



MARITAL SATISFACTION, SEX DRIVE AND SLEEP DEPRIVATION AMONG  
MALAYSIAN ADULTS

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE  
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Declaration

We hereby declare that the report entitled “Marital Satisfaction, Sex Drive and Sleep Deprivation among Malaysian adults” submitted is written by us and is our own effort and that no part has been plagiarized without citations.

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This research paper attached here, entitled “Marital Satisfaction, Sex Drive and Sleep Deprivation among Malaysian adults” prepared and submitted by “LUSHALINEE A/P MURTHY, RACHEL VALERIE ANTHONY, and WONG KAH WAI” in partial fulfilment of the requirement for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

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### Abstract

This study aimed to investigate the relationship between sleep deprivation, sex drive and marital satisfaction. This is a correlational study that uses a quantitative, cross-sectional research design. A total of sixty-five married individuals were recruited using convenient sampling method. Epworth Sleepiness Scale, Sexual Desire Inventory- 2 (SDI-2) and Marital Adjustment Test (MAT) were used in our study. Pearson correlation test was used to measure the relationship of three variables and the results presented no significance between sleep deprivation and marital satisfaction but a slight negative correlation between both variables. Furthermore, results also indicated that there is no significant relationship between sleep deprivation and sex drive. However, married individuals with higher sex drive reported higher marital satisfaction. There was also no significant difference shown between gender and marital satisfaction which was measured using independent t-test. Moreover, linear regression was used to measure the level of prediction between sex drive and marital satisfaction and results showed that sex drive significantly predicts marital satisfaction. The findings in this study are fundamental for future researchers and studies as it can be a form of educational reference. It can also benefit marriage counselors in marriage or couples counseling and public health awareness discourse.

*Keywords: sleep deprivation, sex drive, marital satisfaction, relationship*

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## List of Abbreviations

BMI.....	Body Mass Index
DV.....	Dependent Variable
IV.....	Independent Variable
M.....	Mean
MAT.....	Marital Adjustment Test
Max.....	Maximum
Min.....	Minimum
n.....	Number of participants
SD.....	Standard Deviation
SDI.....	Sexual Desire Inventory –II
SPSS.....	IBM Statistical Package for Social Science

## **CHAPTER 1.0**

### **Introduction**

#### **Background of Study**

Nearly all humans will experience sleep deprivation at one point in their life as there are many contributing factors that can affect their duration of sleep. As such, sleep deprivation is common among any population but it is prevalent in every part of the world today. In terms of terminology, there are a few alternative terms to sleep deprivation which are popular in usage by the public such as lack of sleep or sleep loss. Historically, research on sleep deprivation has its roots dating back at the end of the 19th century where there are attempts to study the long-term effects of sleep deprivation whereby 3 participants were kept awake as part of a 90-hour sleep deprivation test. The study found that not only that the three participants were sleep deprived but one of them became hallucinated after being subjected to the experiment for a considerably long period (Orzel, 2010).

When examining the condition of sleep deprivation, it is also important that one must not forget the underlying cause of sleep deprivation and also the implication that can impact the person and the populace as a whole. Medically, the cause of sleep deprivation is directly attributed to short resting time itself where an individual gets to bed late and waking up early. However, it is worth reminding that there is a wide variety of contributing factors that cause an individual to have such less sleeping time. Factors ranging from work obligations to some chronic illness can affect sleep. Other factors that can affect an individual's sleep include the quality of their sleep hygiene. According to Irish, Kline, Gunn, Buysse and Hall (2015), sleep hygiene refers to the sleep environment as well as the behaviours of the individual to ensure a healthy sleep pattern. According to Chervin and Hershner (2014), a person's sleep hygiene depends on their constant sleep-wake schedule, the quality of the environment, the level of

stimulants that they took such as caffeine or other drugs prior to sleep and poor sleep hygiene can affect an individual circadian rhythm thereby increasing the chances of sleep deprivation. With the advancement of mobile technology in recent years, smartphones can also contribute to sleep deprivation as users tend to use it before going to bed. Chervin and Hershner (2014) also noted that constant usage of smartphone prior to their sleep makes the user harder to fall asleep due to the light that emits from the smartphone that causes them to be less sleepy which in turn delays the user's circadian rhythm and ultimately causes them to have less sleeping time.

The effects and implications of sleep deprivation on an individual vary from one aspect to another. Physiologically, individuals who are sleep deprived have higher stress responsivity that can trigger stress hormones to affect their mood and cognition. Furthermore, the researchers noted that sleep-deprived individuals also reported bodily pain in certain parts of the body and also headaches (Medic, Wille, & Hemels, 2017). Long-term sleep deprivation of an individual can also lead to serious health complications which include cardiovascular diseases as well as risks of cancer. The increased risk of cardiovascular disease is attributed to the increased blood pressure levels due to sleep deprivation which in turns increase the risk of hypertension. Medic et al. (2017) also noted that there is a correlation between higher body mass index (BMI) and less sleep on sleep deprived individuals. Moreover, the risk of cancer can be attributed to the correlation of tumour growth with sleep deprivation and disrupted circadian rhythm. Melatonin a type of hormone that is responsible for controlling tumour growth among others has been affected due to exposure to light as the body only produces melatonin in darkness or nighttime. Psychologically, sleep deprivation has shown to affects an individual's mood, cognition and ultimately performance. Alhola and Polo-Kantola (2007) noted that sleep deprivation can decrease an individual's

attention and working memory as well as other cognitive functions such as visuomotor performance.

When it comes to marital relationships, sleep is identified as one of the deciding factors on the relationship quality of the individuals towards their loved ones. In other words, couples tend to have conflicts such as unnecessary arguments due to sleep deprivation. This is due to the inner working of psycho-cognitive relationships in the brain where sleep loss induces the brain to react to any negative stimuli intensively (Gordon & Chen, 2014). Sleep deprived individuals are also susceptible to have a reduced emotional empathy and thus less willing to understand the other party's point of view during a discussion and this can further inflame the conflicts between married couples which contributed to a less satisfying relationship (Guadagni, Ferrara, Burles, & Laria, 2014). Sleep deprivation is one of the main factors that come between an individual's personal or professional relationships as have been mentioned above. Previous studies have shown the links between sleep deprivation with psychological and psychopathological states which pertains having difficulty in concentration, depression, irritation, the tendency of being extra-sensitive to any criticisms, desensitization between oneself and one's self-realization (Araujo & Miyake, 2017).

Further exploring how sleep deprivation actually affects an individual's progress in the relationship. Costa, Costa and Pestana (2017) did a study regarding how subjective sleep quantity affects the sexual frequencies or arousals among men and women in 2017. The study tested on both animals, using rats and human. The findings were consistent with other studies in humans and animals, resulting with lack of sleep can enhance an individual's sexual arousal, but not their sexual frequency. Salivary testosterone (T) says to play a role in the sexual arousal caused by lack of appropriate sleep. Poorer sleep quality was linked with

female dissatisfaction with their sexual lifestyle, with the explanation that women has lower T levels when lack of sleep.

### **Problem Statement**

According to The Star2, a staggering 89% of surveyed Malaysians suffered from at least one or more sleeping problems with 26% of them report having difficulty falling asleep in which it takes more than 30 minutes for them to fall asleep. As a result, they are sleep deprived as they reported to still feel tired and drowsy after waking up although having rested for the night prior to waking up. A sleep-deprived individual will be subjected to numerous problems in the future both physically and mentally. For example, a sleep-deprived individual has a higher risk of suffering from cardiovascular diseases such as hypertension and heart attack. Furthermore, the individual's mental health will be affected due to the lack of sleep. For example, a sleep-deprived individual has a higher chance of suffering from serious psychological problems such as anxiety as well as depression. However, in most cases, a chronic sleep-deprived individual is most likely to have mood swings and temperament issues. This is because that the brain's emotion regulation system is affected due to the lack of sleep. Consequently, sleep-deprived individuals are prone to make a bad judgement and act impulsively (Tan, 2018). This is particularly risky in terms of relationships where a sleep-deprived individual is required to interact with their significant others where they are bound to be conflicts. Sleep deprived individuals are also found to be having low sex drive since that sleep deprivation can lead to fatigue, sleepiness as well as the lack of energy to engage in sexual activity. Furthermore, sleep deprivation can also cause low hormone production such as testosterone in men diminishing their sex drive in the process (Peri, 2015). Low sex drive coupled with sleep deprivation as well as other external factors involved can cause considerable friction in terms of the relationship among married couples. In other words,

marital couples who have less sleep, to begin with, tend to have angrier arguments or hostile fights when faced with various life challenges that most people will go through such as financial instability, outstanding house chores, lack of commitment and others. If there are prolonged conflicts between marital couples, either one if not both of them will lose interest in reconciling with each other and marital satisfaction will decrease. Communication between couples might break down and there will be a high risk of divorce in the long run. Although the updated statistics for divorce rate will not be released until at the end of 2018, Boo (2014) noted that in every 10 minutes, there will be one divorce case based on statistics from 2012. Although sleep and interpersonal relationships in the local context have been studied in the form of work-family conflict and sleep disturbance, the relationship between the sleep deprivation and marital satisfaction with a sex drive as the moderator are yet to be investigated in the Malaysian context.

### **Significance of the study**

This study aims to uncover whether sex drive is able to influence the strength of sleep deprivation and marital satisfaction. The findings may later be able to provide insights into the role of sex drive as a moderator between the two variables as it might be able to demonstrate the importance of sex drive in sustaining marital satisfaction. Additionally, it may also determine the extent of sleep loss of the individuals since past studies have shown that sleep deprivation can affect sex drive through biological means. Furthermore, the findings derived from this study can potentially be able to raise awareness or can even serve as a reminder to both public health officials and spouses on the importance and benefits of having enough sleeping time both physically and psychologically. Additionally, the results gained from the study might be able to reveal that how sleep plays a role in maintaining healthy relationships between couples and that sleep can also boost hormones which induce



sex drive in men and women. In addition to that, marital counsellors can also use the findings gained from this research to help troubled couples to mend their relationships that were broken by their busy work schedules and lack of sleep. Perhaps the findings of this study can be put into practice by sex therapists in which they can implement the recommendation derived from this study for their clients. For example, if sex drive is identified as the factor in boosting marital relationship or decreasing the prevalence of sleep deprivation, then the therapist can give some suggestions to their clients to boost sex drive such as exercising as it can build hormones such as testosterone, taking the right nutrition, or even taking some time off to rest to reduce the impact of sleep deprivation. In the local academic settings, the findings from this study can also potentially able to contribute to the expansion similar studies in Malaysia by other researchers.

### **Research Objective**

This study aims to investigate the relationship between marital satisfactions, sex drive and sleep deprivation.

### **Research Questions**

1. Is there a significant relationship between sleep deprivation and marital satisfaction?
2. Is there a significant relationship between sex drive and marital satisfaction?
3. Is there a significant relationship between sleep deprivation and sex drive?
4. Does gender predicts any difference in marital satisfaction in adults?
5. Does sex drive significantly predict marital satisfaction?

### **Hypothesis**

H<sub>1</sub>: There is a significant negative relationship between sleep deprivation and marital satisfaction

H<sub>2</sub>: There is a significant positive relationship between sex drive and marital satisfaction

H<sub>3</sub>: There is a significant negative relationship between sleep deprivation and sex drive

H<sub>4</sub>: Gender differences significantly predicts marital satisfaction

H<sub>5</sub>: Sex drives significantly predicts marital satisfaction

## **Definition of Words**

### **Conceptual Definition**

**Sleep deprivation.** Sleep deprivation can be conceptually defined as being in a state or condition which an individual suffers from the lack of sleep and cannot maintain optimal alertness during the daytime (Hershner & Chervin, 2014). Sleep deprivation was recognized as the primary source of daytime sleepiness and the symptoms of sleep deprivation can be seen even with only a night of sleep loss. In most research, sleep deprivation consists of two categories namely acute sleep deprivation and chronic sleep deprivation (Pagel, 2009).

Academically, acute sleep deprivation is defined as being in the state of wakefulness for up to 24 hours or longer. In the social settings, acute sleep deprivation generally means “staying up all night” or less commonly known as “pulling an all-nighter” (Hershner & Chervin, 2014).

Chronic sleep deprivation, on the other hand, is defined as having an inadequate amount of sleep daily or repeatedly. In short, an individual is said to suffer from chronic sleep deprivation if they slept less than the recommended sleeping hour daily (Philip et al., 2012).

**Sex drive.** The general use of the word libido associated with the idea of the human sex drive and Freud did originally associate the libido mainly with sexual desire. For example, Freud (1905) states: ‘We have defined the concept of libido as a quantitatively variable force which could serve as a measure of processes and alterations occurring in the field of sexual excitation.’ However, in later work Freud expanded the meaning of the term

so that it came to represent more of a general life instinct, referring to instincts connected with self-preservation and survival, which still included sex but also added other motivators (Schultz & Schultz, 2004).

**Marital satisfaction.** Marital satisfaction refers to a couple being in a marriage which accommodates multidimensional concepts that involve safety, having a pleasurable sexual relationship and also convenient and comfortable marital relationships (Javed, Gul, & Siddiqua, 2016). According to Ziaee et al. (2014), marital satisfaction can be acquired depending on the individual's family values, cultural norms and obligations. The balance of psychological, socioeconomic and spiritual elements are key to achieve marital satisfaction.

### **Operational Definition**

**Sleep deprivation.** Sleep deprivation in this research can be measured by using the Epworth Sleepiness Scale. It is a short questionnaire that measures daytime sleepiness as well as other sleep disorders such as sleep apnea and sleep deprivation. It contains eight items presented as hypothetical scenarios for the participants to complete. To complete the questionnaire, participants were required to score each item according to 4-item response scale ranging from "0" (would never doze) to "3" (high chance of dozing). Participants were required to rate on the probability of them falling asleep in each scenario by rating accordingly based on the 4-item response scale given. In terms of scoring, the score that the participants have chosen for each scenario will be summed up into a total score. A score of less than 10 indicates the absence of sleep deprivation while a score of 10 and above indicates the presence of sleep deprivation on an individual (Alami, Ghanim & Zyoud, 2018).

**Sex Drive.** The sexual desire which is another term for sex drive can be understood widely as being interested in sexual objects including people and sexual activities, or as the urge to look for sexual objects to engage in sexual activities. Sex drive is not sexual activity.

Sexual activity is explained as performing arousing ventures such as kissing, masturbation, sexual intercourse or touching (Javed, Gul, & Siddiqua, 2016). The Sexual Desire Inventory- 2 (SDI-2) is a brief 14-item scale that aims to measure the multidimensional construct of sexual desire in a dyadic context. Four items are scored on an 8-item response scale from '0' (= 'not at all') to '7' (= 'more than once a day') concerning frequency of desire. The remaining items were answered on a 9-point Likert scale ranging from '0' (= 'no desire') to '8' (= 'strong desire'). Possible score range from 0 to 112 (Spector, Carey & Steinberg, 1996).

**Marital Satisfaction.** This variable will be measured using ENRICH Marital Satisfaction Scale (EMS) which is a 15-item assessment to measure marital quality and satisfaction of a married individual. 10 items measuring the 10 domains of marital quality, whereas the other 5 are meant to shift focus on the individual's tendency to advocate unrealistic and positive expectation of one's marriage. Items 1, 4, 6, 9 and 14 will be comprised of the Idealistic Distortion Scale, whereas other 10 will be measured with the Marital Satisfaction Scale (Javed et al., 2016).

## CHAPTER 2.0

### Literature Review

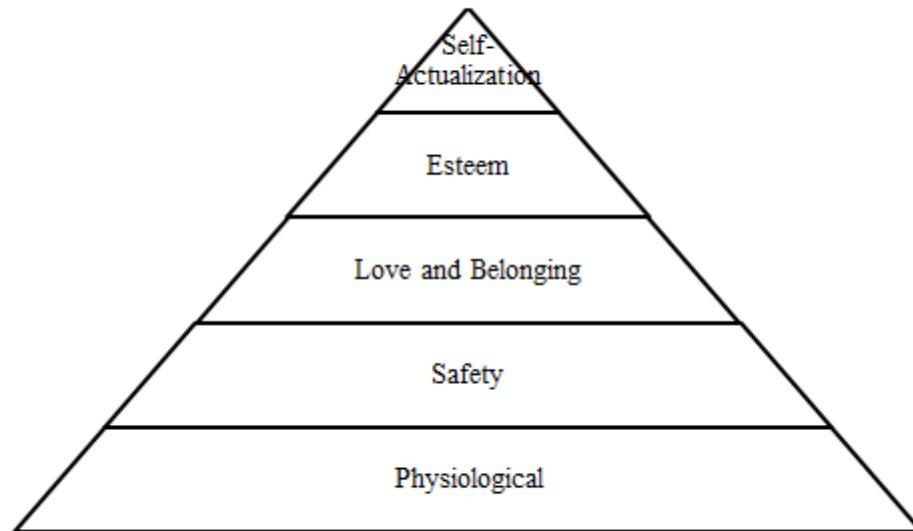


Figure 1

Source: Maslow (1954)

### Maslow's Hierarchy of Need

Abraham Maslow introduced his theory of motivation which involves five classes of needs and is arranged in hierarchical order (Mathes, 1981). Maslow's Hierarchy of Needs is shown as a form of a pyramid in Figure 1. The lowest level of the hierarchy pyramid is the most basic needs, which are our physiological needs, including respiration, sleep, warmth, thirst, and hunger. This is followed by safety needs, which is our need for security on physical, psychological, predictability, control, and economic. Belonging and love come after safety needs, which explains our need to feel like we belong in a group, being able to experience sexual intimacy, trust, to be loved by others, and also being able to love others.

The fourth level will be attaining esteem. In order to reach the highest level of needs, fulfilling one's esteem, having respect for oneself and gaining respect from others, having a sense of mastery, and self-esteem is vital. Finally, reaching the top of the hierarchy pyramid, self-actualization, which involves having the need for self-assessment, spontaneity, autonomy, personal growth, and self-expressiveness (Finkel, Chin, Carswell, & Larson, 2014).

### **Sleep Deprivation**

According to Maslow's Hierarchy of Needs, physiological needs such as oxygen, food, water, ambient temperatures, and sleep need to be fulfilled before individual demands for safety needs. Maslow's theory explains that an individual will not develop new needs until the demands of the first have been satisfied or the third until the second has been satisfied, and so on (Jerome, 2013). With this point being validated, sleep is assuming to be a necessity for every individual to attain satisfaction before the individual can move on to safety needs.

### **Sex Drive**

Maslow's theory is a theory regarding motivation. The word "motivation" can be defined in various terms which involves trigger, stimulate or influence. The purpose of having motivation is to trigger or push something. Quoted by many past researchers, motivation can be viewed as willpower, an effort, a psychological impact, a goal-intended force, and drive (Fallatah & Syed, 2018). Thus, sex drive is considered as the force or motivation that leads an individual to achieve higher levels of needs. This approach can be viewed based on the fundamentals of drive theory. Drive theory proposes that human beings will strive to achieve or have the need to acquire certain things in order to survive, achieve satisfaction and their well-being (Taormina & Gao, 2013).

**Marital Satisfaction**

Under the level of love and belonging, the individual is motivated to fulfil the needs for close relationships. Close relationships may include friendship, romantic relationships and marriage relationship. When one is satisfied with their marriage, they will fulfil the needs for belongingness, emotional support, love and affection, thus achieving marital satisfaction. Maslow's Hierarchy of Needs was positively related to life satisfaction (Taormina & Gao, 2013). Marital satisfaction is one of the domain satisfactions of life satisfaction, as marital satisfaction is one of the vital aspects of one's life. Domain satisfaction and life satisfaction have been shown to correlate significantly with each other (Pavot & Diener, 2008). Thus, marital satisfaction can be achieved when one manages to satisfy the needs under the level of belonging and love.

**Sleep Deprivation and Sex Drive**

According to Oswald's theory of sleep restoration, every living being requires sleep as the purpose of sleep is to restore both physical and mental functions which were needed for the following day. Additionally, non-rapid eye movement (NREM) sleep is crucial in restoring physiological functions while REM sleep is important in restoring mental functions. As noted by Adam (1980), increased REM sleep is correlated with higher sleep deprivation or intense physical activity. This can be evident by the rate of protein synthesis and cell division on a human body while sleeping (Adam, 1980).

In a research conducted by Leproult and Cauter (2011) on the testosterone levels on an adult male, ten healthy participants were subjected to a gradual sleep deprivation experiment for one week. As data recordings were needed, participants spent a total of eleven days in a laboratory where they were subjected to a gradual sleep deprivation. Participants spent ten hours sleep for the first three nights, followed by a five-hour sleep for eight nights.

The findings from the experiment showed that the participants' testosterone levels are lesser when sleep-deprived compared to when fully rested. Testosterone is one of the hormones that are responsible for male sexual behaviour which includes sex drive as well as other general well-being such as muscle mass and strength.

Another study conducted by Kalmbach, Arnedt, Pillai, and Ciesla (2015) on the female counterpart of sleep deprivation and their sexual behaviour with a total of 171 participants found that sex drive can increase with a longer sleep duration. Furthermore, the findings also revealed that the likelihood of engaging in sexual activity with a partner increased by 14% for every additional hour added towards their total sleeping time. Besides that, the study also noted that female participants who acquire longer duration of sleeping time by average show greater sexual response such as genital arousal than those who slept a shorter duration by average.

In terms of sleep quality and sex drive, Costa et al. (2017) studied on Portuguese population with 169 women and 106 men found that low sleep quality is correlated with low sexual satisfaction among women in the experiment. Furthermore, low sleep quality does not correlate with either unstimulated desire, sex frequency as well as sexual desire in both men and women. However, researchers found that low sleep quality is correlated to non-stimulated sexual arousal in both men and women with higher salivary testosterone levels.

### **Sleep Deprivation and Marital Satisfaction**

Married couples who are having children might be one of the factors of declination in one's marital satisfaction. The number of children was negatively correlated with marital satisfaction (Hoesni, Subhi, Alavi, & Wan Azreena, 2013). Children as the arrivals of new family members place a burden on couples as it requires them to re-establish their strategies when dealing with household matters, on top of that couples need to learn to balance their



work and spending time with or taking care of their family while maintaining their marriage relationship. This, in turn, leads couples to have lesser time to spend with each other, thus affecting their marital satisfaction negatively, and most importantly, making it impossible to have an adequate amount of sleep. Negative moods are strongly related to sleep deprivation, and so is irritability, misery and unfriendliness. Other studies show feelings of empathy were reduced and there were symptoms of depression. These negative moods are due to the increase in amygdala activation which causes depletion in functional connectivity in the prefrontal cortex that aids regulation of amygdala. Amygdala is a type of grey matter that helps process and expresses emotions such as fear and others. With the activation of the amygdala and the inhibition of the brain region for amygdala regulation, prompts strong negative affective response explaining why one feels irritated and lacking empathetic feelings after having sleep deprivation (Medina, Lederhos, & Lilis, 2009).

Exploring more on how sleep deprivation affects our cognitive and effective functioning, people experiencing sleep loss experience increased emotions of anger. A correspondent with the study above by Medina Lederhos and Lilis (2009), Gorden and Chen (2014) also found that sleep deprivation is associated with the tendency to react negatively to relationship problems, lack of empathy and lack of emotional recognition. The lack of empathy in an individual prevents understanding, which explains that the individual does not try to reflect that their actions or behaviours might cause the other person to feel bad and otherwise. When dealing with relationship issues, the lack of understanding gives an opportunity for conflicts to occur. Conflicts occur when there are miscommunications, and miscommunications happen when understanding lacks between couples, and lack of understanding is due to lack of empathy. In addition to that, sleep deprivation will inhibit skills of problem-solving, which compromises the ability for the person to resolve the problems during conflicts. Inevitably conflicts do happen in relationships, but if issues are

dealt efficiently with good problem-solving skills will help do more good than harm to one's relationship. Notwithstanding that, too much conflict in one's relationship is damaging. The damage can be prevented when one is rested adequately, as sleep has proven to activate our information process which aids our expressiveness. Emotional expressiveness is essential as it helps each other in the relationship to decode their facial expressions when resolving the conflict. Thus, one has to sleep if they have the means to go through any obstacles in the relationship to achieve relationship satisfaction.

A recent study by Wilson et al. (2017) made findings that associates sleep deprivation, inflammatory responses, and marital conflicts. By recruiting 43 pairs of couples which were consisted of 86 physically healthy participants, they found that individuals who sleep less are prone to more negative behaviours during marital conflicts. In addition, sleep-deprived couples who experienced heated arguments, as well as marital conflicts, were found to have higher biological inflammatory responses such as skin redness as their body responds to the certain stressor. This can be attributed to the negative role of sleep deprivation in which it increases an individual's body inflammatory sensitivity toward stressors. However, the severity of a marital conflict can be reduced if one of the partners is able to get sufficient sleep. Furthermore, couples who are more emotionally expressive and have better emotional regulation did not experience inflammatory responses on their body even after a period of short sleep and marital conflict. Therefore, researchers suggested that the role of emotional expression during marital conflicts are able to control inflammatory responses following a night of insufficient sleep. In short, the study highlights the negative effects of sleep deprivation towards marital relationships.

### **Sex Drive and Marital Satisfaction**

According to Hoesni et al. (2013), marital satisfaction is positively correlated with love. Sternberg's theory of love suggests 3 components of love that encompass passion, commitment and intimacy. It was found by that the component, passion, highly contributes to marital satisfaction. The theory of love implicates that romance in the relationship, physical attractions and sexual consummations overrides components of intimacy and commitment when it comes to determining the concerns of one's marital satisfaction. Kochar and Sharma (2015) reported that sexual satisfaction and relationship satisfaction have a positive relationship. For both young unmarried couples and even married couples are found to have greater relationship satisfaction and stability when they are satisfied sexually with their partners.

Sex drive including its related variables such as sex frequency and sexual satisfaction can decrease over time depending on the length and duration of the relationship. Moreover, sex drive was also identified as one of the many factors that can help promote marital relationship and ensures it's stability in the long run (Impett, Finkel, Strachman & Gable, 2008). On the other hand, low sexual drive among couples predicts lower satisfaction and higher prevalence conflicts in their relationship. In terms of marital distress, sexual drive can be seen in both ways firstly as the cause since that couples are most likely to avoid any sexual activity and their low motivation to involve in sexual activity when facing low marital satisfaction or as an outcome since that low sexual drive can lead to frustration which was translated as low marital satisfaction (Brezsnyak & Whisman, 2004).

Past studies conducted by Brezsnyak and Whisman (2004) regarding sexual desire and relationship with marital power as the moderator found that marital satisfaction and sexual desire are significantly correlated but there was no evidence that marital power acts as

the moderator. Marital power is defined as power based on gender and religiosity, and whoever has the power has control over division of household tasks, making decisions, and childcare. In addition, the researchers noted that sexual desire can act as an indicator to express whether or not if the relationship is satisfying. For instance, couples tend to engage in sexual activity with the drive if they are highly satisfied with their relationship. Instead, an individual's sexual drive towards their partner will decrease when their relationship turned sour (Brezsnyak & Whisman, 2004).

A research on sexual and relationship satisfaction among Australian couples by Smith, Ferris, Lyons and Richters (2011) found that men or women who were likely to be dissatisfied with their relationship also reported being dissatisfied with the frequency of sex that they had experienced. This can be attributed to the ever-increasing age of both couples as well as the duration of their relationship. For instance, older men are reported to be less satisfied with the frequency of sex when compared to younger men in the research. As long lasting relationships tend to have more commitments and challenges compared to early relationships, sex frequency in a long relationship are found to be lesser.

Mizrahi, Mikulincer, Hirschberger and Szepeswoid (2016) also noted that intimacies and sexual drives are both instrumental in providing a strong foundation for early relationships. In their research on the relationship between sexual drive and attachments insecurities on the Israeli population, their findings have mixed results between genders. For women, their finding states that greater sexual drive from their partner can decrease relationship anxiety. However, for the male sample, the result obtained shows that men relationship anxiety decreases when their partner shows the less sexual drive.

An early longitudinal study on the relationship and sexual satisfaction by Byers (2005) was able to find clues that couples who reported to be generally satisfied in their

respective relationship also reported having good sexual satisfaction during their relationship as changes in sexual satisfaction are correlated with changes in relationship satisfaction.

However, it is also noted that the study provides little concrete evidence on the causal effect of the two variables due to the limitation of the study.

### Theoretical Framework

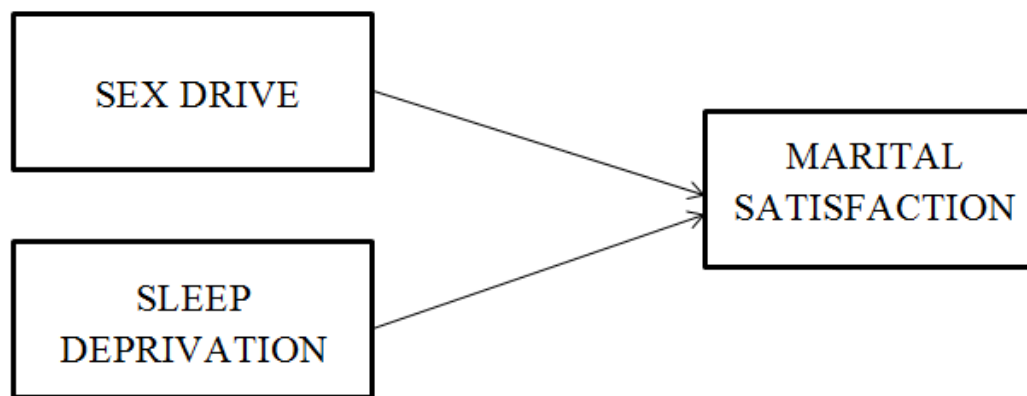


Figure 2

Since our model for this study was based on the relationship between two independent variable and one dependent variable, we examined whether if there is significant relationship between sex-drive as well as sleep deprivation in marital satisfaction among Malaysian adults. The two independent variable in this study were identified as sleep deprivation and sex drive while the dependent variable in this study is marital satisfaction and relationship between those mentioned variables were analyzed through Pearson correlation. Specifically, Pearson correlation will be used to find out the relationship between two or more variables as well as discovering the correlational direction strength of those variables (Gogtay & Thatte, 2017). In our case, we will investigate the relationship between sleep deprivation and sex

drive, sleep deprivation and marital satisfaction as well as sex drive and marital satisfaction. Furthermore, an independent t-test analysis will also be used to find out the difference in means between two different groups. For this study, we will investigate whether the difference in means between gender and marital satisfaction. Simple linear regression analysis will also be carried out to find out whether sex drive predicts marital satisfaction among Malaysian adults.

In our case, we hypothesized that there is a significant negative relationship between sleep deprivation and marital satisfaction as well as sleep deprivation and sex drive. In other words, if there is an increase in sleep deprivation, the individual's marital satisfaction as well as sex drive will decrease and vice versa. Furthermore, we also hypothesized that there are significant positive relationship between sex drive and marital satisfaction and that sex drive predicts marital satisfaction among Malaysian adults. We also hypothesized that there will be gender differences between male and female and marital satisfaction. (see Fig.2).

## **Chapter 3.0**

### **Methodology**

#### **Research Design**

This study employed a non-experimental, correlational design to assess the relationship between the variables. This study design is a cross-sectional as it measures only by observing a representative subset of a population, at a specific point in time. A quantitative approach was used to study a sample of married couples to understand the relationship between sleep deprivation, sex drive and marital satisfaction in Malaysia. This study will be descriptive and quantitative research as we will be using survey methods for data collection. Convenience sampling through an online survey form (Qualtrics) was used as our sampling method. Furthermore, correlational design was employed to examine the relationships of sleep deprivation and marital satisfaction towards sex drive. For the data collection of the study, survey method is used. According to Privitera in 2014, in order to evaluate, describe or characterize an individual or a group by using a written or oral form of a survey, it is through survey research design as one of the methods. Hence, to investigate the relationships between sleep deprivation, sex drive and, marital satisfaction among married couples, the correlational survey was used.

#### **Participants and Location**

The questionnaire was accessed online through social media including Facebook Messenger, Whatsapp and WeChat.

**Inclusion criterion.** The inclusion criteria for participants in our study includes: holding Malaysian citizenship, either man or woman, legally married and age ranging from 21 – 40 years old.

**Exclusion criterion.** Couples are homosexuals but married, undergoing process of divorce, couples who are separated but stay together and individuals older than 40 years old were excluded from our study.

A total of 80 participants took part in the research, 65 of these completed the questionnaire were included in the analysis.

### **Sample Size and Sampling Method**

The sample size of this study was calculated according to the GPower software with an effect size of  $d=0.5$ . The total sample size estimated to be 54 with an alpha level of  $p=0.05$  and power of 0.95 via chi-square test with one degree of freedom. So, the estimated sample size of this study including 17% expected outlier or missing data or incomplete questionnaire is 15 married couples. Respondents of the study were recruited using convenient sampling whereby questionnaires were distributed in the form of an online survey to married couples that were convenient in Malaysia.

### **Research Procedure**

An online questionnaire was distributed by using Qualtrics to reach out to the participants and were distribute through online media so that it is convenient for participants to fill in their answers and also for us to collect our data. There were three sections in the self-report questionnaires. On the first page were the introduction of the topic and purpose of our study. The participants had to sign the written form informed consent. Details in the informed consent such as the purpose of the study, voluntary participation and confidentiality of information were explained and advised to participate voluntarily, withdraw at any time and stay anonymous. It took approximately 8 to 15 minutes to complete the questionnaire. The



online survey was opened for responses for three months from November 2018 until February 2019.

### **Research Instruments**

In this study, demographic section were included as well as three research instruments were used which are Epworth Sleepiness Scale, Sexual Desire Inventory-2 and Locke-Wallace Marital Adjustment Test to measure all the variables under this study.

Under the demographic section, 4 items were included which gave us information regarding participants' age, gender, duration of marriage and race for the purpose of our study (See Appendix F).

**Epworth Sleepiness Scale.** The Epworth Sleepiness Scale consists of 8 items that measure daytime sleepiness as well as other sleep disorders such as sleep apnea and sleep deprivation. Participants will be required to score each item according to 4-item response scale ranging from "0" (would never doze) to "3" (high chance of dozing). In terms of scoring, the score that the participants have chosen for each scenario will be summed up into a total score. A score of less than 10 indicates the absence of sleep deprivation while a score of 10 and above indicates the presence of sleep deprivation on an individual. The internal reliability of this instrument based on a systematic study is ranged from .70 to .90 Cronbach alpha. The reliability of sleep deprivation is Cronbach  $\alpha = .67$  which indicates acceptable internal reliability (Kendzerska et al., 2014).

**Sexual Desire Inventory- 2.** The Sexual Desire Inventory- 2 has a total of 14 items to measure the frequency and strength of sexual desire among the participants. Items 2, 3, 7, 8, and 9 are revised items which refer to partner-related desire. Item 1 till 10 refers to dyadic sexual desire where else items 9 till 13 refer to solitary sexual desire and followed by item 14

to investigate generally about distress experienced self-denial during sexual activity. Four items are scored on an 8-item response scale from 0 (not at all) to 7 (more than once a day) concerning the frequency of desire. The remaining items were answered on a 9-point Likert scale ranging from 0 (no desire) to 8 (strong desire). Possible score range from 0 to 112 indicates higher the score, higher sexual desire. This instrument has the internal reliability of .86 Cronbach's alpha for general dyadic sexual desire dimension and .96 Cronbach's alpha for solitary sexual desire dimension while the test-retest reliability is  $\alpha = .91$  (Spector, Carey & Steinberg, 1996).

**Locke-Wallace Marital Adjustment Test (LWMAT).** The LWMAT is a 15-item self-administered test on marital satisfaction and disagreement. Global happiness was measured in the first item followed by an agreement on specific matters for 8 items such as finances, recreation, affection, friends, and philosophy of life. The final 6 items measure the particular choices and feelings regarding the marriage and respondent's spouse. The test uses various response formats such as 7-point (Item 1), 6-point (Items 2–9), and 4-point (Items 11, 13, and 15) Likert-type scale, and 3- and 2-choice responses (Items 10, 14, and 12). MAT uses a multifaceted scoring system where there are 10 different weights for all 15 items. For instance, the scoring of Item 12 rely on the agreement between the spouses, “Does your mate generally prefer”, and 2 options of answer are given, “stay at home for both” with 10 points, “on the go for both” with 3 points and “disagreement” with 2 points. The total sum of each item and range from 2 to 158 which indicates the higher the score, the greater the satisfaction. Scores less than 100 indicate marital dissatisfaction. LWMAT showed the reliability of marital satisfaction is Cronbach  $\alpha = .84$  while the test-retest reliability is  $\alpha = .70$ , which shows sufficient internal reliability (Locke & Wallace, 1959).

**Data Analysis**

Collected data was analyzed through the IBM Statistical Package for Social Science (SPSS) in version 23.0. Descriptive analysis was examined based on demographic variables such as gender, race, age and duration of the marriage. Pearson correlation test was used to analyze the correlations between sleep deprivation, sex drive and marital satisfaction to verify a linear relationship between two variables in terms of strength and direction. Independent samples t-tests were used to examine gender differences in marital satisfaction by testing on the two different means and conditioned to meet which are these two samples are not related to each other. Besides, linear regression test verified the existence of significant relationship of sex drive (independent variable) towards marital satisfaction (dependent variable). All statistical procedure utilized 0.05 as a significant value.

## Chapter 4.0

### Results

#### Introduction

The purpose of this study was to examine the relationships between sleep deprivation, sex drive and marital satisfaction in Malaysia. Results were calculated using SPSS, version 23.0. Research questions were examined through use of Pearson's Correlations, Independent t- test and Linear Regression.

#### Descriptive Statistics

The total number of 80 respondents were collected and filtered. Fifteen respondents who were excluded as this study focused on studying marital satisfaction among Malaysian adults. Therefore, only 65 respondents were the remaining for continuation of further analysis.

**Respondents' background.** Table 4.1 showed the demographic information of the participants in this study. The sample consisted of 65 participants with the average age of 23 years ( $SD=1.59$ ). The gender of the participants was equally distributed which consisted of 41 females (63.1%) and 24 males (35.9%). Most of the participants were Indian (73.8%), followed by Chinese (15.4%), Malays (6.2%) and others (4.6%). Lastly, most of the participants' duration of marriage were within 5 years (76.4%), within 10 years (7.7%) and 10 years and above (16.9%).

Table 4.1

*Demographic information of participants (N=65)*

	<b>n (%)</b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
Age		2.15	1.24	21	40
21-25	30 (46.2)				
26-30	10 (15.4)				
31-35	10 (15.4)				
36-40	15 (23.1)				
Gender					
Male	24 (36.9)				
Female	41 (63.1)				
Race					
Malay	4 (6.2)				
Chinese	10 (15.4)				
Indian	48 (73.8)				
Others	3 (4.6)				
Duration of marriage (years)					
0-5	49 (75.4)				
6-10	5 (7.7)				
10 and above	11 (16.9)				

*Note.* SD: Standard Deviation; Min: Minimum; Max: Maximum

### Inferential Statistics

This section presented the correlation analysis, independent t-test and linear regression based on the research questions of the study.

Research Question 1: Is there any significant relationship between sleep deprivation and marital satisfaction in Malaysia?

*H<sub>1</sub>: There is a significant negative relationship between sleep deprivation and marital satisfaction in Malaysia.*

Results of the Pearson correlation indicated that there was a non-significant negative correlation between sleep deprivation with marital satisfaction among Malaysian married

couples ( $r = -.022, p = .862$ ). The result indicates that there is negative relationship between the two variables. This means that when their sleep deprivation is high, their marital satisfaction is low and vice versa. The alternative hypothesis for this study is rejected.

Research Question 2: Is there any significant relationship between sex drive and marital satisfaction in Malaysia?

*H<sub>2</sub>: There is a significant positive relationship between sex drive and marital satisfaction in Malaysia.*

Result shows that there is a statistically significant positive relationship between sex drive and marital satisfaction in Malaysia ( $r = -.175, p = .164$ ). Married couples who reported to have higher marital satisfaction are more likely to have higher sex drive. Thus, this hypothesis is accepted.

Research Question 3: Is there any significant relationship between sleep deprivation and sex drive in Malaysia?

*H<sub>3</sub>: There is a significant negative relationship between sleep deprivation and sex drive in Malaysia.*

According to the result, there is no statistically significant negative association between sleep deprivation and sex drive in Malaysia ( $r = -.175, p = .164$ ). However, there is small negative relationship between the two variables. This means that when sleep deprivation is high among married couples, their sex drive tends to be lower and vice versa. Therefore, this hypothesis is rejected.

Table 4.2

*Correlation among variables (N=65)*

Variables	Mean	SD	1	2	3
1. Sleep deprivation	9.8	3.78	1		
2. Sex drive	60.23	20.93	-.175	1	
3. Marital Satisfaction	50.23	20.59	-.022	.339**	1

\*\*. Correlation is significant at the 0.001 level (2-tailed)

Research Question 4: Is there any significant gender difference in the marital satisfaction in Malaysia?

*H<sub>4</sub>: There is a difference between gender and marital satisfaction.*

Independent sample t-test was administered to analyze gender difference in marital satisfaction among married couples (refer to *Table 4.3*). Males ( $M = 89.00$ ,  $SD = 18.43$ ) tend to score significant positive as compared to female ( $M = 83.93$ ,  $SD = 21.76$ ) but this difference is not significant  $t(63) = .958$ ,  $p = .342$ . Hence,  $H_4$  is not supported.

Table 4.3

*Independent sample t-test for gender and marital satisfaction among Malaysian adults*

Variables	Mean		SD		<i>t</i>	<i>p</i>
	Male	Female	Male	Female		
Marital satisfaction	89	83.93	18.425	21.758	.958	.342

Research Question 5: Does sex drive significantly predicts marital satisfaction?

*H<sub>5</sub>: Sex drives significantly predicts marital satisfaction*

Simple linear regression was carried out to investigate that how much sex drive predicts marital satisfaction/ level of variance between sex drive and marital satisfaction. The

scatterplot shows that there was a weak positive linear relationship between the two, which was confirmed with a Pearson's correlation coefficient of .339. Simple linear regression showed a significant relationship between sex drive and marital satisfaction,  $F(1, 63) = 8.195$ ,  $p < .006$ ). It was found that sex drive significantly predicted marital satisfaction ( $\beta = .334$ ,  $p < .006$ ). The  $R^2$  value was .115 so 11.5% of the variation in marital satisfaction can be explained by the model containing only sex drive.

Table 4.4

*Linear regression for sex drive and marital satisfaction among Malaysian adults*

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	66.65	9.86		6.76	.000
	SDI	0.34	0.35	0.35	2.85	.006

a. Dependent Variables: MAT



## Chapter 5.0

### Discussion and Conclusion

*H<sub>1</sub>: There is a significant negative relationship between sleep deprivation and marital satisfaction*

In our study, the results showed no statistically significant relationship between sleep deprivation and marital satisfaction. To a certain degree, there is negative relationship between sleep deprivation and marital satisfaction but the correlation between the two variables is weak which was valued at  $-.022$ . This highlights the possibility that the correlation has occurred by chance. For example, past study suggested that when women were given adequate sleep duration, women's marital satisfaction increases and so was the number of positive marital occasions on the next day. On the other hand it was also found that women encountered fewer negative marital episodes such as lesser conflicts with their husband on the next day after gaining more than the average amount of sleep they usually get. These results are also applicable to men, as when men achieves a higher than average sleep quality, they reported to have a higher marital satisfaction. Thus, it can be concluded that good and adequate sleep often predicts marital satisfaction (Yorgason et al., 2018).

Furthermore, similar study also showed distinctive findings with the current study which suggested that poor sleeping habits are highly associated with marital distress. Poor sleep can be used to elaborate the lack of emotional expression and cognitive reappraisal that is needed effectively to aid heightened inflammation when in conflicts. Negative behaviors increases and both couples are more likely to negatively and in a hostile manner when sleep deprived. This summarizes that how sleep deprivation can negatively affects the quality of marital satisfaction (Wilson et al, 2017).

Related with the findings in our previous review, Gorden and Chen (2014) also found that sleep deprivation is linked with more relationship problems, with the insights explaining lack of both empathy and emotional recognition decreases the ability of an individual to reflect on their actions or behaviors when conflict arises. Empathy and emotional functioning are vital when it comes to dealing with conflicts, as it requires one to be compassionate and understanding enough for effective conflict resolution. Lack of two components of empathy, which are compassion and understanding, will result in miscommunication, ultimately leads to conflicts. Sleep deprivation has an impact on our inhibitory skills while compromising our problem-solving ability during conflict situations.(Gordon & Chen, 2014). Adequate amount of sleep promotes good problem-solving skills and aids in conflict-resolution in the relationship. Moreover, resting adequately also stimulate our information process which aids our expressiveness. Emotional expressiveness is crucial in helping the couples decode one another's' facial expressions during a conflict. In short, the study done by Gorden and Chen (2014) proves how sleep deprivation affects the satisfaction in one's marital affair.

Besides the possibility that the negative correlation is by chance, perhaps that the weak negative relationship between sleep deprivation and marital satisfaction can be attributed to other factors especially coping strategies and social support. For instance, a sleep deprived individuals with a lot of commitments still found his or her marriage satisfying due to the amount of social support given by significant other. In a meta-analysis study of a large pool of sample participants, they found that better social support is related to better sleeping quality across participants (Grey, Cronan, Uchino & Hogan, 2018). In a separate study by Stafford, Bendayan, Tymoszuk and Kuh (2017) on older adult populations found that their sleep quality improves when got exposed to better social support over the years. Thus, this study recommends the further research using other factors affecting sleep deprived couples and causes of low or high marital satisfaction.

The weak relationship can also be supported with a study done by Capur and Eker (2014) which involves looking at the financial perspective that affects the level of marital satisfaction. It was found that financial stability and status can predict a high marital satisfaction among married couples. The findings showed that couples who has financial problems tend to label their entire relationship as a “failed relationship”, which further supports that marital satisfaction can be affected by the current financial status. Additionally, it was shown that couples who engage in constructive financial behaviors will lead to financial satisfaction, which increases marital satisfaction. Other than financial status, marital satisfaction can also be affected by duration of marriage. According to Sorokowski et al. (2017), the relationship between duration of marriage and relationship satisfaction showed a negative relationship or a U-shaped relationship, which can be understood as the longer the couples stay together, the lower the relationship satisfaction; as for the U-shaped relationship it was described as couples shown high relationship satisfaction in the initial stage of their affair, then it gradually decreases in the mid-stage, which then progressively increases after that.

*H<sub>2</sub>: There is a significant positive relationship between sex drive and marital satisfaction*

Our study predicted that sex drive and marital satisfaction would have a significant positive relationship, and our results proved this assumption. This explains that if one’s sex drive is high, marital satisfaction will also be high. This findings can be supported by past study which stated that the huge predictor of successful romantic relationships is emotional intimacy, as intimacy aids to boost the couples’ well-being and adjustment by coping with individual’s daily stress. Emotional intimacy plays an important role in the increase of sex drive and also frequency of sexual activities with each other in a romantic relationship. Thus, we can conclude that intimacy predicts sex drive that lead to an increase in frequency of

sexual intercourse for both individuals in the relationship (Van Lankveld, Jacobs, Thewissen, Dewitte, & Verboon, 2018).

Our results also can be supported by Yoo, Bartle-Haring, Day, and Gangamma (2013) who did a study that concerns couple's communication, emotional and sexual intimacy, and relationship satisfaction. The findings from this study suggest that the sampled married couples had reported relationship satisfaction due to fulfilling their sexual needs which promotes emotional intimacy. There are significant results showing the impact of sexual satisfaction on emotional intimacy in one's relationship for both men and women. However, the results from this study also shows a stereotypical gender associations regarding how an individual's sexual satisfaction would be allied with his or her partner's relationship satisfaction. The findings show that the men report high levels of relationship satisfaction when their partner reported higher sexual satisfaction, whereas the men's sexual satisfaction does not depend on their partner's relationship satisfaction. It was concluded that men and women tend to emphasize on different facets when defining their own emotional intimacy. This could be indicated as women tends to rate own marital satisfaction depending on the satisfaction of their male partner; if the men shows higher relationship satisfaction, the women report higher marital satisfaction. Opposing to that, the women's sexual satisfaction is a fundamental factor for men to feel good in the relationship, as it explains that men feels the need to achieve a status of "great in sex" to fulfill the relationship satisfaction (Yoo et al., 2013).

Sexual satisfaction and relationship satisfaction does have a positive relationship. Married or unmarried couples found to have greater relationship satisfaction and stability in their own relationship when they are satisfied sexually with their partners (Kochar & Sharma, 2015)

*H<sub>3</sub>: There is a significant negative relationship between sleep deprivation and sex drive*

According to our results, we reject our alternative hypothesis which states that there is no significance between sleep deprivation and sex drive. However, there is insignificant negative relationship between sleep deprivation and sex drive. Unhealthy or conflicted relationships can cause higher sleep deprivation and lower sex drive. Leproult and Cauter (2011) conducted a study on the testosterone levels in adult males, ten healthy participants were subjected to a gradual sleep deprivation experiment for one week. The study showed that when the participants are sleep-deprived, their testosterone levels are low as compared to when rested properly. Similar with this study, these findings supports our results that suggest that sleep deprivation and sex drives negatively correlates with one another, with the understanding that testosterone is one of the hormones that is accountable promoting male's sex.

On the other hand, Kalmbach, Arnedt, Pillai, and Ciesla (2015) conducted a study on the female counterpart suffering with sleep deprivation and their sexual behavior which gave similar findings that supports our results as drive can increase with longer sleep duration. Moreover, the possibility of engaging in sexual activity with a partner increased by 14% for every additional sleeping hour. Besides that, female participants who obtain longer hours of sleep by average show a higher sexual reaction such as genital arousal compare to those who slept lesser. Costa et al. (2017) too did a study on sleep and sex drive. The study investigates 169 women and 106 men among the Portuguese population and results show low sleep quality is correlated with low sexual satisfaction among women in the experiment.

The difference between gender and sexual desires could explain the insignificant relationship between sleep deprivation and sex drive. Some possible factors that affects women's sexual drive includes the agedness, victims of sexual harassment, interpersonal

conflicts, mental health issues and also adjustments due middle age. The early-aged experience of unsatisfied sexual experience will also decrease the women's desire in sexual activities (Kalra & Subramanyam, 2011).

*H<sub>4</sub>: There is a difference between gender and marital satisfaction*

According to the results as shown in table 4.3 depicts that there is no significant gender differences among male and female participants with marital satisfaction with the average of the male sample were reported to have slightly higher marital satisfaction with a mean of 89.00 as compared to female which obtained a mean of 83.93. In general, the mean scores for both male and female sample in this study are considered to be moderately high. A study conducted by a team of researchers also yields similar results in which they compare the degree of marital satisfaction of both 226 male and female participants via meta-analysis (Jackson, Miller, Oka, & Henry, 2011). The main finding concluded that there are small differences between both genders although the statistic is significant. Furthermore, their finding from effect size states that there are little to no significant differences between males and females in marital satisfaction with the female sample was found to be slightly less satisfied than their male counterpart in marital satisfaction.

Since there is no significant gender differences in marital satisfaction, perhaps the result obtained for this study can be interpreted by referring back to the ever evolving role of husband and wife. Since most of the sample was of newlywed couple who were married for 0-5 years, it is possible that both husband and wife have more or less similar levels of marital satisfaction as husband and wife in the contemporary era have a different outlook on marital dyad in the sense that they tends to share household chores among each other in order not to put those chores solely onto one person of the union. A study on Japanese married couple by a group of researchers shows that both husband and wife are more satisfied when either one

of them perform household chores during the weekdays assuming that both of them are employed (Kobayashi, Kobayashi, Okumura, & Usui, 2016). Other findings such as the one by Ogolsky, Dennison and Monk (2014) found that female with high values for equity or egalitarianism were more likely to have their marital satisfaction affected if there are inconsistencies in the delegation of house chores (Dennison & Monk, 2014).

The role of sleep, particularly the different requirement of sleeping hour between male and female might be able to explain the result obtained from this study. A study on sleep using sociological perspective by Burgard and Ailshire (2013) on American population found that female generally slept more and after considering various demographic factors found that female also require more sleeping time in the process. In other words, if a women's sleep quality is affected by the lack of sleep, it may affect their marital satisfaction to a certain degree as well. A study by Schlarb et al. (2015) found that there is a positive relationship between sleep quality and marital quality between cohabiting couples. Similarly, a longitudinal study in Korea by Yang et al. (2013) found significant correlation between marital quality and sleep disturbance. Since this is a longitudinal study, sleep disturbance plays a role in marital quality after four years from baseline. (Yang et al., 2013). Simply put, the lower mean score obtained compared to male in this study might be attributed to the decreased sleeping hour the female receive which affects their marital satisfaction.

##### *H5: Sex drives significantly predicts marital satisfaction*

According to results, shown in table 4.4 depicts that sex drive significantly predicts marital satisfaction in the Malaysian context. Related studies by Schoenfeld et al. (2017) generally found that the sexual related domains can affect individual's marital satisfaction. For instance, they found that positive interpersonal behaviours, especially initiated by the husband can influence the sex frequency between the married couple. On the other hand, sex

frequency was strongly correlated with sexual satisfaction for both couples but was not associated with marital satisfaction. However, sexual satisfaction was significantly correlated to marital satisfaction for both husband and wife. Therefore, based on past studies, it can be assumed that it is not the frequency of sexual activity but the quality of the sexual activity which determines marital satisfaction. It is also theoretically possible that a member of the marital union, especially the husband expresses affections or any other positive interpersonal behaviours towards their wife in hopes of initiating sexual activities. Furthermore, husbands might also assume that their wives require intimacies before jumping to sexual activities and hence perform activities that were favorable to the wife such as being romantic or even as simple as helping with chores around the household in order to increase their desire for sex which contributes to their marital satisfaction.

Consistent findings were also found in the local settings where marital dissatisfaction was found to be associated with sexual dysfunction among married couples (Faizal et al., 2017).

## **Conclusion**

Statistics shows divorce cases occur every 10 minutes (Boo, 2014). This study aimed to investigate the relationship between sleep deprivation, sex drive and marital satisfaction among adults in Malaysia.

A total of sixty-five married individuals were recruited using convenient sampling method. This is a correlational study that uses a quantitative, cross-sectional research design. Epworth Sleepiness Scale, Sexual Desire Inventory- 2 (SDI-2) and Marital Adjustment Test (MAT) were used in our study. The sample consisted of 65 participants with the average age of 23 years ( $SD=1.59$ ). The gender of the participants was equally distributed which



consisted of 41 females (63.1%) and 24 males (35.9%). Participants were Indians (73.8%), followed by Chinese (15.4%), Malays (6.2%) and others (4.6%).

The correlation results presented no significance between sleep deprivation and marital satisfaction which describes as the presence of sleep deprivation does not affect one's marital satisfaction. Furthermore, results also indicated that there is no significant relationship between sleep deprivation and sex drive which explains that individuals with sleep deprivation does not affect their level of sex drive. However, married individuals with higher sex drive reported higher marital satisfaction. There was also no significant difference shown between genders and marital which explains both female and male does not show much difference in evaluating their own marital satisfaction. Moreover, sex drive significantly predicts marital satisfaction which explains sex drive is an important factor for marital satisfaction.

### **Implication of Study**

First of all, the findings could benefit future researchers and students who require updated data and information for educational purposes. For instance, our study is helpful to researchers or students who want to explore more regarding related variables which indicate the relationship between marital satisfaction, sex drive and sleep deprivation. The findings in this study can benefit professionals who specialized in sleep such as sleep therapist or sleep specialist. Sleep deprivation can lead to unusual production of testosterone levels that gives a negative impact to men's health. This can be a clinical implication that provides professionals an additional statistics which shows how lack of sleep decreases men's testosterone that might lead sexual dysfunction (Andersen, Alvarenga, Mazaro-Costa, Hachul, & Tufik, 2011). This can provide an understanding to individuals suffering from mild to chronic sleep patterns and encourage them to seek for professional advice or help from primary care

providers (PCPs) in the healthcare industry in order to prevent further health conditions.

Behavioral health providers (BHPs) can be a source of help for assessing marital satisfaction and presence of sleep deprivation, by specifying their focus on helping one's marriage due to sleep disturbances.

In addition to that, findings can also benefit counselors specialized in marriage or relationship counseling. It provides an insight on how sleep can be affecting the sexual satisfaction in the relationship which impacts negatively on the state of affairs. Counselors can then educate clients to be more aware regarding their own sleeping habits which allows couples to focus on the main problems in their relationship. This does not just elevate both individuals' satisfaction in the marriage but also promotes health and well-being. Counselors may collaborate with other health care providers to bring a more professional and accurate solution to clients who suffers from sleep deprivation

### **Limitation of study**

One of the limitation for this study is that the married couples of different ethnicities and religions in Malaysia may have different views, beliefs and opinions on a satisfying marriage and as a result, the findings might not reflects their true marital satisfaction. As suggested by Jiang et al (2013), the marital adjustment test questionnaire might be required to be reassessed when applying it to a different cultural context. Due to the difference in numbers of population distribution, especially to gender and ethnicities, it may be difficult to make a statistical generalization from this study since generalization was needed to apply the results obtained to the general population. Furthermore, sex related topics might still be considered as a taboo among Malaysian society and hence, there might be a difficulty in finding samples for this study, especially among the Malay population. This perceived taboo has been reflected on other areas as well such as the education sector. As for instance, the

implementation of sex education in Malaysia has been inconsistent as policy makers have to make adjustments based on the values and beliefs of various cultures as well as religion (Khalaf et al., 2014). Moreover, although that the privacy and confidentiality of the participants for the study were protected, a considerable number of potential participant might still felt apprehensive in giving away their private information for the study, especially information regarding their sex drive and marital satisfaction to third parties.

### **Recommendations**

Future studies can focus on other factors on how other dimensions of marital satisfaction can affect sex drive or sleep deprivation. For instance, a study done by Sorokowski et al. (2017) describes that gender has been identified as a predictor of marital satisfaction even in the early years. Men reported higher marital satisfaction than women in both Western and non-Western cultures. Cultures that still practices traditional gender role classifications or equality in sex roles can be a factor predicts the difference in marital satisfaction.

Past studies focused upon how the number of children can affect marital satisfaction as mentioned in this study that married couples who are having children determine the level of marital satisfaction. The number of children was negatively correlated with marital satisfaction. Having children takes up a lot of the parents' time which will only lead to couples spending lesser time with each other, which might put a strain on the quality of marital relationship, declining their marital satisfaction, and suffer from sleep deprivation (Hoesni, Subhi, Alavi, & Wan Azreena, 2013). Other than that, perhaps future researches could also focus upon the variables of financial status as well as the types of family since past studies conducted in the local context on women population found that there are no significant differences for both of the variables (Angusamy, Kuppusamy & Anantharaman,

2017). Other than that, perhaps that future researchers should also look into the mediating effects of social support in the relationship between sleep deprivation and marital satisfaction. Moreover, further researches are needed to investigate and explore the relationship between sleep deprivation and sex drive, and its effects on marital satisfaction with a bigger sample size in order to determine that the possibility of the relationship of both variables are not by chance alone.

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Appendix A

Box 2 Epworth Sleepiness Scale - Brazilian Portuguese validation. LR±1.45<sup>9</sup> (B).

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Gender: \_\_\_\_\_

Age (years): \_\_\_\_\_

How likely are you to doze off or fall asleep in the situations described below, in contrast to feeling just tired? This refers to your usual way of life in recent times. Even if you haven't done some of these things recently try to work out how they would have affected you. Use the following scale to choose the most appropriate number for each situation:

0 = would never doze;

1 = slight chance of dozing;

2 = moderate chance of dozing;

3 = high chance of dozing

Situation	Probability of dozing
Sitting and reading	0 1 2 3
Watching TV	0 1 2 3
Sitting, inactive in a public place (e.g. a theater, lecture or a meeting)	0 1 2 3
As a passenger in a car for an hour without a break	0 1 2 3
Lying down to rest in the afternoon when circumstances permit	0 1 2 3
Sitting and talking to someone	0 1 2 3
Sitting quietly after a lunch without alcohol	0 1 2 3
In a car, while stopped for a few minutes in traffic	0 1 2 3

Thank you for your cooperation

## Appendix B

## Sexual Desire Inventory-2 (SDI-2)

This questionnaire asks about your level of sexual desire. By desire, we mean INTEREST IN or WISH FOR SEXUAL ACTIVITY. For each item, please circle the number that best shows your thoughts and feelings. Your answers will be private and anonymous.

1. During the last month, how often would you have liked to engage in sexual activity with a partner (for example, touching each other's genitals, giving or receiving oral stimulation, intercourse, etc.)?

0) Not at all	4) Twice a week
1) Once a month	5) 3 to 4 times a week
2) Once every two weeks	6) Once a day
3) Once a week	7) More than once a day

2. During the last month, how often have you had sexual thoughts involving a partner?

0) Not at all	4) 3 to 4 times a week
1) Once or twice a month	5) Once a day
2) Once a week	6) A couple of times a day
3) Twice a week	7) Many times a day

3. When you have sexual thoughts, how strong is your desire to engage in sexual behavior with a partner?

0	1	2	3	4	5	6	7	8
No Desire				Strong Desire				

4. When you first see an attractive person, how strong is your sexual desire?

0	1	2	3	4	5	6	7	8
No Desire				Strong Desire				

5. When you spend time with an attractive person (for example, at work or school), how strong is your sexual desire?

0	1	2	3	4	5	6	7	8
No Desire				Strong Desire				

6. When you are in romantic situations (such as a candle lit dinner, a walk on the beach, etc.), how strong is your sexual desire?

0	1	2	3	4	5	6	7	8
No Desire				Strong Desire				

7. How strong is your desire to engage in sexual activity with a partner?

0	1	2	3	4	5	6	7	8
No Desire				Strong Desire				



8. How important is it for you to fulfill your sexual desire through activity with a partner?
- 0 1 2 3 4 5 6 7 8
- Not At All Important Extremely Important
9. Compared to other people of your age and sex, how would you rate your desire to behave sexually with a partner?
- 0 1 2 3 4 5 6 7 8
- Much Less Desire Much More Desire
10. During the last month, how often would you have liked to behave sexually by yourself (for example, masturbating, touching your genitals etc.)?
- 0) Not at all 4) Twice a week  
1) Once a month 5) 3 to 4 times a week  
2) Once every two weeks 6) Once a day  
3) Once a week 7) More than once a day
11. How strong is your desire to engage in sexual behavior by yourself?
- 0 1 2 3 4 5 6 7 8
- No Desire Strong Desire
12. How important is it for you to fulfill your desires to behave sexually by yourself?
- 0 1 2 3 4 5 6 7 8
- Not At All Important Extremely Important
13. Compared to other people of your age and sex, how would you rate your desire to behave sexually by yourself?
- 0 1 2 3 4 5 6 7 8
- Much Less Desire Much More Desire
14. How long could you go comfortably without having sexual activity of some kind?
- 0) Forever 5) A week  
1) A year or two 6) A few days  
2) Several months 7) One day  
3) A month 8) Less than one day  
4) A few weeks

## Appendix C

1. Check the dot on the scale line below which best describes the degree of happiness, everything considered, of your present marriage. The middle point, "happy," represents the degree of happiness which most people get from marriage, and the scale gradually ranges on one side to those few who are very unhappy in marriage, and on the other, to those few who experience extreme joy or felicity in marriage.

0	2	7	15	20	25	35
.	.	.	.	.	.	.
Very Unhappy			Happy			Perfectly Happy

State the approximate extent of agreement or disagreement between you and your mate on the following items.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
2. Handling Family Finances	5	4	3	2	1	0
3. Matters of Recreation	5	4	3	2	1	0
4. Demonstration of Affection	8	6	4	2	1	0
5. Friends	5	4	3	2	1	0

6. Sex Relations	15	12	9	4	1	0
7. Conventionality (right, good, or proper conduct)	5	4	3	2	1	0
8. Philosophy of Life	5	4	3	2	1	0
9. Ways of dealing with in-laws	5	4	3	2	1	0

10. When disagreements arise, they usually result in:

husband giving in                      wife giving in                      agreement by mutual give and take  
0    2    10

11. Do you and your mate engage in outside interests together?

All of them                      some of them                      very few of them                      none of them.  
10    8    3    0

12. In leisure time do *you* generally prefer:

to be "on the go"    to stay at home

Does your mate generally prefer:

to be "on the go"    to stay at home ?

*(Stay at home for both, 10 points; "on the go" for both, 3 points; disagreement, 2 points.)*

13. Do you ever wish you had not married?

Frequently                      occasionally                      rarely                      never  
0    3    8    15

14. If you had your life to live over, do you think you would:

marry the same person                      marry a different person                      not marry at all  
15    0    1

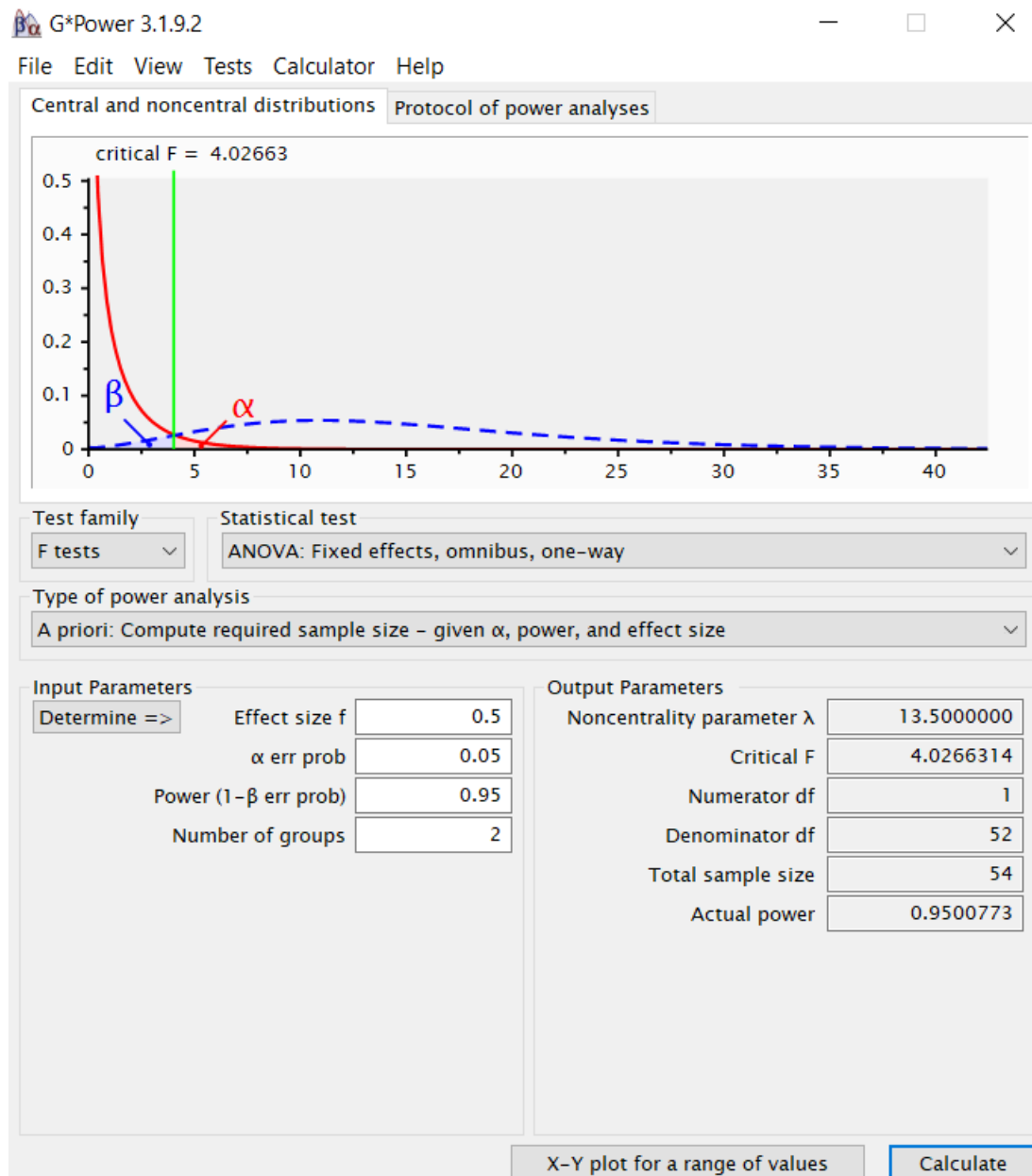
15. Do you confide in your mate:

almost never                      rarely                      in most things                      in everything  
0    2    10    10

#### Scoring:

The scoring rubric (points for each response) is included in the above scale, but should not be included when giving the scale to respondents. The scores for all 15 items should be added up together. Higher scores indicate greater satisfaction.

## Appendix D



## Appendix E

## The relationship between sleep deprivation, sex drive and marital satisfaction

## ORIGINALITY REPORT

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17	Mohammad Khak, Marzieh Hassanijirdehi, Sohrab Afshari-Mirak, Kourosh Holakouie-Naieni et al. "Evaluation of Sexual Function and Its Contributing Factors in Men With Spinal Cord Injury Using a Self-Administered Questionnaire", American Journal of Men's Health, 2014 Publication	<1 %
18	Maria Manuela Peixoto, Hugo Gomes, Adriana Correia, Inês Pires, Tiago Pereira, Paulo P. P. Machado. "Translation and validation of the Portuguese version of the Sexual Desire Inventory-2: assessing gender differences", Sexual and Relationship Therapy, 2018 Publication	<1 %
19	Submitted to Higher Education Commission Pakistan Student Paper	<1 %
20	www.ijbmjournal.com Internet Source	<1 %
21	Heresi Milad, Eliana, Diana Rivera Ottenberger, and David Huepe Artigas.	<1 %

"Associations Among Attachment, Sexuality, and Marital Satisfaction in Adult Chilean Couples: A Linear Hierarchical Models Analysis", Journal of Sex & Marital Therapy, 2014.

Publication

22

Adonu, Joseph Kordzo(Goodwin, R).  
"Psychosocial predictors of marital satisfaction in British and Ghanaian cultural settings",  
School of Social Sciences Theses, 2009.

Publication

<1%

Exclude quotes Off  
Exclude bibliography Off

Exclude matches Off



## Appendix F

within this consent form. However, your identity will not be disclosed. The original records will be reviewed by the principal investigator and the research team, the UTAR Scientific and Ethical Review Committee and regulatory authorities for the purpose of verifying research procedures and/or data.

#### Contact information

If you have any questions or concerns, please feel free to contact any of our group members at lushamid9@gmail.com (Lushalnee), rvanthony@1utar.my (Rachel Valerie Anthony) and kahwaiketh96@1utar.my (Wong Kah Wai)

#### Declaration

I have read or had the information above reading to me, in the language understandable to me. The above content has been fully explained to me.

I have asked all the questions that I need to know about the study and this form. All my questions have been answered. I have read, or have had read to me, all pages of this consent form and the risks described. I voluntarily consent and offer to take part in this study. By signing this consent form, I certify that all information I have given, including my medical history, is true and correct to the best of my knowledge. **I will not hold UTAR or the research team responsible for any consequences and/or liability whatsoever arising from my participation in this study.**

#### Consent

By signing this form, I am stating that I am at least 18 years old and that I understand the above information and consent to participate in this study.

☐ I agree to participate in this study and authorize the record review, publication and re-utilisation of data, information and sample storage and data transfer as described above.

☐ I DISAGREE to participate in this study



UNIVERSITI TUNKU ABDUL RAHMAN FACULTY OF ARTS AND SOCIAL SCIENCE  
BACHELOR OF SOCIAL SCIENCE (HONS) PSYCHOLOGY  
UAPZ 3013 FINAL YEAR PROJECT

#### Participant Information Sheet

**Research Title:** *The Moderating Effect of Sex Drive on Sleep Deprivation and Marital Satisfaction in Malaysia*

#### Voluntary Participation

You understand that participation in this study is voluntary and that if you decide not to participate, you will experience no penalty or loss of benefits to which you would otherwise be entitled. If you decide to participate, you may subsequently change your mind about being in the study and may stop participating at any time. You understand that you must inform the principal investigator of your decision immediately.

There are no known risks associated with this research.

#### Confidentiality

All information and responses given by you in the research will be kept confidential by the principal investigator and will not be made available to the public unless disclosure is required by law.

Data and information obtained from this study will not identify you individually. The data and information may be published or be reused for research purpose not detailed

☐ I DISAGREE to participate in this study

Demographic Information

Gender

- ☐ Male
- ☐ Female

Age

- ☐ 21-25
- ☐ 26-30
- ☐ 31-35
- ☐ 36-40

Duration of Marriage

- ☐ 0-5 years
- ☐ 6-10 years
- ☐ 10 years and above

Race

- ☐ Malay
- ☐ Indian
- ☐ Chinese
- ☐ Others

Epworth Sleepiness Scale

How likely are you to doze off or fall asleep in the situations described below, in contrast to feeling just tired? This refers to your usual way of life in recent times. Even if you haven't done some of these things recently try to work out how they would have affected you. Use the following scale to choose the appropriate number for each situation:

	Would never doze	Slight chance of dozing	Moderate chance of dozing	High chance of dozing
Sitting and reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Watching TV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sitting, inactive in a public place (e.g. a theater, lecture or a meeting)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As a passenger in a car for an hour without a break	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lying down to rest in the afternoon when circumstances permit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sitting and talking to someone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sitting quietly after a lunch without alcohol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In a car, while stopped for a few minutes in traffic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Sexual Desire Inventory-2

During the last month, how often would you have liked to engage in sexual activity with a partner (for example, touching each other's genitals, giving or receiving oral stimulation, intercourse, etc.)?

- ☐ Not at all
- ☐ Once a month
- ☐ Once every two weeks
- ☐ Once a week
- ☐ Twice a week
- ☐ 3 to 4 times a week

- ☐ Once a day  
☐ More than once a day

During the last month, how often have you had sexual thoughts involving a partner?

- ☐ Not at all  
☐ Once or twice a month  
☐ Once a week  
☐ Twice a week  
☐ 3 to 4 times a week  
☐ Once a day  
☐ A couple of times a day  
☐ Many times a day

When you have sexual thoughts, how strong is your desire to engage in sexual behaviour with a partner?

- |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No Desire             | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | Strong Desire         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

When you first see an attractive person, how strong is your sexual desire?

- |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No Desire             | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | Strong Desire         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

When you spend time with an attractive person (for example, at work or school), how strong is your sexual desire?

- |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No Desire             | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | Strong Desire         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

When you are in romantic situations (such as candle lit dinner, a walk on the beach, etc.) how strong is your sexual desire?

- |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No Desire             | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | Strong Desire         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

How strong is your desire to engage in sexual activity with a partner?

- |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No Desire             | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | Strong Desire         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

How important is it for you to fulfil your sexual desire through activity with a partner?

- |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not at all important  | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | Extremely Important   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Compared to other people of your age and sex, how would you rate your desire to behave sexually with a partner?

- |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Much Less Desire      | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | Much More Desire      |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

During the last month, how often would you have liked to behave sexually by yourself (for example, masturbating, touching your genital etc.)?

- ☐ Not at all  
☐ Once a month  
☐ Once every two weeks  
☐ Once a week  
☐ Twice a week  
☐ 3 to 4 times a week  
☐ Once a day  
☐ More than once a day

How strong is your desire to engage in sexual behaviour by yourself?

marriage, and on the other, to those few who experience extreme joy or felicity in marriage:

Very Unhappy ☐ Happy ☐ Perfectly Happy ☐

State the approximate extent of agreement or disagreement between you and your mate on the following items.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree
Handling Family Finances	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Matters of Recreation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Demonstration of Affection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sex Relations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conventionality (right, good, or proper conduct)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Philosophy of Life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ways of dealing with in-laws	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When disagreements arise, they usually result in:

husband giving in ☐ wife giving in ☐ agreement by mutual give and take ☐

Do you and your mate engage in outside interests together?

All of them ☐ some of them ☐ very few of them ☐ none of them. ☐

In leisure time do you generally prefer:

No Desire ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 Strong Desire ☐

How important is it for you to fulfil your desire to behave sexually by yourself?

Not At All Important ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 Extremely Important ☐

Compared to other people of your age and sex, how would you rate your desire to behave sexually by yourself?

Much Less Desire ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 Much More Desire ☐

How long could you go comfortably without having a sexual activity of some kind?

☐ Forever  
☐ A year of two  
☐ Several months  
☐ A month  
☐ A few weeks  
☐ A week  
☐ A few days  
☐ One day  
☐ Less than a day

### Locke-Wallace Short Marital-Adjustment Test

1. Check the dot on the scale line below which best describes the degree of happiness, everything considered, of your present marriage. The middle point, "happy," represents the degree of happiness which most people get from marriage, and the scale gradually ranges on one side to those few who are very unhappy in

to be "on the go"

☐

to stay at home

☐

Does your mate generally prefer:

to be "on the go"

☐

to stay at home ?

☐

Do you ever wish you had not married?

Frequently

☐

Occasionally

☐

Rarely

☐

Never

☐

If you had your life to live over, do you think you would:

marry the same person

☐

marry a different person

☐

not marry at all

☐

Do you confide in your mate:

almost never

☐

rarely

☐

in most things

☐

in everything

☐

**Action Plan of UAPZ 3023 (group-based) Final Year Project II for Jan & May trimester**

Supervisee's Name: Lushaine, Ranel Valerie Anthony, Wong Kan Wai

Supervisor's Name: Dr. Zainab Chaudhry

Task Description	Duration	Date/Time	Supervisee's Signature	Supervisor's Signature	Supervisor's Remarks	Next Appointment Date/Time
Methodology, Data Collection & Data Analysis	W1-W2	22/12/19 11:00am 12:00pm	<i>[Signature]</i>	<i>[Signature]</i>	* Draft seen & checked * Feedback given. * Discussion.	7/3/2019.
Finding & Analysis Discuss Findings & Analysis with Supervisor Amending Findings & Analysis	W3-W6	11/3/2019 12:00pm 1:00pm	<i>[Signature]</i>	<i>[Signature]</i>	* Discussion * Feedback.	11/3/2019.
Discussion & Conclusion Discuss Discussion & Conclusion with Supervisor Amending Discussion & Conclusion	W7-W9	11/3/2019 9:30am 10:30am	<i>[Signature]</i>	<i>[Signature]</i>	* Checked & Reviewed * Feedback. * Suggestion.	22/3/2019.
Submission of first draft*	Monday of Week 10				submit the first draft to Turnitin.com to check similarity rate	
Amendment	W10					
Submission of final FYP (FYP I + FYP II)*	Monday of W11				submit hardcopy, CD, and relevant documents to supervisor	
Oral Presentation	W11-W12				Oral Presentation Schedule will be released and your supervisor will inform you via email.	

**Notes:**

1. The listed duration is for reference only, supervisors can adjust the period according to the topics and content of the projects.
2. \*Deadline for submission can not be changed, one mark will be deducted per day for late submission.
3. Supervisees are to take the active role to make appointments with their supervisors.
4. Both supervisors and supervisees should keep a copy of this rec 5. This record is to be submitted together with the submission of the FYP II.

Universiti Tunku Abdul Rahman			
Form Title : Supervisor's Comments on Originality Report Generated by Turnitin for Submission of Final Year Project Report (for Undergraduate Programmes)			
Form Number: FM-IAD-005	Rev No.: 0	Effective Date: 01/10/2013	Page No.: 1 of 1



## FACULTY OF ARTS AND SOCIAL SCIENCE

<b>Full Name(s) of Candidate(s)</b>	Lushalinee A/P Murthy, Rachel Valerie Anthony, Wong Kah Wai
<b>ID Number(s)</b>	15AAB02882, 15AAB03025, 15AAB00226
<b>Programme / Course</b>	Bachelor of Social Science (HONS) Psychology
<b>Title of Final Year Project</b>	Marital Satisfaction, Sex Drive and Sleep Deprivation among Malaysian adults.

Similarity	Supervisor's Comments (Compulsory if parameters of originality exceeds the limits approved by UTAR)
<b>Overall similarity index: _____ %</b>  <b>Similarity by source</b> Internet Sources: _____ % Publications: _____ % Student Papers: _____ %	
<b>Number of individual sources listed of more than 3% similarity: _____</b>	
<b>Parameters of originality required and limits approved by UTAR are as follows:</b> (i) Overall similarity index is 20% and below, and (ii) Matching of individual sources listed must be less than 3% each, and (iii) Matching texts in continuous block must not exceed 8 words <i>Note: Parameters (i) – (ii) shall exclude quotes, bibliography and text matches which are less than 8 words.</i>	

Note Supervisor/Candidate(s) is/are required to provide softcopy of full set of the originality report to Faculty/Institute

***Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.***

---

Signature of Supervisor

Name: \_\_\_\_\_

Date: \_\_\_\_\_

---

Signature of Co-Supervisor

Name: \_\_\_\_\_

Date: \_\_\_\_\_



**FACULTY OF ARTS AND SOCIAL SCIENCE**  
**UNIVERSITI TUNKU ABDUL RAHMAN**

Date: **25<sup>th</sup> MARCH 2019**

**SUBMISSION OF FINAL YEAR PROJECT**

It is hereby certified that **LUSHALINEE A/P MURTHY** (ID No.: **15AAB02882**) has completed this final year project entitled “Marital Satisfaction, Sex Drive and Sleep Deprivation among Malaysian adults” under the supervision of Dr Zainab Chaudhry from the Department of Psychology and Counselling, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,

---

Name: **LUSHALINEE A/P MURTHY**

**FACULTY OF ARTS AND SOCIAL SCIENCE**  
**UNIVERSITI TUNKU ABDUL RAHMAN**

Date: **25<sup>th</sup> MARCH 2019**

**SUBMISSION OF FINAL YEAR PROJECT**

It is hereby certified that **RACHEL VALERIE ANTHONY** (ID No.: **15AAB03025**) has completed this final year project entitled “Marital Satisfaction, Sex Drive and Sleep Deprivation among Malaysian adults” under the supervision of Dr Zainab Chaudhry from the Department of Psychology and Counselling, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,

---

Name: **RACHEL VALERIE ANTHONY**

**FACULTY OF ARTS AND SOCIAL SCIENCE**

**UNIVERSITI TUNKU ABDUL RAHMAN**

Date: **25<sup>th</sup> MARCH 2019**

**SUBMISSION OF FINAL YEAR PROJECT**

It is hereby certified that **WONG KAH WAI** (ID No.: **15AAB00226**) has completed this final year project entitled “Marital Satisfaction, Sex Drive and Sleep Deprivation among Malaysian adults” under the supervision of Dr Zainab Chaudhry from the Department of Psychology and Counselling, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,

---

Name: **WONG KAH WAI**

**DEPARTMENT OF PSYCHOLOGY AND COUNSELLING  
FACULTY OF ARTS AND SOCIAL SCIENCE  
UNIVERSITI TUNKU ABDUL RAHMAN**

**UAPZ 3023 Final Year Project II**

**Research Project Evaluation Form**

**TURNITIN:** *‘In assessing this work you are agreeing that it has been submitted to the University-recognised originality checking service which is Turnitin. The report generated by Turnitin is used as evidence to show that the students’ final report contains the similarity level below 20%.’*

Project Title: Marital Satisfaction, Sex Drive and Sleep Deprivation among Malaysian adults.	
Supervisor: Dr Zainab Chaudhry	
Student’s Name: 1. LUSHALINEE A/P MURTHY 2. RACHEL VALERIE ANTHONY 3. WONG KAH WAI	Student’s Id 1. 15AAB02882 2. 15AAB03025 3. 15AAB00226

**INSTRUCTIONS:**

Please score each descriptor based on the scale provided below:

1. For criteria **1, 2, 3, 4, 5, 6**:  
**0 = no attempt, 1 = very poor, 2 = poor, 3 = average, 4 = good, 5 = very good**
2. For criteria **3, 4**:  
**0 = no attempt, 1 = very poor, 3 = poor, 5 = average, 7 = good, 10 = very good**
3. For criteria **7**:  
 Please retrieve the mark from “**Oral Presentation Evaluation Form**”.

<b>1. ABSTRACT (5%)</b>	<b>Score</b>
1. States clearly the research objectives. (5%)	
2. Describe briefly and clearly the approach/methodology of the study. (5%)	
3. Highlights the outcomes of the study. (5%)	
4. Highlights the significance of the study. (5%)	
5. Three relevant keywords mentioned. (5%)	
<i>Sum</i>	
<b>Subtotal (Sum /5)</b>	<b>/ 5%</b>
Remark:	
<b>2. METHODOLOGY (20%)</b>	
1. Appropriate research design/framework (5%)	
2. Appropriate sampling techniques (5%) <ul style="list-style-type: none"> <li>- Sample size is justified.</li> <li>- Sampling method correctly mentioned</li> <li>- Location of how the subjects are selected</li> </ul>	
3. Clear explanation of procedure (5%) <ul style="list-style-type: none"> <li>- How is consent obtained</li> <li>- Description of how data was collected</li> </ul>	
4. Explanation on the instruments/questionnaires used (5%) <ul style="list-style-type: none"> <li>- Description of instrument measures, scoring system, meaning of scores, reliability and validity information.</li> </ul>	
<b>Subtotal</b>	<b>/ 20%</b>
Remark:	
<b>3. RESULTS (20%)</b>	
1. Analyses used are appropriate for each hypothesis. (10%)	

2. Interpretations and explanations of the statistical analyses are accurate. (10%)	
<b>Subtotal</b>	<b>/ 20%</b>
Remark:	

<b>4. DISCUSSION &amp; CONCLUSION (25%)</b>	
1. Constructive discussion of findings. - Explanation and critical analysis. Results were critically analyzed with similar and/or dissimilar results. (10%)	
2. Implication of the study. (5%)	
3. Limitations mentioned relevant and constructive to the study. (5%)	
4. Recommendations for future research. (5%)	
<b>Subtotal</b>	<b>/ 25%</b>
Remark:	

<b>5. LANGUAGE &amp; ORGANIZATION (5%)</b>	
1. Comprehensiveness: Content Organization + Language	
<b>Subtotal</b>	<b>/ 5%</b>
Remark:	

<b>6. APA STYLE AND REFERENCING (5%)</b>	
1. APA format is followed	
<b>Subtotal</b>	<b>/ 5%</b>
Remark:	

7. *ORAL PRESENTATION (20%)		Score		
		Student 1	Student 2	Student 3
Subtotal				
Remark:				
PENALTY: Maximum 10 marks for LATE SUBMISSION, MISSING FORM or POOR ATTENDANCE for consultation with supervisor				
		Student 1	Student 2	Student 3
**FINAL MARK/TOTAL				

\*\*\*Overall Comments:

---



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---



---



---

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Notes:**

- Subtotal:** The sum of scores for each assessment criteria
- FINAL MARK/TOTAL:** The summation of all subtotal score
- Plagiarism is UNACCEPTABLE. Parameters of originality required and limits approved by UTAR are as follows:
  - Overall similarity index is 20% and below**, and
  - Matching of individual sources listed must be less than 3% each, and
  - Matching texts in continuous block must not exceed 8 words

Note: Parameters (i) – (ii) shall exclude quotes, references and text matches which are less than 8 words.

Any works violate the above originality requirements will NOT be accepted. Students have to redo the report and meet the requirements in **SEVEN(7)** days.

\*The marks of “Oral Presentation” are to be retrieved from “**Oral Presentation Evaluation Form**”.

\*\*It’s compulsory for the supervisor/reviewer to give the overall comments for the research projects with A- and above or F grading.