.

7. The study was conducted with the permission of dissertation chair and committee members.

8. All of the study information and computer data are kept under lock and key.

### **Statistics**

Following the administration of the survey, collected data were transferred from Qualtrics to IBM Statistical Package for the Social Sciences (SPSS) version 24 to calculate descriptive and inferential statistics. The total received responses were 325. Before start the analyzing data, individual cases were evaluated based on completion of survey, extreme missing data, and IP address. Respondents with extreme missing data were eliminated using listwise deletion method. After the evaluation of data, 146 cases were excluded. A total of 179 cases were included for final analysis.

Descriptive tests were used to look for themes for each variable and subscale that frequency, normality, and proportion tests were executed to guide further findings. Inferential tests, specifically, correlation, F-test, U-test, and regression analyses were conducted in order to answer research questions.

#### Summary

In this chapter, the research methodology of the study was explained. The purpose of the study is to examine the total wellness of Turkish international students in the United States. The design of the study is quantitative survey method. The population of the study was identified as Turkish international students in the U.S., and the sample was recruited using a convenience sampling method. In order to measure wellness and basic psychological needs of international

students, four instruments were implemented. Researcher was responsible to collect and analyze data using descriptive and inferential tests in the SPSS. All ethical considerations were provided by the researcher that respondents' data were kept confidential.

### **Chapter IV-Results**

# Introduction

The overall purpose of this study was to examine the perceived total wellness of Turkish international students in the United States. Specifically, this study was conducted to answer the research question: What is the total perceived wellness of Turkish international students in the United States? Also, the relationship between basic psychological needs, self-determined way of functioning and wellness was examined. This chapter includes description of participants and the results of the study based on the statistical analyses. The results of the analysis are organized in accordance with the research questions. First, descriptive statistics of dependent and independent variables are presented. Second, the inferential statistics ANOVAs, regression analyses, and correlations are displayed.

### **Demographic Characteristics of Sample**

The study initially intended to include a sample of Turkish international students in the U.S. Three hundred and twenty-five Turkish students responded to the study. Respondents with extreme missing data were eliminated using listwise deletion method before starting to analyses. A total of 179, yielding a 55.1% response rate, students were included in this final analysis. Of those who responded, 60.3% (n = 108) were male and 39.7% (n = 71) were female. The age of the participants ranged from 19 to 57 with an average participant age of 29.72 (SD = 4.53) years. Most of the participants were between the ages from 25 to 34 (n = 158). Out of the total amount of respondents reported their education level as follows 48% doctoral students (n = 86), 44.1% master's students (n = 79), and 7.8% students in bachelors (n = 14). In terms of field, most of the participants 67.6% were in the science and engineering field followed by 11.7% in Business, 16.22 % in Education and 4.5 % in Art, humanities, and other fields. The socioeconomic statuses

of participants were low (25.7%), intermediate (70.4%) and high (3.9%). Only 3.9% of the participants were engaged, 48% percent were married, 10.1 % percent were in a relationship, and 37.4% were single. The length of stay of the participants in the U.S. ranged from one year to 25 years, with an average of 5 years (SD = 3.80). Participants reported their level of spirituality/religiosity as follows: low (22.9%), intermediate (60.9%), and high (16.2%). Demographic characteristics of the participants are summarized in Table 1.

Research question one was as follows: What is the total perceived wellness of Turkish international students in the United States? Overall wellness for the participants was calculated by dividing the individual's wellness magnitude by their wellness balance. Wellness magnitude was determined by summing the subscale means for each of the wellness dimensions. Wellness balance was found by taking the square root of the overall variance and adding 1.25. The value of 1.25 was added to prevent a wellness balance of zero from creating invalid wellness composite scores (Adams et al., 1997). In the current study, the mean score for total wellness was 14.78 (SD = 2.50). The Cronbach alpha reliability of the total perceived wellness in the present study was .89 that was consistent with the previous studies (Adams et al., 1997; Harari et al., 2005).

In addition to total wellness, the Perceived Wellness Scale provided scores for six dimensions that are psychological wellness, emotional wellness, social wellness, physical wellness, spiritual wellness, and intellectual wellness. The mean scores and standard deviations for each wellness dimension are shown in Table 2. The mean scores among subscales were fairly consistent. The current study showed the highest mean scores in the dimensions of spiritual (M = 4.64, SD = .90), social (M = 4.55, SD = .80), and physical wellness (M = 4.41, SD = .90)

.79). The mean scores of emotional (M = 4.32, SD = .77), intellectual (M = 4.21, SD = .70), and psychological dimensions (M = 4.20, SD = .70) were slightly lower.

# Table 1

a 1	Response	Sample N	Sample %
Gender			
	Male	108	60.3
	Female	71	39.7
Age			
	18-24	9	5.0
	25-34	158	88.3
	35 and above	12	6.7
Length of Stay			
	1-5	115	64.2
	6-10	52	29.1
	11 and above	12	6.7
Degree			
0	Bachelors	14	7.8
	Masters	79	44.1
	Doctorate	86	48.0
Major			
U	Science and	121	67.6
	Engineering		
	Business	21	11.7
	Education	29	16.2
	Arts, Humanities,	8	4.5
	and Others		
Relationship			
1	Single	67	37.4
	In a relationship	18	10.1
	Engaged	7	3.9
	Married/partnered	86	48.0
	Divorced	1	.6
Socio-Economic			
Status			
	Low	46	25.7
	Intermediate	126	70.4
	High	7	3.9
Spirituality and	-0		
Religious			
0	Low	41	22.9
	Intermediate	109	60.9
	High	29	16.2

*Demographic Characteristics of the Study Sample* (N = 179)

Reliability measures using Cronbach's Alpha for each of the wellness subscales are also reported in Table 2. The primary variable of interest was total wellness. However, the subscales of Perceived Wellness Scale can be used individually to measure particular wellness areas (Adams et al., 1997). Nunnally (1978) reported that .70 is the minimum alpha coefficient for internal consistency reliability. For the current study sample, only spiritual wellness dimension met this criteria (a = .815).

### Table 2

Variable	Mean	SD	Minimum	Maximum	Range	Cronbach's Alpha (α)
Total Wellness	14.78	2.49	8.88	23.10	14.22	.890
Psychological Wellness	4.20	.690	2.50	6.00	3.50	.514
Social Wellness	4.55	.803	2.50	6.00	3.50	.603
Physical Wellness	4.41	.787	2.00	6.00	4.00	.676
Spiritual Wellness	4.64	.904	2.00	6.00	4.00	.815
Intellectual Wellness	4.21	.699	2.67	6.00	3.33	.602
Emotional Wellness	4.32	.772	2.67	6.00	3.33	.614

Descriptive Analyses for Total Wellness and Six Dimensions

*Note*. *N* = 179

Research question two was as follows: What is the total perceived wellness of Turkish international students as relates to gender, age, and length of stay in the United States, level of degree, relationship status, and religious/spiritual orientation?

Literature documented differences in wellness scores based on socio-demographic characteristics such as gender, age, relationship status (Deggs-White & Myers, 2006; Hermon & Davis, 2004; Rayle, 2005; Van Dyke, 2001). Therefore, it is important to determine whether the wellness of Turkish international students was significantly related to any socio-demographic characteristics such as gender, age, length of stay, relationship status, education level, and religious/spiritual orientation. These variables were examined to determine if they were significantly related to overall perceived wellness and within six dimensions of wellness. Table 3 provides a summary of statistical tests comparing scores in total perceived wellness and each dimension of wellness according to the demographic characteristics of respondents.

### **Results Regarding the Relationship between Wellness and Gender**

Mann- Whitney U test, a non-parametric test, was used to test the differences in perceived wellness between gender categories. This test was chosen because the distribution of the wellness variable was not normally distributed within gender categories. The distribution of perceived wellness was the same across gender categories with the value of U = 3663.5, p =.615, thus, there was no significant difference in the perceived wellness across gender categories. Mann- Whitney U test was also used to test the differences in psychological, intellectual, physical, spiritual, and social wellness between gender categories. This test was chosen because the distributions of these wellness dimensions were not normally distributed within gender categories. The results indicated that there were no significant differences in the physical (U =3345.5, p = .148), spiritual (U = 3766.5, p = .842), intellectual (U = 3360.5, p = .161), psychological (U = 3346, p = .149) wellness across gender categories. However, there are significant differences in social wellness across gender categories (U = 2986.5, p = .012).

The Independent t-Test was used to test the differences in emotional wellness between gender categories. This test was chosen because the normally assumption was met within gender categories. Results revealed that there was no significant difference in the emotional wellness scores across gender categories (t (177) = 1.402, p > 0.05).

### **Results Regarding the Relationship between Wellness and Age**

The effects of age on total wellness were examined by one-way analysis of variance (ANOVA). The results revealed that there were significant differences in the perceived wellness

across age groups (F = 11.938, p > .05). The Tukey, multiple comparison test, showed age group 35+ is significantly different than age groups 25-24, and age group 18-24.

Kruskal-Wallis test, a non-parametric test, was used to test the differences in dimensions of wellness across age groups. This test was chosen rather than Mann-Whitney U Test because age group has more than two independent groups. The data showed that there were significant differences in psychological (H(2) = 12.43, p = .002), social (H(2) = 10.41, p = .005), spiritual (H(2) = 10.48, p = .005), and intellectual (H(2) = 10.53, p = .005) wellness across age categories (p < 0.05). Results indicated that there were no significant differences in physical wellness across age groups (H(2) = 4.90, p = .086). Results also showed significant differences in the normally distributed emotional wellness across age groups (F(2,176) = 6.602, p = .002).

# **Results Regarding the Relationship between Wellness and Length of Stay**

The one-way analysis of variance (ANOVA) was executed to determine the effect of years lived in the U.S. on total wellness. Results showed that there were significant differences in perceived wellness across the number of years lived in the US (F (2,176) =6.388, p <.05). The Tukey, multiple comparison post hoc test was used to find which year group affected the total wellness score most strongly. Result showed perceived wellness was significantly different for participants who lived in the US 11+ years (M = 17.14) than those who lived in the US less than 10 (M = 14.81) years. With respect to length of stay, results revealed there were no significant differences in social (H (2) = 2.54, p = .280), spiritual (H (2) = 2.28, p = .318), physical (H (2) = 1.18, p = .552), psychological (H (2) = 5.50, p = .064), and emotional (F (2,176) = .789, p = .456) across number of years lived in the US. However, there were significant differences in the intellectual wellness across number of years lived in the US (H (2) = 6.84, p = .033)

### **Results Regarding the Relationship between Wellness and Degree**

The one-way analysis of variance (ANOVA) was executed to determine the effect of degree in overall wellness. Results showed that there were no significant differences across degrees F(2, 176) = .64, p > .05). In other words, the total wellness of students was not significantly different based on their degree level.

# **Results Regarding the Relationship between Wellness and Relationship Status**

Kruskal-Wallis test was run to find differences in perceived total wellness across relationship status groups. Results revealed that there were no significant differences in perceived wellness across relationship status groups (H(2) = 2.38, p = 0.496).

ANOVA test were executed for normally distributed emotional and psychological wellness across relationship status groups. Results revealed that there were no significant differences in the emotional (F(3,174) = 1.453, p > .05) and psychological (F(3,174) = 1.567, p > .05) wellness across relationship status groups. Results also revealed that there are no significant differences in the social (H(2) = 4.91, p = .178), physical (H(2) = 1.14, p = .765), spiritual (H(2) = 6.40, p = .094), and intellectual (H(2) = 1.86, p = .600) wellness across relationship status groups.

### **Results Regarding the Relationship between Wellness and Socio-economic Status**

The one-way analysis of variance (ANOVA) was executed to determine the effect of socio-economic status in overall wellness. Results indicated that there were significant differences in perceived overall wellness across socio-economic status levels (F(2,176) = 3.70, p = .027). Post hoc analyses were conducted to given statistically significant results of ANOVA. The following groups were found to be significantly different (p < .05): groups 1 (low; M = 13.96, SD = 1.91), 2 (intermediate; M = 15.02, SD = 2.58), 3 (high; M = 15.74, SD = 3.22). In

other words, students with low socio-economic status seem to report lesser wellness than students with intermediate and high socio-economic status.

# Results Regarding the Relationship between Wellness and Spirituality/Religious Involvement

To determine the differences between wellness and spirituality/religious involvement levels, ANOVA test was conducted. Results revealed that there were no significant differences in the perceived wellness across levels of spiritual/religious involvement F(2,176) = .136, p =.873). Kruskal-Wallis test for physical, spiritual, intellectual, psychological, emotional wellness and ANOVA for normally distributed social wellness were executed to determine differences between subscales of wellness and spirituality/religious involvement. ANOVA test revealed that there were no significant differences in the social wellness across levels of spiritual/religious involvement (F(2,176) = .211, p = .810). The independent samples Kruskal-Wallis test also indicated that there were no significant differences in emotional (H(2) = .302, p = .860), physical (H(2) = 1.27, p = .528), psychological (H(2) = 1.45, p = .484), and intellectual (H(2) = 2.18, p = .335) across levels of spiritual/religious involvement (p > 0.05). However, there were significant differences in the spiritual wellness across levels of spiritual/religious involvement (H(2) = 1.5.19, p = .001).

### **Results Regarding the Research Question 3**

Research questions three were as follows: To what extent Turkish international students' basic psychological needs related to their perceived total wellness? To what extent Turkish international students' autonomy is related to their perceived total wellness? To what extent Turkish international students' competence is related to their perceived total wellness? To what extent extent Turkish international students' relatedness is related to their perceived total wellness?

# Table 3

Analysis of Variance Comparing Wellness by Demographic	Analysis of V	'ariance (	Comparing	Wellness	by	Demographics
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Demographic	Response	Sample N	Mean	SD	F (df)	p-value
Gender						
	Male	108	14.62	2.23		
	Female	71	15.01	2.85		
Age					11.93(2,176)	.000
	18-24	9	14.22	2.37		
	25-34	158	14.57	2.32		
	35 and above	12	17.98	2.81		
Length of					6.39(2,176)	.002
Stay						
-	1-5	115	14.51	2.30		
	6-10	52	14.81	2.60		
	11 and above	12	17.14	2.77		
Degree					.64(2,176)	.529
C	Bachelors	14	15.34	3.44		
	Masters	79	14.88	2.30		
	Doctorate	86	14.60	2.50		
Major					9.66(2.176)	.199
	Science and	121	14.63	2.42	,	
	Engineering					
	Business	21	15.14	2.57		
	Education	29	14.65	2.43		
	Arts, Humanities,	8	16.48	3.27		
	and Others	0	10.10	3.27		
Relationship					.64(2,176)	.635
renunonsmp	Single	67	14.52	2.40		
	In a relationship	18	14.32	2.55		
	Engaged	7	14.72	2.55		
	Married/partnered	86	15.07	2.58		
	Divorced	1	15.22	2.30		
Socio-	Divolecu	1	13.22		3.70(2,176)	.027
Economic					5.70(2,170)	.027
Status						
Status	Low	46	13.96	1.91		
	Intermediate	126	15.02	2.58		
	High	7	15.74	3.22		
Spirituality	111511	/	13.74	5.44	.136(2,176)	.873
and Religious					.130(2,170)	.075
and Kenglous	Low	41	14.66	2.75		
			14.00 14.77			
	Intermediate	109		2.46		
	High	29	14.98	2.30		

In this sample, Cronbach's alpha for the overall Basic Psychological Needs Scale

(BPNS) was .86. Alpha scores for the subscales in this study were as follows: autonomy ( $\alpha =$ 

.62), competence ( $\alpha = .69$ ), and relatedness ( $\alpha = .76$ ).

Correlation and multiple regression analyses were conducted to examine the relationship between wellness and predictors of autonomy, competence, relatedness as well as total score of Basic Psychological Needs Scale. The results indicated that there is a moderate linear relationship between perceived total wellness and autonomy (r = .571, p < .001), competence (r= .562, p < .001), and relatedness (r = .449, p < .001), respectively.

Table 4

Correlations between Perceived Total Wellness and Basic Psychological Needs Subscales

Variable	Wellness	Autonomy	Competence	Relatedness
Wellness	1.000	.571**	.562**	.449**
Autonomy	.571**	1.000	.640**	.576**
Competence	.562**	.640**	1.000	.581**
Relatedness	.449**	.576**	.581**	1.000

*Note*. \*\* Correlation is significant at the 0.01 level.

A multiple linear regression was calculated to predict wellness based on basic psychological needs (autonomy, competence, and relatedness). The multiple regression model with all three predictors produced (F (3, 175) = 38.289, p < .001) with an R<sup>2</sup> of .396. In other words, at least one variable has explanatory power and 39.6% of the variation in total perceived wellness can be explained by autonomy, competence, and relatedness. To determine which independent variables are significantly predicting the total perceived wellness, a model was structured. For the model assumption, normal and linear assumptions met and standardized residuals were uncorrelated with each of the predictor variables. Results revealed that autonomy and competence were found significant predictors of total perceived wellness (p < .05). Relatedness did not contribute to the multiple regression model. The correlation and multiple regression tests were reported in Table 5.

Table 5

Multiple Linear Regression Analyses of Basic Psychological Needs on Perceived Total Wellness

Variable	В	SE B	В	T	p
Autonomy	1.018	.250	.33*	4.071	.000
Competence	.803	.215	.30*	3.730	.000
Relatedness	.233	.212	.08	1.098	.274

*Note*.  $R^2$ =.396 (p <.05)

### **Results Regarding the Research Question 3a**

The research question 3a was as follows: To what extent Turkish international students' autonomy is related to their perceived total wellness? A simple linear regression was calculated to predict perceived total wellness based on autonomy level. A significant regression equation was found (F(1, 177) = 85.834, p < .001) with an R<sup>2</sup> .327. Results indicated that autonomy was found a significant predictor of perceived overall wellness that 32.7% of the variation in total perceived wellness was explained by autonomy level of Turkish international student.

### **Results Regarding the Research Question 3b**

The research question 3b was as follows: To what extent Turkish international students' competence is related to their perceived total wellness? To predict perceived total wellness of Turkish international students' overall wellness based on their competence level, a simple linear regression was executed. A significant regression equation was found (F(1, 177) = 81.922, p < .001) with an R<sup>2</sup> .316. According to the results, competence was found a significant predictor of perceived overall wellness that 31.6% of the variation in total perceived wellness was explained by competence level of Turkish international student.

### **Results Regarding the Research Question 3c**

The research question 3c was as follows: To what extent Turkish international students' relatedness is related to their perceived total wellness? Simple regression analysis was used to test if the relatedness significantly predicted participants' perceived overall wellness. The results of the regression indicated the predictor variable of relatedness explained 20.2% of variance. It was found that Relatedness is a significant predictor of total perceived wellness (F(1,177) = 44.817, p < .001); however, this variable was not a significant predictor when Autonomy and Competence were included in the model.

Table 6

Summary of Simple Regression Analyses for Autonomy, Competence, and Relatedness Predicting Perceived Total Wellness

F	$\mathbb{R}^2$	В	SE B	В	Variable
85.834	.327	.571*	.191	1.768	Autonomy
81.922	.316	.562*	.165	1.490	Competence
44.817	.202	.449*	.186	1.248	Relatedness
_	.202	.449*	.186	1.248	Relatedness

*Note.* \**p* < .05

# **Results Regarding the Research Question 4**

Research question four was as follows: What is the relationship between a selfdetermined way of functioning and wellness among Turkish international students in the United States? In this sample, Cronbach's alpha for the overall Self Determination Scale (SDS) was .80. Alpha scores for the subscales in this study were as follows: awareness ( $\alpha = .70$ ) and perceived choice ( $\alpha = .79$ ).

To examine the relationship between self-determined way of functioning (awareness and perceived choice) and perceived total wellness, correlation and multiple regression analyses were conducted. Based on the results of the correlation, both awareness level (r = .371, p < .05) and perceived choice (r = .436, p < .05) were strongly related to perceived total wellness.

# Table 7

Variable	Wellness	Perceived choice	Awareness
Wellness	1	.371**	.418**
Perceived Choice	.371**	1	.436**
Awareness	.418**	.436**	1

Correlations between Perceived Overall Wellness and Self Determination Subscales

*Note.* \*\* Correlation is significant at the 0.01 level.

A multiple linear regression was used to predict participant's total perceived wellness based on their awareness and perceived choice level. The multiple regression model with two predictors produced (F(2,176) = 24.688, p < .001) with an R<sup>2</sup> of .219. Also, ANOVA analyses revealed that perceived choice (t = 3.151, p = .002) and awareness (t = 4.279, p = .000) both are significantly related to perceived total wellness.

### Table 8

Multiple Linear Regression Analyses of Self Determined Way of Functioning on Perceived Total Wellness

Variable	В	SE B	В	t	р
Perceived	.694	.220	.233*	3.151	.002
Choice Awareness	1.057	.247	.317*	4.279	.000

*Note*. p < .05

# Discussion

A reflection of this study about International students and their wellness has been provided in this section with a professional and ethical view. This section is provided with an overview of research questions, explanations of quantitative data, a summary of key findings, and an interpretation of findings presented within the perspective of prior research.

Using a sample of 179 Turkish international students who study in the United States, this study examined the perceived total wellness and its association with basic psychological needs and self-determined way of functioning regarding to Deci and Ryan's Self Determination Theory

(1985, 1991). The findings of the current study extend our knowledge in understanding the role of basic needs on international students' wellness.

As the number of international students is rising in the United States, it is crucial to explore the definition, conceptualization, dimensions and influences of wellness from a holistic perspective. The following research questions were used to undertake further explanation of Turkish international students' wellness.

Research Questions One: What is the total perceived wellness of Turkish international students in the United States?

Research Questions Two: What is the total perceived wellness of Turkish international students as relates to gender, age, length of stay in the United States, level of degree, and religious/spiritual orientation?

Research Questions Three: To what extent Turkish international students' basic psychological needs related to their perceived total wellness?

Research Questions 3a: To what extent Turkish international students' autonomy is related to their perceived total wellness?

Research Questions 3b: To what extent Turkish international students' competence is related to their perceived total wellness?

Research Questions 3c: To what extent Turkish international students' relatedness is related to their perceived total wellness?

Research Questions Four: What is the relationship between a self-determined way of functioning and wellness among Turkish international students in the United States?

### **Interpretation of Findings**

**Research Question One.** Several studies in the area of psychological health, coping resources and life satisfaction among international students use student sample to measure the total perceived wellness. Past investigations of the physical and emotional health of international students had been mixed up, with the main focus of adjustment and acculturation issues. Wellness is a general indicator of physical and mental health and determines the current health status of the students. For the current study, there is no normative population to compare overall wellness as well as dimensions of wellness. However, several studies used student sample to measure the total perceived wellness. Based on past research using the same wellness measure, the descriptive statistics of the current study revealed that Turkish international students presented lower wellness, when compared to Adams et al. (1997) and Hariri et al (2005). An explanation of the results for the Turkish students' wellness measures and descriptive statistics might be the fact that other studies included only domestic undergraduates. The younger undergraduate students might be more physically and socially active. As a result, their physical and social wellness scores increase the perceived total wellness statistics. The Turkish students might have been impacted by their status in their host culture. This particular research was largely consistent with other studies that international and domestic students experience similar stressors. However, international students' culture-specific challenges directly impact personal wellness in regards to interpersonal and intrapersonal communication.

Comparing domestic students with international students' physical-medical reactions, the international students had more stressors including: loss of appetite, headaches, fatigue, lethargy, anxiety, and depression. Thus, international students are most likely to seek medical services for their physical well-being (Misra & Castillo, 2004; Shih & Brown, 2000). Besides, past

researchers had pointed out that students who are from collectivistic cultures mostly prefer talking to friends, rather than seeking counseling services (Kilinc & Granello, 2003). I agree with Kilinc and Granello's results, because my personal cultural perspective, as a Turkish international student, has been that I prefer to talk to friends for psychological assistance and not use counseling or professional services.

**Research Question Two.** The past adjustment, acculturation, and well-being studies on international students provided individual, group, and situational differences based on gender, age, relationship status, degree levels, socio-economic status, spiritual and religious involvement, length of time in host culture (Aycan & Berry, 1996; Ballentine, 2010; Lee, 1999; Leung, 2001; Poyrazli et. al., 2001; Poyrazli & Lopez, 2007; Yeh & Inose, 2003). The second research question examined the relationship between the overall wellness and demographics of the Turkish international students. Overall, the results of the current study found both consistent and inconsistent findings with the literature. A list of individual, situational differences representing international students from the stated list above are as follows:

**Gender.** According to the results, there had not been significant relationship between wellness and gender (male/female). The report on female students had been slightly higher on the wellness scores (M = 15.02) than their male counterparts (M = 14.62) but this difference was not significant. This result is consistent with wellness, acculturation, adjustment issues, and well-being studies of Turkish international students (Ballentine, 2010; Bektas, Demir, & Bowden, 2009; Duru & Porazli, 2011; Myers, Mobley, & Booth, 2003).

The cultural perspective indicated that there had been a clear distinction between genders where assertiveness, toughness, and focusing on material success were the characteristics of men, while women displayed modesty, tenderness, and responsibility for quality of life

(Hofstede, 2011). A personal outlook of Turkish culture, from a male perspective, is that Turkish men do not typically express their emotions. The Turkish cultures expresses that males should not reveal their emotions. The traditional views insist that emotions are sign of weakness in masculinity. Therefore, it might be assumed that the female Turkish students were more confident in expressing their emotions about wellness than the male Turkish students and their wellness scores were found to be higher than those of male students in the present study. Despite these differences, the results in this study showed that wellness does not significantly differ based on gender.

Age. The demographic variable of age proved to be highly related to Turkish international students' perceived levels of wellness. The previous statistics had presented that older students expressed a higher social and psychological, and spiritual wellness than younger students (Keyes 1998; Myers & Mobley, 2004; Tsoi-Pullar, 1995). In terms of adjustment, younger international students experience higher volumes of homesickness than older individuals (Poyrazli & Lopez, 2007). As a result, their wellness may be decreased by the negative effects of homesickness. In contrast, several studies revealed that there had been no relationship between age and acculturative stress (Poyrazli et. al., 2004; Yeh & Inose, 2003). In modern debates, it has been revealed that there have been significant increases in psychological, emotional, social, spiritual, and intellectual wellness across all age categories. The developed proposal that perceived wellness might change according to age for specific Turkish international students based on the present results.

**Socio-Economic Status.** Socioeconomic status has been an important element on wellness with international students. As stated previously in the literature review, wellness has been affected by personal income and wealth (Kaplan et. al., 2008; Nettle, 2005; Woodyard and

Grable, 2014). Consistent with the previous research, this study revealed that there is a significant relationship between socioeconomic status and perceived wellness of Turkish international students. High level of socioeconomic status may be associated with high level satisfaction of life and decreased level of psychosomatic symptoms. As a result, psychological, physical, and emotional wellness may boost the total perceived wellness. A possible answer for these significant findings might be inadequate medical care, nutrition problems, and deprived living circumstances for most international students.

A large number of Turkish international students participated to this study receive scholarships from their government to pursue advanced education. A research study by Poyrazli and colleagues (2001) found difficulties with finances between adjustment problems and scholarship funds to live in new countries. Students who received scholarship from their government may end up with higher anxiety levels with decreased wellness, because of low funding to live. Therefore, the amount of scholarship has to be adjusted to a higher dollar amount to achieve better living standards in the United States, for the sake of international students' overall wellness.

**Degree.** In the literature, it has been suggested that students' wellness differ along with their level of education and field of study (Myers, Mobley, & Booth, 2003; Keyes, 1998). Contrary to previous studies, this study found no significant relationship between perceived wellness of Turkish international students and their level of education. This may be due to experiencing similar problems, stressors, or living conditions while Turkish international students are in the U.S. Considering the effect of maturity, maintaining high level of degree, and greater knowledge, students' perceived overall wellness may be expected to be high as a result of increased wellness in specific areas such as intellectual, social, emotional, and psychological.

However, overgeneralization of this opinion may not be proper because of international students' critical sojourn and different living conditions. One explanation for this finding may be that wellness of international students is highly contextual, therefore, other life conditions would be more influential on the Turkish students' wellness no matter the degree they are studying. The time frame of degree years for completion could be a reason of increase of the anxiety in total wellness of international students. The time away from the international student's home country could cause separation anxiety, culture shock, and abandonment issues. As the students' progress moves along through school, they become more comfortable with their host culture and may experience less stress while developing better confidence.

**Relationship.** Relationship status is one of the most studied variables in wellness literature. Existing research indicated a link between well-being and marital status/committed relationship. In a Turkish student sample, it was found that there were significant differences among married/committed groups status (Sari, 2003). In addition, an examination had been conducted looking at the association between relationship status and well-being (White, 1992). The current study found no significant relationship in the wellness between single, in a relationship, engaged, married, or divorced groups of international students. Since there is no existing study, particularly on Turkish international students' perceived wellness, it could be perceived that it is possible to interpret the result of previous acculturation research of wellbeing and adaptation process studies. An example of adaptation found that marital status showed a significant increase in married Turkish international students' stress level compared to single Turkish international students' acculturative stress level (Duru & Poyrazli, 2007).

The findings of a recent study could have revealed a significant wellness score among international Turkish groups within a relationship status. In the Turkish culture, feelings of

belongingness and harmony are key components of a healthy living. Being a family is the most important part of the Turkish society and most family members are emotionally dependent and supportive of one another. Married international students and those committed to a relationship are expected to have higher significant wellness scores when compared to single Turkish international students. Despite the literature documented contradicted results, more research is merited particularly about the relationship between international students' wellness and marital status.

**Length.** Exploration about international students' wellness has questioned if the number of years living in the U.S. impacted their overall health. The research conducted came up empty with no published study in literature that investigated the relationship between lengths of stay in the U.S. compared to the wellness of Turkish international students. The results of the current study showed that there were significant differences in perceived wellness across the number of years lived in the US. Regarding to other international groups, a study showed different results with previous research (Yue & Le, 2012). One general study about international students revealed that the challenges and adjustment problems are negatively associated with the length of stay in the U.S. (Duru & Poyrazli, 2011). The possible explanation for those results may be a consequence of unfamiliarity to the host culture or over increased confidence about living different culture.

Augmented length of the stay in the host culture may increase the level of social engagement with domestic friends, professors and local community. Accordingly, international students who have high level of social connectedness might show higher level of wellness. In collectivistic Turkish culture, the patterns of relationships, belonging to group and support from family/friends could be vital elements. When Turkish international students have adequate

engagement with the host society, my understanding has been that their overall perceived wellness has increased.

**Spirituality.** Spiritual and religious involvement was another variable in this study. A few current discoveries in this study revealed that there had been no significant differences in the perceived overall wellness of spiritual/religious involvement. This result is inconsistent with previous research (Idler, 1987; Ellison, 1991). In the literature there is a positive association between adjustment difficulties and perceived discrimination among Turkish international students (Duru & Poyrazli, 2011). Also, perceived discrimination is one of the most important elements on international students' wellness (Lee, 2005). One explanation for this finding might be that Muslim Turkish international students might not practice their religion or cannot attend religious activities in the host culture due to the feeling of discrimination.

The literature documented that individual with much more spiritual and religious involvement had high level of happiness, positive emotions, and greater levels of life satisfaction (Ellison, 1991. International students may struggle trying to balance their faith, religious involvement and living in a different environment in terms on religion. Although schools and most of people in the U.S. defend religious freedom, international students might still experience discomfort with practicing their religion and spiritual orientation. In terms of culture, Turkey shows higher uncertainty avoidant characteristics. The studies showed that Turkish people highly need rules and laws to alleviate anxiety and stress (Hofstede, 2011). Islamic and traditional regulatory patterns are seen to decrease the amount of tension by how they alleviate the stress and anxiety of uncertainty. It could be concluded that religion has a significant role on alleviating stress and anxiety. Hamza (2014) indicated that international students attach importance to their values, norms about life and its difficulties in host country. Therefore,

religion and spirituality could have a positive influence on Turkish people's spiritual wellness, even they live in an environment different than own culture.

# **Research Question Three and Four**

I now present an evaluation of the literature based on the theory of self-determination that compares three basic psychological needs that facilitate perceived total wellness of Turkish international students that addresses the third research question "To what extent Turkish international students' basic psychological needs related to their perceived total wellness?" Results indicated that all three basic psychological needs, autonomy, competence, and relatedness significantly predict overall wellness of Turkish international students. The importance of basic psychological needs for well-being, academic success, interpersonal relationships, mental and physical health has been researched extensively in the literature. Selfdetermination theory (SDT) refers to a human motivation theory that assesses a broader array of phenomena throughout culture, age, education, socio-economic status and gender amongst others (Kormas et al., 2014). Being a motivation based theory, SDT tackles the aspects that tend to energize individual's behaviors as well as what makes them to take action and the way such behaviors are controlled within the diverse domains of their lives. The explanations of SDT have been focused mainly at psychological levels thereby making use of the human cognitions, perceptions, emotions, and requirements as the key predictors of behavioral, regulatory, experiential, and developmental outcomes. Visser and Hirsh (2013) have, therefore, described SDT as an organismic presumption of best human motivation that has been broadly supported in the last thirty years by several researchers carried out within the field of education. According to SDT, the intrinsic motivation to engage in specific behavior is either supported or undermined by the three psychological needs autonomy, competence, and relatedness.

Autonomy. The present study revealed autonomy has been a strong predictor for overall ratings towards health and wellness for Turkish international students residing in the U.S. Autonomy, as a psychological need, mainly occurs when individuals acquire the sense that they are causes of their behaviors (Deci & Ryan, 2008). Thus, autonomy does not imply total freedom /independence, however, it refers to the internal approval of, as well as involvement with the motivated behavior of an individual. On the contrary, the support of autonomy implies taking the perception of the Turkish international students' perspective, offering choice and useful rationale in instances where choices are not feasible (Molix & Nichols, 2013). This specific study indicated that, despite cultural pressures, Turkish international students with greater levels of autonomy reported higher perceived wellness in their lives.

The results from the present study are supported by another study conducted by Chirkov, Ryan, Kim, and Kaplan, (2003) on differentiating autonomy from individualism and independence. The researchers collected autonomy and wellness related data from participants that were international students in the universities of the United States. The participants belonged from South Korea, Turkey, Russia and the United States. The relationship between autonomy in practicing one's own culture and the culture of the host country versus well- being of the individuals was studied. Similar to the present study, the study by Chirkov and colleagues suggested a strong relationship between autonomy of culture and wellness of the international students. This can further be explained by individual's mental state, acceptance of the norms while maintaining a connection with parent culture that further contribute to the wellness of the international students (Chirkov et. al, 2003).

The results of the present study are further reinforced by another study by Wichmann, (2011) which suggests that in international educational environments, students developed high

levels of wellness if they are provided autonomy in cultural practices. According to Wichmann, this is true for the students coming from Asian or non- Asian origins coming to the universities in the United States. Students are given autonomy in how they associate with each other, choose residence and attend classes, but their overall performance in school remains to be a fundamental aspect that checks their degree of independence while on campus. There is no autonomy when it comes to meeting the academic expectations of faculty, and all students including Turkish students are aware of the outcomes of gross violation of academic standards. Autonomous functioning has to vary across different domains and behaviors (Kaya & Weber, 2003).

**Competence.** This predictor variable takes place in instances where an individual acquires the sense of effectiveness with regards to his/her behavior. The current study indicated that competence was another strong predictor of wellness for Turkish international students in the U.S. As mentioned in chapter 2, Turkish international students experience challenges regarding language proficiency, lack of social interactions with others, willingness toward new experiences, personality traits. Competence seems to be adjacent to self-efficacy and could be perceptible when individuals resort to take on and master tasks that are challenging. Thus, supporting competence, for that reason, may imply the conveyance of confidence in the abilities of the Turkish international students' aptitude to resolve challenges away from home (Visser & Hirsh, 2013).

This is notwithstanding the fact that competence is an umbrella concept that looks at myriad other factors that define it. Most importantly, competence looks both at the academic and social ability of the individuals to remain above average. In a study done by Can, İnözü and Papaja (2015), socially competent individuals enjoyed studying a broad and the single most important factor was learning the lingua of their new country. Social skills in a new cultural

setup develop from a point of understanding the new language of the place, after which the individual gains access to many other aspects of the environment.

**Relatedness.** Literature indicated that relatedness mainly takes place in instances where and individual acquires the sense of connectedness to, or being comprehend by, other individuals. In the current study, relatedness had been explained as a predictor variable of overall wellness for Turkish international students, however, this variable did not weigh out to be a significant predictor amidst autonomy and competence in a regression model. A possible explanation for this finding may be that balance and quality in relationships mattered in Turkish culture. However, there is a shift from collectivistic characteristics of culture to individualistic characteristics of culture among Turkish students (Aygun, 2004).

The construct of relatedness is comparable to re requirement for belongingness that has been fronted by Visser and Hirsh (2013); nonetheless, it is increasingly general and tends to take in both group and interpersonal connections (Mason, 2012). Therefore, supporting relatedness can be taken to imply the provision of approval, the sense of caring, and respect. Further, researchers have disclosed that every sense of relatedness to peers, parents, and teachers tend to have a personal effect on both engagement and motivation (Vlachopoulus & Michailidou, 2006).

The feeling pertaining to relatedness, between the students and the advisors, were noted to have considerable degrees of positive results for the graduate level learners (Kormas et al., 2014). In instances where the advisor offered an individual touch that included showing interest in the personal life of the learner, offering psychological support and portraying caring attitude for the student, the graduate learner had increased satisfaction with such relations compared to students whose advisors lacked such attitudes (Schneidera & Kwan, 2013). This constructive advisor relationship may have a positive effect on the overall wellness of Turkish international

students. In addition, students who had teachers who were autonomy supportive also reported being increasingly competent with regards school work, in addition to reporting increased levels of self-esteem (Deci and Ryan, 2008). In collectivistic Turkish culture, the more senior figure is responsible for providing guidance and nurturance (Aycan et. al., 2000). As a senior figure, teachers/professors would provide more guidance to increase international students' autonomous behaviors. As a Turkish international student living in the U.S., peers and teachers/professors seems to have the most insignificant effect with regards to engagement, particularly in instances where international students have decreased degrees of relatedness to the parents due to separation from the family environment.

The results of the present study conform to the results from the investigation conducted by Demir, Özen, and Doğan, (2012) on significance of friendship between Turkish and American college students, its connection with the feelings of happiness and ultimately the wellness of the college students in international environments. In this context, the study by Demir and colleagues (2012) has suggested an interesting aspect of Turkish and American students with each other. Using analyses of the student responses, the results indicated that having a perception of 'mattering to each other' mediates friendship for the American students and hence, the happiness and wellness while for the Turkish students, the quality of friendship with their American peers defined the friendship, relatedness and happiness (Demir, Özen, & Doğan, 2012). From a cross- cultural perspective and psychological studies, the present study and the one conducted by Demir and colleagues (2012) are important indicators of how international students perceive the relatedness and associate their wellness.

### **Chapter Five: Summary, Implications, and Recommendations**

### Summary

With the growing interdependence of countries and the changes in today's societal awareness in the importance of the higher education, studying abroad becomes an important component of our society's fabric. According to the Institute of International Education (IIE, 2016), over 1,000,000 international students enrolled in U.S. institutions of higher education during the 2015-2016 academic year. As the number of international students grows, the need for culturally specific research becomes ever more apparent. Also, wellness of international students has become an important issue in universities all over the world. The sojourn of the international student includes obstacles and disadvantages that are related to their cultural identity, background, and demographic characteristics. International students need to be examined in different cultural groups in order to identify specific experiences (Cheng, Leong, & Geist, 1993).

Literature documented that the top five problems for international students are lack of English proficiency, inadequate financial resources, problems in social adjustment, problems in daily living, and loneliness or homesickness (Shih & Brown, 2000). In addition, these adjustment problems influence the wellness of international students in areas such as academic performance, mental and physical health, level of life satisfaction, and attitudes toward the host culture and environment. General living, academic, sociocultural, and personal-psychological areas are determined as international students' adaptations areas. In order to comprehend the specific situations of international students, cultural factors and recognition of the significant diversity issues need to be addressed in the evaluation of wellness.

Turkey was one of the top ten countries sending students to the United States until 2013, but the number of international Turkish students has continually decreased after 2013 (IIE, 2016). Similarly to the other international student population, Turkish international students experience acculturation stress and adjustment problems related to language barrier, homesickness, less satisfaction in the social aspect of their lives, financial issues, perceived discrimination, and isolation from the host culture and community (Poyrazli et.al., 2001) Thus, there is a need for understanding of Turkish international students' wellness in all aspects, as well as sustained research efforts focused on the specific problems of international students. Research on the international students mostly focuses on adjustment and acculturation issues rather than the wellness of specific cultural groups of international students. Moreover, there is no research on perceived total wellness of international students based on their self-determined attitudes, feelings, and behaviors

Colleges and universities try to increase recruitment of international students. Therefore, the present study is important to understand current international students' wellness and the relationship with the basic psychological needs in specific life areas in order to boost their academic achievement and success. The role of culture in the understanding of wellness has been documented in previous studies, however, there is no culturally specific research on the wellness of Turkish international students, and comprehensive research on the relationship between wellness and basic psychological needs of Turkish international students. It will add to the current research on the wellness of international students by offering insights about their academic and social development.

The present study utilized non-experimental cross-sectional survey methodology. The reasons for choosing survey design is to provide accurate definition of existing conditions in a

community or region, comparing groups of communities, documenting community opinion, and significant amount of data (Babbie, 2015; Guyette, 1983). The design of the current study was not intended to infer causality but to explore the degree to which the criterion variable (Total Wellness) can be predicted from the predictor variables (autonomy, competence, relatedness, awareness, and perceived choice).

The study utilized demographic questionnaire, Perceived Wellness Scale, Basic Psychological Needs Survey, Self-Determination Scale, and Perceived Competence Scale. Convenience sampling method was used for the current study that the researcher tried to reach participants who are eligible and suit the purpose of the study. The data was collected through online Qualtrics survey that included informed consent form, demographic questionnaire, and all surveys. Collected data were transferred from Qualtrics to IBM Statistical Package for the Social Sciences (SPSS) version 24. In order to answer each research question, descriptive test, correlation, F-test, U-test, and regression analyses were conducted.

The first research question aimed to examine total wellness of Turkish international students. Wellness is a general indicator of physical and mental health and determines the current health status of the students. There was no normative population to compare total wellness and dimensions of wellness. Thus, previous studies using the same wellness scale were used to compare the current study results that Turkish international students reported lower wellness scores (M = 14.78, SD = 2.50) in the present study. The Turkish students might have been impacted by their status in their host culture. This particular research was largely consistent with other studies that international and domestic students experience similar stressors. However, international students' culture-specific challenges directly impact personal wellness in regards to interpersonal and intrapersonal communication. In addition to overall wellness, the

current study examined the dimensions of wellness. Turkish international students reported their highest wellness in the spiritual dimension (M = 4.64, SD = .90), and sequentially social (M = 4.55, SD = .80), and physical wellness (M = 4.41, SD = .79), emotional (M = 4.32, SD = .77), intellectual (M = 4.21, SD = .70), and psychological dimensions (M = 4.20, SD = .70).

The second research question aimed to examine total wellness based on demographic characteristics. Results revealed that there was no significant difference in the total wellness between male and female Turkish international students. Regarding the age of Turkish students, results showed significant differences in total wellness in favor of higher age groups. Further findings of this study revealed that there were significant differences in overall wellness across the number of years lived in the U.S. The literature documented that students' wellness differ along with their level of education. In contrast, this study found no significant relationship between total wellness of Turkish international students and their level of education. In addition, the current study revealed that there were no significant differences in perceived wellness among single, engaged, married, divorced, and separated Turkish international students. Socio-economic status was another variable that students with low socio-economic status seem to report lesser wellness than students with intermediate and high socio-economic status. The results also showed there were no significant differences in the total wellness across levels of spiritual/religious involvement.

Research questions three and four were intend to examine the role of three basic psychological needs on perceived total wellness of Turkish international students. Correlation and regression analyses were run to examine the relationship between criterion (total wellness) and predictor (autonomy, competence, relatedness, awareness, and perceived choice) variables. To give a more vivid picture of the parameters that define basic psychological needs and self-

determined way of functioning in the lens of perceived total wellness levels, the question was split in to three.

Results indicated a moderate linear relationship between total wellness and autonomy (r = .571), competence (r = .562), and relatedness (r = .449), respectively. The multiple regression model with all three predictors showed that 39.6 % of the variation in perceived total wellness can be explained by autonomy, competence, and relatedness. Results also showed that autonomy and competence were found significant predictors of total perceived wellness, with a p-value of .000. However, relatedness did not contribute to the regression model. In addition, the question of self-determined way of functioning is solved in the Self-Determination Theory, and it is what question four sought to deduce. Multiple regression analyses gave the predictor value as 37.1 % and a p- value less than 0.05. In other words, perceived choice with a p-value of .002 and awareness with a p-value of .000 were found significant predictors of total wellness of Turkish international students. To sum, this specific study indicated that, despite cultural pressures, Turkish international students with greater levels of autonomy, competence, relatedness, perceived choice, and awareness reported higher perceived total wellness in their lives.

### Limitations

The limitations in this research had been significant, however, the most obvious proved to be utilizing online self-reporting data collection procedures. Accordingly, the participants' responses to questionnaires might be biased. Compared to the other experimental settings, researcher did not have control over the environment. Also, this was a cross-sectional study that respondents take the survey in one time, so there might be other factors affecting their responses, such as having an extraordinary day in which they take the survey. Thus, it may not be totally possible to describe total wellness in relation to other variables.

Another limitation was sample size in this study. Although including informed consent and explaining operational definitions were done in the beginning of survey, researcher did not have control over the data collection setting. Thus, incomplete responses and extreme missing data caused small sample size that might have impacted this study and could have caused insignificant results in several parts of study. In addition, this creates a risk that many responses may not show the actual inclination of the students against the questions asked in the questionnaires.

This study was conducted in universities across the United States using a convenience sample to collect data. This places an error on the outcomes given the fact that convenience samples are not always fully representative of the populations, in order to generalize the results beyond the group studied. Therefore, the study could have included participants through random selection. Further, the study was conducted on a limited sample size, and therefore, the results obtained from this study may not be full representative of the larger populations. Larger sample size from all levels of education (i.e. colleges and universities) could have provided a clearer picture of the situation. In college campuses, the student strength is lesser than the students in university level. Also, there are fewer international students in colleges as compared to number of students in the graduate levels. This can affect the interaction of Turkish students with American students in a different way. However, the present study only took the university students into account.

Another limitation that was experienced during the study has been the paucity of literature already available on the subject. There has been colossal research data that is available on student performance in international environments, the external stressors, peer pressure, cross- cultural interactions at the college and university campuses as well as the coping

mechanisms. However, all the data is available on students coming from a mix of cultural backgrounds. It is difficult to find particular data on the topics of wellness and various parameters affecting the wellness of Turkish students studying in the United States. This puts the researcher in a difficulty that there are only fewer studies to compare the data of Turkish students while the researchers are left with the option of comparing the wellness indicators with other cultural groups only.

In addition, even if the study used a good survey that yields reliable and validated scores, there might be errors in measurement that limit the tool's usefulness for specific populations. The lack of reliable scores in the dimensions may be due to the fact that the instrument had not been designed to measure specifically international students' wellness. The perceived wellness instrument could measure dimensions of wellness for different populations, but not necessarily be used with an international population of university students living in the U.S. This limitation will be further explained in the implications for future research.

#### **Implications and Recommendations**

Despite the limitations, the data has been collected through standard means of practice and statistical analyses have been applied to obtain the results. Research on the international students mostly focuses on adjustment and acculturation issues rather than the total wellness of specific cultural groups of international students. The existing research does not extensively discuss perceived total wellness of international students based on their self-determined attitudes, feelings, and behaviors. Therefore, the results of this study make a contribution to the international students' literature by examining total perceived wellness and the relationship with the basic psychological needs. The results of this study suggested a link between international students' wellness, their demographics, and psychological needs.

Assessing international students' wellness regarding their demographics and basic psychological needs are vital in providing support to international students for future implications. Having obtained the amount of information regarding wellness of Turkish international students in U.S. universities through this study, several major implications are born.

First, the findings will help the Turkish government improve its scholarship policy so as to ensure that students that join U.S. universities are best prepared to take advantage of the opportunity of joining some of the best universities around the globe. For instance, the findings showed that socioeconomic status of individuals, relatedness, autonomy, and competence contribute to their wellness while in U.S. universities. This is a concept that the Turkish university can adopt and streamline its programs so that those who are put on scholarships to the U.S. have enough funding to improve their welfare, and are fully prepared to take on an international program of study. Moreover, using the information, the universities can train their students as to make them able to join an international university and compete with peers in extraordinary high competitive environments. The universities can also start training on stress coping mechanisms that would help the students in managing stress and peer pressure in international academic environments.

School environment is essential for creating and learning many skills related to the wellbeing (St. Leger, 2004). Relatedness has been identified as an important influence on Turkish international students' wellness. This finding calls for the attention of international and administrative offices, and advisors to help Turkish international students in engaging enthusiastically educational and societal activities in their sojourn. Increased feeling of connectedness with school, peers, and teachers refer to relatedness than could enhance perceived total wellness of Turkish international students.

In addition, the results of this study are important to further academic exploration, for example, assessing and evaluating the factors that can possibly affect the performance of Turkish international students in American universities and colleges, the kind of problems when they are exposed to intercultural academic environment, and how their culture interacts with different cultures. Research in these areas from the psychological and cross- cultural perspective are critical to gain insights into wellness of international students.

Autonomy was found a strong predictor of Turkish international students' wellness. Deci and Ryan (2000) found that more autonomous people reported high levels of functioning in areas such as engagement, learning, and performance. In addition, results showed that autonomy is significantly related to the elements of well-being such as positive affect, self-esteem, mental health, and vitality. Hence, the basic psychological need of autonomy is also an essential concept in the wellness. Autonomy supportive school environment, teachers/professors, and offices may enrich the wellness of Turkish international students in the U.S.

Competence was another predictor for wellness of Turkish international students who have many needs that their self-confidence and self-esteem can be promoted through school and class activities. Teachers/professors would include self-enhancement techniques in the curriculum could have an impact on that Turkish international students may enhance their capacity with increasing their own ability to achieve optimal wellness.

The topic of wellness is like an umbrella that covers key concepts of human life. Thus, future research would focus many areas in the journey of international students. My study used quantitative methods to examine the total wellness and basic psychological needs of Turkish international students. To ensure objectivity of study, qualitative aspects and observations should be included to provide a comprehensive understanding of the wellness. The meaning and

99

components of wellness might be investigated among international student population in the future research. As mentioned in the limitations section, the wellness scale was not designed for international students. A mixed method would be used to gather specific information about international students in order to create a wellness scale with greater construct validity. Also, there is a need of further and more expansive research on determining even more indicators that can affect the wellness of international Turkish student in the American universities. The future research should explore those parameters that are potentially important for the policy making purposes in psychology, education and international exchange program.

The self-determination theory proposes that the cultures have an influence on individuals in significant and profound ways even though every human has specific requirements. Though the means of satisfying the needs tend to vary from one culture to another, their requirement to be met or satisfied so that individuals might experience maximal state of wellness. Therefore, this study results may be applicable to other international student population. However, this study was carried on particular group of (Turkish) students. The findings must therefore not be generalized towards other countries' international students without conducting further research. The research might be conducted with mix of international student participants. There might be significant value and pertinent data in replicating the results of this study within international student groups. Also, there should be comparative analysis of Turkish students in different university and college campuses to determine if the students face any cultural, linguistic or any other barriers that can potentially hamper the wellness or academic progress of the Turkish students. Only an inquiry into the barriers can lead to determining the possible solutions to the problems.

100

The results of such studies must be presented in such a form that is actionable for the policy makers, researchers and academia to make changes in the policies or develop new policies that would ensure wellness of the students on educational campuses. A healthy competition among students is conducive to higher and critical learning processes, however, competition beyond fairness can make the playfield uneven for students coming from different cultural backgrounds.

In this context, it is also important that solutions are explored through which universities and educational institutes train their students in stress management and stress coping mechanisms. This may also be amalgamated with training in social skills that are culturally sensitive and contextually appropriate. This will eventually lead to students who are psychologically education to accept peers from all cultural backgrounds and are trained in connecting and working with people from diverse backgrounds. The wellness of students is not an isolated concept and is connected with a number of other social, economic, political and psychological indicators. A thorough understanding of the subject in the context of Turkish culture can lead to determining the positive and negative factors affecting the wellness indicators.

This study sought to answer several questions that relate to wellness standards of Turkish international students that join US institutions of higher learning. In connection, the dissertation also sought to evaluate the basic psychological needs are related to their perceived total wellness and the relationship between a self-determined way of functioning and wellness among Turkish students studying in the universities of the United States. The initial analysis of data propped up the observation that there is a significant relationship between perceived wellness and basic psychological needs among Turkish students in the U.S. Based on the above observations, when

101

the three basic needs are met, a state of psychological well-being attained, and the international students is, therefore, likely to experience optimal wellness. On the contrary, the lack of satisfaction of those needs might be seen to result in the failure to achieve optimal wellness amongst Turkish international students. While international students internalize the cultural practices and beliefs of the host country, they still try to exercise autonomy, in which they practice the traditions of their native country.

Adapting to any new environment could have hardships, however, if governments provide appropriate financial provisions, it would relieve some burdens on students. Universities requirements could be more accommodating with policy changes, by including wellness in its regulations. Such studies are not only important for the educational policy making in the native country but also the host countries as they are responsible to provide safe and healthy environment on their campuses for students coming from all kinds of cultural backgrounds.

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## **Appendix A: Informed Consent Form**

Total Wellness of Turkish International Students in the U.S.: Perceptions and Inherent Growth Tendencies

You are being invited to participate in a research study about Turkish international students in the U.S. This research is being conducted by Mehmet Avci at St. Mary's University. This study constitutes the research aspect of my dissertation. The objective of this research is to attempt to examine wellness of the Turkish international students. The study will take about 15 minutes to complete.

There are no known risks if you decide to participate in this research, nor are there any costs for participating in the study. If you are experiencing stress/anxiety during the administration, you are free to terminate. The information you provide will help to understand perceptions of Turkish students' wellness and their basic psychological needs. The information collected may benefit you directly. In addition, what I learn from this study should provide general benefits to international students, schools, families and researchers in our community.

This survey is anonymous. To help protect your confidentiality, the surveys *do not* contain information that will personally identify you. The results of this study will be used for scholarly purposes only.

Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research survey, you may withdraw at any time. If you have any questions or concerns about completing those questionnaires or about being in this study, you may contact me, Mehmet Avci, at St. Mary's University Counselor Education and Supervision program, <u>mavci@mail.stmarytx.edu</u> You may also contact the faculty adviser for this research, Dr. Rómulo Montilla at <u>rmontilla@stmarytx.edu</u>

ANY QUESTIONS REGARDING YOUR RIGHTD AS A RESEARCH PARTICIPANT MAY BE ADDRESSED BY THE ST. MARY'S UNIVERSITY INSTITUTIONAL REVIEW BOARD HUMAN SUBJECTS. ONE CAMINO SANTA MARIA. SAN ANTONIO, TX 78228. CHAIR, INSTITUTIONAL REVIEW BOARD. 210-436-3736 or email at IRBCommitteeChair@stmarytx.edu. ALL RESEARCH PROJECTS CARRIED OUT BY REQUIREMENTS OF THE UNIVERSITY AND FEDERAL GOVERNMENT.

By submitting this form you are indicating that you have read the description of the study, are over the age of 18, and that you agree to the terms as described.

Thank you for your participation and collaboration in this research study,

Respectfully,

Mehmet Avci, M.A.

# **Appendix B: Demographic Questionnaire**

- 1. Your Gender
  - a. Female
  - b. Male
  - c. Other
- 2. Your Age \_\_\_\_\_

3. Length of Stay in the United States (Year)

- 4. What degree are you pursuing?
  - a. Bachelors
  - b. Masters
  - c. Doctorate
- 5. Your Major, please indicate: \_\_\_\_\_
- 6. Relationship Status: Please identify your current relationship status
  - a. Single
  - b. In a relationship
  - c. Engaged
  - d. Married/partnered
  - e. Divorced
  - f. Separated
  - g. Other, please specify:
- How would you rate your socio economic status? Low Intermediate
  - High
- How would you rate your spirituality/religious involvement? Low Intermediate High

# **Appendix C: Perceived Wellness Scale**

The following statements are designed to provide information about your wellness perceptions. Please carefully and thoughtfully consider each statement, then select the <u>one</u> response option with which you<u>most</u> agree.

				0		
Stro	-	•		S		ngly
Dis	agr					gree
<ol> <li>I am always optimistic about my future.</li> <li>There have been times when I felt inferior to most of the people</li> <li>Members of my family come to me for support.</li> <li>My physical health has restricted me in the past.</li> <li>I believe there is a real purpose for my life.</li> <li>I will always seek out activities that challenge me to think and</li> <li>I rarely count on good things happening to me.</li> <li>In general, I feel confident about my abilities.</li> </ol>	1 1 1 1 1 1 1 1	2 2 2	33333333333333333333333333333333333333	4 4	5 5	6 6 6 6 6 6 6 6
9. Sometimes I wonder if my family will really be there for me	1	2	3	4	5	6
<ul> <li>I am in need.</li> <li>10. My body seems to resist physical illness very well.</li> <li>11. Life does not hold much future promise for me.</li> <li>12. I avoid activities which require me to concentrate.</li> <li>13. I always look on the bright side of things.</li> <li>14. I sometimes think I am a worthless individual.</li> <li>15. My friends know they can always confide in me and ask me for</li> <li>16. My physical health is excellent.</li> <li>17. Sometimes I don't understand what life is all about.</li> <li>18. Generally, I feel pleased with the amount of intellectual I receive in my daily life.</li> </ul>	1 1 1 1	2 2 2 2	3 3 3 3	4 4 4 4	5 5 5 5 5 5 5 5	6 6 6
19. In the past, I have expected the best.	1	2	3	4	5	6
20. I am uncertain about my ability to do things well in the future.	1	2	3	4	5	6
21. My family has been available to support me in the past.		2				
22. Compared to people I know, my past physical health has been		2				
23. I feel a sense of mission about my future.	1		3			
24. The amount of information that I process in a typical day is just about right for me (i.e., not too much and not too little).	I	2	3	4	5	6
25. In the past, I hardly ever expected things to go my way.	1	2	3	4	5	6
26. I will always be secure with who I am.	1	2	3	4	5	6
27. In the past, I have not always had friends with whom I could	1	2	3	4	5	6
joys and sorrows. 28. I expect to always be physically healthy.	1	2	3	4	5	6
29. I have felt in the past that my life was meaningless.	1	$\frac{2}{2}$	3	4	5	6
30. In the past, I have generally found intellectual challenges to be						
vital to my overall well-being.						
31. Things will not work out the way I want them to in the future.	1		3	4	5	6
32. In the past, I have felt sure of myself among strangers.	1	2	3	4	5	6
33. My friends will be there for me when I need help.	1 1	2	3	4	) 5	6
<ul><li>34. I expect my physical health to get worse.</li><li>35. It seems that my life has always had purpose.</li></ul>	1	∠ 2	3 3	4 1	5	0
36. My life has often seemed void of positive mental stimulation.	1	$\frac{2}{2}$	3	$\frac{4}{4}$	5	6
so. The has often seemed void of positive mental sumulation.	Ŧ	-	5	т	5	0

### **Appendix D: Basic Psychological Needs Survey**

Please read each of the following items carefully, thinking about how it relates to your life, and then indicate how true it is for you. Use the following scale to respond:

1	2	3	4	5	6	7
not at all		very true				
true			true			

1. I feel like I am free to decide for myself how to live my life.

- 2. I really like the people I interact with.
- 3. Often, I do not feel very competent.
- 4. I feel pressured in my life.
- 5. People I know tell me I am good at what I do.
- 6. I get along with people I come into contact with.
- 7. I pretty much keep to myself and don't have a lot of social contacts.
- 8. I generally feel free to express my ideas and opinions.
- 9. I consider the people I regularly interact with to be my friends.
- 10. I have been able to learn interesting new skills recently.
- 11. In my daily life, I frequently have to do what I am told.
- 12. People in my life care about me.
- 13. Most days I feel a sense of accomplishment from what I do.
- 14. People I interact with on a daily basis tend to take my feelings into consideration.
- 15. In my life I do not get much of a chance to show how capable I am.
- 16. There are not many people that I am close to.
- 17. I feel like I can pretty much be myself in my daily situations.
- 18. The people I interact with regularly do not seem to like me much.
- 19. I often do not feel very capable.
- 20. There is not much opportunity for me to decide for myself how to do things in my daily life.
- 21. People are generally pretty friendly towards me.

## **Appendix E: Self-Determination Scale**

Instructions: Please read the pairs of statements, one pair at a time, and think about which statement within the pair seems more true to you at this point in your life. Indicate the degree to which statement A feels true, relative to the degree that Statement B feels true, on the 5-point scale shown after each pair of statements. If statement A feels completely true and statement B feels completely untrue, the appropriate response would be 1. If the two statements are equally true, the appropriate response would be a 3. If only statement B feels true And so on.

<ol> <li>A. I always feel like I choose the things I do.</li> <li>B. I sometimes feel that it's not really me choosing the things I do.</li> </ol>									
Only A feels true	1	2	3	4	5	Only B feels true			
<ul><li>2.</li><li>A. My emotions sometimes seem alien to me.</li><li>B. My emotions always seem to belong to me.</li></ul>									
Only A feels true	1	2	3	4	5	Only B feels true			
<ul><li>3.</li><li>A. I choose to do what I have to do.</li><li>B. I do what I have to, but I don't feel like it is really my choice.</li></ul>									
Only A feels true	1	2	3	4	5	Only B feels true			
<ul><li>4.</li><li>A. I feel that I am rarely myself.</li><li>B. I feel like I am always completely myself.</li></ul>									
Only A feels true	1	2	3	4	5	Only B feels true			
<ul><li>5.</li><li>A. I do what I do because it interests me.</li><li>B. I do what I do because I have to.</li></ul>									
Only A feels true	1	2	3	4	5	Only B feels true			
<ul><li>6.</li><li>A. When I accomplish something, I often feel it wasn't really me who did it.</li><li>B. When I accomplish something, I always feel it's me who did it.</li></ul>									
Only A feels true	1	2	3	4	5	Only B feels true			

<ul><li>7.</li><li>A. I am free to do whatever I decide to do.</li><li>B. What I do is often not what I'd choose to do.</li></ul>								
Only A feels true	1	2	3	4	5	Only B feels true		
<ul><li>8.</li><li>A. My body sometimes feels like a stranger to me.</li><li>B. My body always feels like me.</li></ul>								
Only A feels true	1	2	3	4	5	Only B feels true		
<ul><li>9.</li><li>A. I feel pretty free to do whatever I choose to.</li><li>B. I often do things that I don't choose to do.</li></ul>								
Only A feels true	1	2	3	4	5	Only B feels true		
<ul><li>10.</li><li>A. Sometimes I look into the mirror and see a stranger.</li><li>B. When I look into the mirror I see myself.</li></ul>								
Only A feels true	1	2	3	4	5	Only B feels true		

## **Appendix F: Perceived Competence Scale**

Perceived competence for quitting smoking

Please read each item and mark the number that indicates your level of agreement with that statement.

1	2	3	4	5	6	7
Strongly	Moderately	Slightly		Slightly	Moderately	Strongly
D'	D.	D.	Neutral			
Disagree	Disagree	Disagree		Agree	agree	Agree

1. I feel confident in my ability to quit smoking.

- 2. I feel capable of quitting smoking now.
- 3. I am able to quit smoking now.
- 4. I am able to meet the challenge of quitting smoking.

#### Perceived competence for maintaining a healthy diet

Please read each item and mark the number that indicates your level of agreement with that statement.

1	2	3	4	5	6	7
Strongly	Moderately	Slightly	Neutral	Slightly	Moderately	Strongly
Disagree	Disagree	disagree		Agree	agree	Agree

1. I feel confident in my ability to maintain a healthy diet.

2. I feel capable of maintaining a healthy diet now.

3. I am able to maintain a healthy diet now.

4. I am able to meet the challenge of maintaining a healthy diet.

### Perceived competence for exercising regularly

Please read each item and mark the number that indicates your level of agreement with that statement.

1	2	3	4	5	6	7
Strongly	Moderately	Slightly	NI 1	Slightly	Moderately	Strongly
Disagree	Disagree	disagree	Neutral	Agree	agree	Agree

1. I feel confident in my exercise regularly.

2. I feel capable of exercising regularly now.

3. I am able to exercise regularly now.

4. I am able to meet the challenge exercising regularly.

Perceived competence for using alcohol responsibly

Please read each item and mark the number that indicates your level of agreement with that statement.

1	2	3	4	5	6	7
Strongly	Moderately	Slightly	Neutral	Slightly	Moderately	Strongly
Disagree	Disagree	disagree		agree	agree	agree

1. I feel confident in my ability to use alcohol responsibly.

2. I feel capable of using alcohol responsibly now.

3. I am able to use alcohol responsibly now.

4. I am able to meet the challenge of using alcohol responsibly.