INFLUENCE OF PSYCHOSOCIAL FACTORS ON QUALITY OF LIFE AMONG in-SCHOOL ADOLESCENTS

FUNMILOLA BOSEDE OLUTOLA[1], ADEKUNLE THOMAS OLUTOLA[2], WAIDI SHINA MUSTAPHA[3], GRACE AANUOLWAPO ADEJUWON[4]

[1,3&4]*Department of Psychology, Faculty of the Social Sciences, University of Ibadan, Ibadan, Nigeria*

[1]*funmilolatola@gmail.com; [4]gaadejuwon@gmail.com*

[2]*Department of Educational Psychology and Couselling, Faculty of Education, Federal University Dutsin-Ma, Katsina State, Nigeria. olutolatola@gmail.com*

ABSTRACT: *The impact of psychosocial factors on quality of life remains the subjects of considerable research globally. Thus, this study investigated the influence of psychosocial factors on quality of life among in-school adolescents in Oriade Local Government Area, of Osun State, Nigeria. The study adopted descriptive research design of survey type and was conducted in three purposively selected senior secondary schools in Oriade Local Government Area of Osun State, Nigeria. The population of the study consists of 4,669 in-school adolescents. Slovin's formula was used to select 369 in-school adolescents from the population. The instrument used for data collection was a structured questionnaire consisting of 89 items. Three hypotheses were formulated and multiple regression analysis was used to analyse the data collected. Results show that sleep quality, social media addiction and family relationship jointly predicted quality of life (QoL) among in-school adolescents ($F_{(3,363)} = 156.182; p<.01$). The researchers recommended that both parents and teachers should assist in-school adolescents to improve their sleep quality and family relationship in other to maintain their QoL.*

Keywords: Sleep quality, Social media addiction, Family relationship, Quality of life, In-school Adolescents.

INTRODUCTION

The roles of psychosocial factors on quality of life have been the crucial subjects in active research worldwide. Quality of life is a broad concept that incorporates all aspects of an individual's existence. According to World Health Organisation (2000), health can be defined as a complete state of physical, mental and social well-being and not merely the present or absence of disease or infirmity. World Health Organization (WHO) defined quality of life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns (WHO, 1998). Quality of life means a good life, a good life is the same as living a life with a high quality (Ventegodt, Merrick & Aderson, 2003).

Studies on quality of life (QL) have increased in the last years, both in the national and international literatures, becoming a theme highlighted in today society (Casarin, Barboza & Siquira, 2010). Quality of life reflects the patient's perception of well-being. It has several functioning aspects such as psychological, physical, cognitive, and social (O'Neil, Stevenson, Williams, Mortimer, Oldenburg, & Sanderson 2013, Olapegba, Balogun & De Paul Chism 2012). Li & Yuan (2011) found that anxiety, depression, and quality of life are affected by demographic and socio-economic factors such as age, social support, and financial status. These demographic, socio-economic and psychosocial factors can have adverse influence on in-school adolescents' quality of life.

Adolescence represents a crucial phase in the development of the individual, full of complex developmental demands that move the young person from childhood to young adulthood. Adolescence is

Funmilola Bosede Olutola, et al.
Influence of Psychosocial Factors on Quality of Life Among in-School Adolescents

Quality of Life (2023) 14(1-2):30-37

the period of transition between childhood and adulthood. It includes some unique changes—to the body, and to the way a young person relates to the world. The term adolescence is derived from the Latin word *adolescere*, which means to sprout into maturity. It is the intermediate period between childhood and adulthood. This period is otherwise referred to as the age of teenagers. Santrock (2001), defines adolescence as, the developmental period of transition between childhood and adulthood that involves biological, cognitive and social changes. In addition, adolescence is a period of dramatic physical change marked by an overall growth spurt and sexual maturation, known as puberty. In-school adolescents can also be referred to as teenagers. It is crucial to investigate psychosocial factors (sleep quality, social media addiction & family relationship) on in-school adolescents' quality of life.

Sleep is a universal phenomenon undertaken by everyone. In order words, sleep is one of the basic needs of human life. Sleep is an active period in which a lot of important processing, restoration, and strengthening occurs (National Sleep Foundation, 2020). Sleep has also been defined as the state of the organism, in which its environmental interaction is reversible partially and periodically, lost and can be revoked by various external stimuli (Taskiran, 2011).

Sleep quality is an important factor for health. Sleep is an essential and significant behaviour which is affected by many physiological or pathological changes in pregnancy period. According to National Sleep Foundations the key determinants of sleep quality are sleeping more time while in bed (at least 85% of total time); falling asleep in 30 minutes or less; waking up not more than once per night and, being awake for 20 minutes or less after initially falling asleep. Good sleep quality is associated with a wide range of positive outcomes such as better health, less daytime sleepiness, greater well-being and better psychological functioning (Harvery, Stinson, Kathleen, Whitaker, Moskovitz & Harvinder, 2008).

Oswald (1966) proposed the restoration theory which suggested that sleep restores depleted resources of energy, removes waste from muscles and repairs cells. According to the theory, sleep provides an opportunity for the body to recover by replenishing resources that have been used up during the day, including neurotransmitters that are vital to communication between neurons. It also allows any damaged cells to be repaired and various muscles to be detoxified or rid themselves of waste products. This view was supported by the findings that many functions in the body such as muscle repair, tissue growth, protein synthesis and release of many of the important hormones for growth occur primarily during sleep (Brinkman & Sharma, 2020). Oswald (1980) built on the theory to include restoration during rapid eye movement (REM) sleep. They believe that REM is for restoration of the brain and non-rapid eye movement (NREM) sleep is a time for replenishing the body especially stage 3 and 4, which occur at the start of the night when the body is most tired. At these stages, the body secret greater level of growth hormones in the blood, this would help in the repair process. Sleeping is essential for revitalizing and restoring the physiological processes that keep the body and mind healthy, and properly functioning (Oswald, 1980). Omotoso, Abdulmalik, Adediran, Omigbodun, (2022) identified the influence of sleep habit on mental wellbeing and reported the prevalence of inadequate sleep among in-school adolescents in Nigeria.

Social media technologies take on many different forms including blogs, business networks, enterprise social networks, forums, micro-blogs, photo sharing, products, services review, video sharing and virtual worlds (Aichner & Jacob, 2015). Kaplan and Haenleinn (2010) defined social media as a group of internet-based applications that build on the ideological and technological foundation of Web 2.0, and that allow the creation and exchange of user-generated content. Also, social media can be defined as widely accessible electronic tools that enable anyone to publish and access information. Griffiths (2013) proposed the concept of technology addiction. He has defined technology addiction as the actions which are non-chemical but behavioural, and involve extreme human-machine interaction. Also, technology addiction

Funmilola Bosede Olutola, et al.
Influence of Psychosocial Factors on Quality of Life Among in-School Adolescents

Quality of Life (2023) 14(1-2):30-37

is portrayed as a passive behaviour like watching TV, playing a video game, and chatting online. Internet addiction is a special type of technology addiction.

The term "Internet addiction" was defined for the first time by Ivan Goldberg in 1995 as a psychological illness (Kim, 2009). Young(1998) suggests five types of Internet addiction: (a) cyber sexual addiction, (b) cyber relationship addiction to online friendships or affairs, (c) net compulsions to online gambling, auctions or obsessive trading, (d) information overload to compulsive web surfing or databases searches, and (e) computer addiction to game playing or programming. When properly used, Internet is an important technology that provides people with vital skills for the 21st century such as information access, problem solving, and self-directed learning. However, when Internet is used unconsciously, it can cause anxiety or fear and negatively affect personal development (Colwell & Kato, 2003). Thus, internet addiction has gradually become a serious problem. Internet addiction is big cause of social media addiction, because people started to explore the internet and by that started visiting social network websites, and, consequently, people went from internet addiction to social media addiction. Social network addiction leads to many problems such as problems with the family, work, friends, and so on (Ayatalumo & Ukegbu, 2018).

Although it was not mentioned in the previous editions, American Psychiatric Association (APA) has added internet addiction, with a particular reference to online gambling, as a mental illness to the fifth edition of the Handbook of Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). In many areas of behavioural addiction, it has been debated that whether some extreme behaviours can really be regarded as addiction or not. Some studies on social media addiction among students in Nigeria reveals a larger percentage of students are addicted to social media (Ayatalumo & Ukegbu, 2018; Idubor, 2015)

Family relationships can also have influence on quality of life of in-school adolescents. Family relationships play a central role in shaping an individual's well-being and quality of life. Family connections can provide a greater sense of meaning and purpose as well as social and tangible resources that benefit quality of life (Hartwell & Benson, 2007; Kawachi & Berkman, 2001). Those receiving support from their family members may feel a greater sense of self-worth, and this enhanced self-esteem may be a psychological resource, encouraging optimism, positive affect, and better mental health (Symister & Friend, 2003). Family members may also regulate each other's behaviours (i.e., social control) and provide information and encouragement to behave in healthier ways and to more effectively utilize health care services (Reczek, Thomeer, Lodge, Umberson, & Underhill, 2014). Thus, family relationships, sibling relationships can be characterized by both positive and negative aspects that may affect elements of the stress process, providing both resources and stressors that influence quality of life. Siblings play important roles in support exchanges and caregiving, especially if their sibling experiences physical impairment and other close ties, such as a spouse or adult children, are not available (Namkung, Greenberg & Mailick, 2017).

Family relationships may become even more important to well-being as individuals age, needs for caregiving increase, and social ties. The quality of family relationships can be viewed in terms of cohesion, expressiveness & conflict within the family. Cohesion include the degree of commitment, help, and support family members provide for one another, expressiveness entails expression of opinions, and conflict is the amount of openly expressed anger, aggression, and conflict among family members (Moos and Moos, 1981). These domains can influence well-being through psychosocial, behavioural, and physiological pathways. Since family relationship is relevant aspect of adolescents dispositions it is important to examine its influence on their quality of life.

Funmilola Bosede Olutola, et al.
Influence of Psychosocial Factors on Quality of Life Among in-School Adolescents

Quality of Life (2023) **14**(1-2):30-37

Therefore, there is need for researchers to investigate variables that may influence in-school adolescents. Based on this, the study investigated the influence of psychosocial factors (Sleep quality, social media addiction and family relationship) on quality of life among in-school adolescents in Oriade Local Government Area, of Osun State, Nigeria.

HYPOTHESES

The following hypotheses were formulated for the study:

1. Sleep quality, social media addiction and family relationship will significantly jointly and independently influence quality of life among in-school adolescents.
2. Age, gender and religion will significantly jointly and independently influence quality of life among in-school adolescents.
3. Family relationship sub-domains (Cohesion, Expressiveness & Conflict) will significantly jointly and independently influence quality of life among in-school adolescents.

METHODOLOGY

The study adopted descriptive research design of survey type and was conducted in three purposively selected public senior secondary schools in Oriade Local Government Area of Osun State, Nigeria. The population of the study consists of 4669 in-school adolescents while the Slovin's formula was used to select 369 in-school adolescents from the population and it covered SSS1 to SSS3 students. The instrument used for data collection was an 89 items structured questionnaire which consists of five sections. Section A contains demographic information of the respondents while B consists of World Health Organization Quality of Life Brief (developed by WHO, 1998) with a cronbach alpha coefficient of .86. Section C has Sleep Quality Scale (developed by Yi, Shin& Shin, 2006) with a record of .81 test-retest reliability while section D entails Social Media Addiction Scale (developed by Sahin, 2018) with cronbach alpha of .94 and section E consists of Brief Family Relationship Scale (developed by Moos & Moos,1994) with reliability index of .70. The questionnaires were administered to those students who were randomly selected from the sampled schools. Three hypotheses were formulated and tested at 0.01 alpha level of significance. Multiple regressions analysis was used to analyse the data collected for the study.

RESULTS

Three hypotheses were formulated and tested using multiple regressions analysis. Results of the hypotheses testing are shown below:

Hypothesis One:

Sleep quality, social media addiction and family relationship will significantly jointly and independently influence quality of life among in-school adolescents.

This hypothesis was analysed using multiple regression analysis. The outcomes are reported in Table 1.

Table 1: Multiple regression summary showing joint and independent influence of sleep quality, social media addiction and family relationship on QoL among in-school adolescents

Variable	B	t	Sig.	R2	F	Sig.
Sleep Quality	.381	8.306	.000			
Social Media Addiction	.428	9.165	.000	.565	156.182	.000
Family Relationship	.063	1.780	.076			

DV: QoL

Results from Table 4.1 show that sleep quality, social media addiction and family relationship jointly predicted QoL among in-school adolescents (F $_{(3,363)}$ = 157.182; p<.01); and accounted for a variance of 57%. Further results from the table show that sleep quality (β =.381; p<.01) and positive social media addiction (β =.428; p<.01) had significant positive independent influence on QoL among in-school adolescents. But, family relationship (β =.063; p>.05) does not have independent influence on QoL of in-school adolescents. The results imply in-school adolescents who exhibit higher level of sleep quality and positive social media addiction are more probably to report good QoL. The stated hypothesis one is therefore partially accepted.

Hypothesis Two:

Age, gender and religion will significantly jointly and independently influence quality of life among in-school adolescents.

The stated hypothesis two was analyzed using multiple regression analysis. The outcomes are reported in Table 2.

Table 2: Multiple regression summary showing joint and independent influence of age, gender and religion on QoL among in-school adolescents

Variable	B	t	Sig.	R2	F	Sig.
Age	-.059	-1.157	.248			
Gender	-.181	-3.534	.000	.064	8.372	.000
Religion	-.154	-3.024	.003			

DV: QoL

Results from Table 4.2 show that age, gender and religion jointly predicted QoL among in-school adolescents (F $_{(3,365)}$ = 8.372; p<.01); and accounted for a variance of 6.4%. Further results from the table show that gender (β = -.181; p<.01) and religion (β = -.154; p<.01) had significant negative independent influence on QoL among in-school adolescents. The results imply in-school adolescents' gender and age are good predictors of their QoL. But, age (β = -.059; p>.05) does not have significant independent influence on QoL of in-school adolescents. The stated hypothesis two is therefore partially accepted.

Hypothesis Three:

Family relationship sub-domains (Cohesion, Expressiveness & Conflict) will significantly jointly and independently influence quality of life among in-school adolescents.

The stated hypothesis three was analyzed using multiple regression analysis. The outcomes are reported in Table 3.

Funmilola Bosede Olutola, et al.
Influence of Psychosocial Factors on Quality of Life Among in-School Adolescents

Quality of Life (2023) 14(1-2):30-37

Table 3: Multiple regression summary showing joint and independent influence of family relationship sub-domains (Cohesion, Expressiveness & Conflict) on QoL among in-school adolescents

Variable	B	t	Sig.	R2	F	Sig.
Cohesion	.389	7.858	.000			
Expressiveness	.098	1.964	.049	.340	62.594	.000
Conflict	-.338	-7.870	.000			

DV: QoL

Results from Table 4.3 shows that family relationship sub-domains (cohesion, expressiveness & conflict) jointly predicted QoL among in-school adolescents ($F_{(3,365)}$ = 62.594; p<.01); and accounted for a variance of 34%. Further results from the table shows that cohesion in family relationship (β = .389; p<.01) and expressiveness in family relationship (β = .098; p<.05) had significant positive independent influence on QoL among in-school adolescents. The results imply that family relationship sub-domains (cohesion & expressiveness) had strong positive influence on QoL of in-school adolescents and the higher the family relationship sub-domains (cohesion and expressiveness) of in-school adolescents the higher their QoL. Conflict family relationship sub-domain (β = -.338; p<.01) emerged as a significant negative independent predictor of QoL among in-school adolescents. The results also imply that in-school adolescents who exhibit higher degrees of conflict family relationship are more probably to report poor QoL. Thus, the stated hypothesis three is accepted.

DISCUSSION OF FINDINGS

Result of this study shows that sleep quality, social media addiction and family relationship jointly predicted QoL among in-school adolescents and they accounted for a variance of 57%. Further results show that sleep quality and social media addiction had significant positive independent influence on QoL among in-school adolescents. However, family relationship does not have independent influence on QoL of in-school adolescents. Supporting this study, Siegel, (2011) established sleep as an important element in quality of life, he concludes that there exist a positive relationship between sleep quality and quality of life. This implies that as sleep quality increases, quality of life also increases. Confirming the results of this study, Wu, Lai and Hwang, (2012) conducted a study in Taiwan, the results indicated that poor sleep quality, insomnia and psychological symptoms caused are associated with poor life.

Additionally, Lo & Lee, (2012) showed that there was a strong negative correlation between poor sleep quality and quality of life among adolescents. These results confirmed that sleep health is important for improving quality of life of adolescents, and those who had poorer sleep quality had a worse quality of life. It also agrees with researches that confirms social media influences QoL. Several studies reveals that the active use of social media is one of the other factors that is negatively associated with Quality of life (Collins, 2017; Chan, 2014).

The study also revealed that age, gender and religion jointly predicted quality of life among in-school adolescents and accounted for a variance of 6.4%. Further results show that gender and religion had significant negative independent influence on quality of life among in-school adolescents. The results implied that in-school adolescent's gender and age are good predictors of their quality of life. But, age does not have significant independent influence on quality of life of in-school adolescents. This summation agrees with Li and Yuan (2011) found that anxiety, depression, and quality of life are affected by demographic and socio-economic factors such as age, social support, financial status.

Result of this study also showed that family relationship sub-domains (cohesion, expressiveness & conflict) jointly predicted quality of life among in-school adolescents and accounted for a variance of 34%. Further results shows that cohesion in family relationship and expressiveness in family relationship had significant positive independent influence on quality of life among in-school adolescents. Supporting this study, Umberson, Crosnoe, and Reczek, (2010) reported that family members are linked in important ways through each stage of life, and these relationships are an important source of social connection and social influence for individuals throughout their lives and they are clearly show that stress undermines health and quality of life. Similarly, Graham, Christian, and Kiecolt-Glaser, (2006) reported that positive relationships for those receiving support from their family members may feel a greater sense of self-worth, and this enhanced self-esteem may be a psychological resource, encouraging optimism, positive affect, and better quality of life (Symister & Friend, 2003). Clearly, the quality of family relationships can have considerable consequences for quality of life.

CONCLUSION

The researchers concludes that in-school adolescents quality of life can only be improve upon by increasing the positive aspect of sleep quality, social media addiction and family relationship. Since, sleep quality, social media addiction and family relationship contributes significantly to quality of life among in-school adolescents more efforts should be made to assist the in-school adolescents in these areas. Also, the study concludes that the age, gender and religion were significantly jointly predicts quality of life of in-school adolescents. Furthermore, this study concludes that family relationship sub-domains (cohesion, expressiveness & conflict) jointly predicted quality of life among in-school adolescents.

RECOMMENDATIONS

Based on the findings and conclusions drawn in this study, the following recommendations are made:

1. Government agencies and all the stakeholders in education should promote quality of life among in-school adolescents which in turn leads to lead to healthy nation in general.
2. Cohesion should also be advocated among family members of in-school adolescents because good family relationship resulted to good quality of life. In other words if the family is effective with good relationship among members, each individual in the family will enjoy good quality of life.
3. School counsellors and teachers should help in-school adolescents to improve on their sleep quality, prevent social media addiction and ensure good family relationship which will in turn improve their quality of life.

REFERENCES

Aichner, T. and Jacob, F. (2015). 'Measuring the Degree of Corporate Social Media Use'. *International Journal of Market Research, 57 (2):* 257-275.

American Psychiatric Association. (2013). Handbook of diagnostic and statistical manual of mental disorders (DSM-5). *Washington, DC: The author*.

Ayatalumo, C. J. C. & Ukegbu, C. C. (2018). Social media addiction among Nigerian students: issues arising and possible solutions. *World Educators Forum*, 10 (1), 1-9

Brinkman, J. E., & Sharma, S. (2020). *Physiology, Sleep*. StatPearls (Internet), Retrieved on May 15, 2020 from https://www.ncbi.nlm.nih.gov/books/NBK482512/

Casarin S.T., Barboza, M.C.N. and Siquira, H. C.N. (2010). Quality of life in pregnancy: Literature systematic review. *Journal of Nursing UFPE Online,* 4, 66-76

Chan, T. H. (2014). Facebook and its Effects on Users' Empathic Social Skills and Life Satisfaction: A Double-Edged Sword Effect. *Cyberpsychology, Behaviour & Social Networking*, 17(5), 276-280.

Collins, K. (2017). Social media use, social anxiety and the relationship with life satisfaction (Order No. 10662061). *Available from Pro Quest Dissertations & Theses A & I.* (1937402274).

Colwell, J. & Kato, M. (2003). Investigation of the relationship between social isolation, self-esteem, aggression and computer game play in Japanese adolescents. *Asian Journal of Social Psychology*, 6,149-158

Graham, J. E., Christian, L. M., & Kiecolt-Glaser, J. K. (2006). Marriage, health, and immune function: A review of key find-ings and the role of depression. In S. Beach & M. Wamboldt (Eds.), Relational processes in mental health, Vol. 11. Arlington, VA: *American Psychiatric Publishing, Inc.*

Griffiths, M.D. (2013). Social networking addiction: Emerging themes and issues. *Journal of Addiction Research & Therapy*, 4(5). doi:10.4172/2155-6105.1000e118

Hartwell, S. W., & Benson, P. R. (2007). Social integration: A conceptual overview and two case studies. In W. R. Avison, J. D. McLeod, & B. Pescosolido (Eds.), Mental health, social mirror (pp. 329–353). New York: *Springer.*

Harvery, A.G., Stinson, K., Whitaker, K.L., Moskavitz, D. & Harvinder, V. (2008). The Subjective meaning of sleep quality. A comparison of individuals with and without insomnia. *Sleep*, 31 (3), 383-393.

Idubor, I. (2015). Investigating Social Media Usage and Addiction Levels among Undergraduates in University of Ibadan, Nigeria. *British Journal of Education Society and Behavioural Science.* 7(4), 291-301

Kaplan, A and Haenlei, M. (2010). *Users of the World, the Challenges and Opportunities of Social Media. Business Horizons, 55, (1):* 59-68.

Kawachi, I., & Berkman, L. F. (2001). Socialites and mental health. *Journal of Urban Health-Bulletin of the New York Academy of Medicine*, 78, 458–467. doi:10.1093/jurban/78.3.458

Kim, K. et al. (2009). Internet overuse and excessive daytime sleepiness in adolescents. *Psychiatry Clin Neurosci*, 63(4), 455-462.

Li, Y., & Yuan, C. (2011). Levels of fatigue in Chinese wom0en with breast cancer and its correlates: A cross-sectional questionnaire survey. *Journal of the American Academy of Nurse Practitioners*, 23(3), 153-160

Lo. C.M, Lee, P.H. (2012). Prevalence and impacts of poor sleep on quality of life and associated factors of good sleepers in a sample of older Chinese adults. *Health and Quality of Life Outcomes*; 10(72): 1-7.

Moos, R. & Moos, B. S. (1981). Family environment scale: Manual. Palo Alto: Consulting Psychologists Press.

Namkung, E. H., Greenberg, J. S., & Mailick, M. R. (2017). Well-being of sibling caregivers: Effects of kinship relationship and race. *The Gerontologist*, 57, 626–636.

National Sleep Foundation (2020). Sleep Foundation.org https://www.sleepfoundation.org/articles/why-do-we-need-sleep

O'Neil, A., Stevenson, C. E., Williams, E. D., Mortimer, D., Oldenburg, B., & Sanderson, K. (2013). The health-related quality of life burden of co-morbid cardiovascular disease and major depressive disorder in Australia: findings from a population-based, cross-sectional study. *Quality of life research*, 22(1), 37-44.

Olapegba, P. O., Balogun, S.K., & De Paul Chism, N. F. (2012). Modeling Perceiving quality of life for people living near a Nigerian dumpsite. *International Perspectives in Psychology Research, Practice, Consultation,* (1) *4,* 221-235.

Omotoso, A.B.O., Abdulmalik, J.O., Adediran, K.I., Omigbodun, O.O. (2022). Sleep quality and its correlates among adolescents schooling in Northcentral Nigeria. *Nigeria Research Journal of Health Sciences* 10(3), 216-223

Sahin, C. (2018). Social media addiction scale-student form: the reliability and validity study. *The Turkish Online Journal of Educational Technology*, 17, 169-182

Siegel, J. M. (2011). REM sleep: A biological and psychological paradox. *Sleep Medicine Reviews,* 15(3), 139–142.

Symister, P., & Friend, R. (2003). The influence of social support and problematic support on optimism and depression in chronic illness: A prospective study evaluating self-esteem as a mediator. *Health Psychology*, 22, 123–129.

Taskiran, N., (2011). Pregnancy and sleep quality. *Journal of Turkish Society of Obstetrics and Gynecol*ogy, 8(3), 181-187.

Umberson, D., & Montez, J. K. (2010). Social relationships and health: A flashpoint for health policy. *Journal of Health and Social Behavior*, 51, S54–S66.

Ventegodt, S., Merrick, J. & Aderson, N.J. (2003). Quality of life theory I. The IQOL Theory: An integrative theory of the global quality of life concept. *The Science World Journal*, 3, 1030-1040.

World Health Organization (1998). *WHOQOL Measuring Quality of life.* Geneva. World Health Organization.

World Health Organization (2000*). Population reports: issues in World Health Samesi:* 9, Geneva. Retrieved, 7th January 2017 from http: // www.who.org/populationreports/issuesinworldhealth/9/476872115678htem

Wu, H.C., Lai, J.N., Hwang, J.S. (2012 Quality of life and sleep quality amongst climacteric women seeking medical advice in Northern Tai-wan. *Sleep Medicine*. 2012; 13(7): 906-912

Yi,H., Shin, k. & Shin, C. (2006). Development of the sleep quality scale. Journal of sleep research, 15(3), 309-316

Young, K. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyber Psychology & Behavior*, 1(3), 237-244.