

## **UNIVERSITI PUTRA MALAYSIA**

# RELATIONSHIPS BETWEEN SEXUAL SOCIALIZATION INFLUENCES AND SEXUAL BEHAVIOR AMONG ADOLESCENTS IN MALAYSIA

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TAN SOON AUN

MASTER OF SCIENCE UNIVERSITI PUTRA MALAYSIA 2014



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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of the Requirements for the Degree of Master of Science

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#### **DEDICATION**

I dedicate this thesis to my parents:
Without their patience, understanding, support and most of all love, the completion of this work would not have been possible.

&
Ms. Lim YanJun
With her support and care overtime.



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science

# RELATIONSHIPS BETWEEN SEXUAL SOCIALIZTAION INFLUENCES AND SEXUAL BEHAVIOR AMONG ADOLESCENTS IN MALAYSIA

By

#### TAN SOON AUN

#### March 2014

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In Malaysia, adolescents' sexual behaviors have contributed to several social problems such as teenage pregnancy, abandoned babies, risky sexual behavior and HIV/AIDS infection cases. This study aimed to determine the relationships between sexual socialization influences (parental, peer and media factors) and sexual behavior among adolescents in Malaysia.

This study employed a quantitative research approach and correlational research design. The respondents of the study consisted of 442 school-going adolescents aged 16 to 17 years old, recruited by using convenience sampling technique. Instruments used in this study included Sexual Communication with Parents and Peers (Longmore, Eng, Giordano & Manning, 2009), Parental and Peer Approval of Sexual Behavior (Treboux & Busch-Rossnagel, 1990), Peer Norm Scale (Ball, Pelton, Forehand, Long & Wallace, 2008), Use of SEIM, Perceived Social Realism and Utility of SEIM (Peter & Valkenburg, 2006), and Sexual Behavior Inventory (Treboux & Busch-Rossnagel, 1990). All the instruments used in this study were translated to Malay language by using back to back translation and obtained high reliability. Descriptive, bivariate and multivariate analyses were used to present the data of the study.

Bivariate analysis revealed that parental factors (sexual communication with parents and parental approval of sexual behavior), peers factors (perceived peers' behavior, sexual communication with peers and peers' approval of sexual behavior) and media factors (use of SEIM, perceived social realism and utility of SEIM) were significantly related to adolescents' sexual behavior.

The results of regression analysis denoted that sexual communication with parents, perceived peers' sexual behavior and use of SEIM were significant contributors of adolescents' sexual behavior. Perceived peers' behavior appeared to be the strongest predictor of adolescents' sexual behavior.

The findings of the study emphasized the importance of sexual socialization influences (parents, peer and media factors) on sexual behavior among Malaysian adolescents. Intervention and prevention programs to promote healthy sexuality

among adolescents should emphasize on adolescents' socialization factors (parents, peers and media).



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan ijazah Master Sains

#### PERKAITAN ANTARA PENGARUH SOSIALISASI SEKSUAL DAN TINGKAH LAKU SEKSUAL DALAM KALANGAN REMAJA DI MALAYSIA

Oleh

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Di Malaysia, tingkah laku seksual remaja telah menyumbang kepada beberapa permasalahan sosial seperti remaja mengandung, pembuangan bayi, tingkah laku seksual yang berisiko dan kes jangkitan HIV/AIDS. Sehubungan dengan itu, kajian ini dijalankan untuk menentukan perkaitan antara pengaruh sosialisasi seksual (faktor ibu bapa, rakan sebaya dan media) dan tingkah laku seksual dalam kalangan remaja di Malaysia.

Kajian ini menggunakan pendekatan penyelidikan kuantitatif dan reka bentuk penyelidikan kolerasi. Responden kajian terdiri daripada 442 remaja sekolah yang berumur 16 hingga 17 tahun yang dipilih dengan menggunakan teknik pensampelan mudah. Instrumen yang digunakan dalam kajian ini termasuk Sexual Communication between Parent and Peer (Longmore, Eng, Giordano & Manning, 2009), Parental and Peer Approval of Sexual Behavior (Treboux & Busch-Rossnagel, 1990), Peer Norm Scale (Ball, Pelton, Forehand, Long & Wallace, 2008), Use of SEIM, Perceived Social Realism and Utility of SEIM (Peter & Valkenburg, 2006) dan Sexual Behavior Inventory (Treboux & Busch-Rossnagel, 1990). Semua instrumen yang digunakan dalam kajian ini diterjemahkan ke dalam bahasa Melayu dengan menggunakan kaedah back to back translation dan mempunyai kebolehpercayaan yang tinggi. Analisis deskriptif, bivariat dan multivariat telah digunakan untuk menghuraikan data kajian.

Analisis bivariat menunjukkan bahawa faktor ibu bapa (komunikasi seksual dengan ibu bapa dan kelulusan ibu bapa dalam tingkah laku seksual), faktor rakan sebaya (persepsi tingkah laku rakan sebaya, komunikasi seksual dengan rakan dan kebenaran rakan sebaya dalam tingkah laku seksual) dan faktor media (penggunaan SEIM, persepsi sosial realistik dan kegunaan SEIM) mempunyai perkaitan signifikan dengan tingkah laku seksual remaja.

Keputusan analisis regresi pelbagai menunjukkan bahawa komunikasi seksual dengan ibu bapa, persepsi tingkah laku rakan sebaya dan penggunaan SEIM dalah penyumbang signifikan kepada tingkah laku seksual remaja. Persepsi tingkah laku rakan sebaya muncul sebagai peramal yang terkuat dalam tingkah laku seksual remaja.

Dapatan kajian ini menekankan pentingnya pengaruh sosialisasi seksual (faktor ibu bapa, rakan sebaya dan media) terhadap tingkah laku seksual dalam kalangan remaja di Malaysia. Program intervensi dan pencegahan untuk meningkatkan seksualiti yang sihat dalam kalangan remaja harus memberi penekanan kepada pengaruh sosialisasi remaja (faktor ibu bapa, rakan sebaya dan media).



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Finally, I would like to thank everybody who was involved in the successful realization of this thesis, as well as expressing my apology that I could not mention personally one by one.

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March 2014



This thesis was submitted to the Senate of University Putra Malaysia and has been accepted as fulfillment of the requirement for the Degree of Master of Science. The members of the Supervisory Committee were as follows:

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#### **DECLARATION**

#### **Declaration by graduate student**

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#### LIST OF ABBREVIATIONS

AIDS Acquired Immune Deficiency Syndrome

DV Dependent variables

EDA Exploratory Data Analysis

FrASB Friends' Approval of Sexual Behavior HIV Human Immunodeficiency Virus

IVs Independent Variables

PASB Parental Approval of Sexual Behavior

SBI Sexual Behavior Inventory
SEIM Sexual Explicit Internet Media
SEOM Sexual Explicit Online Material

SPSS Statistical Package for Social Sciences for Window

STDs Sexually Transmitted Diseases
STIs Sexually Transmitted Infections
UNICEF United Nations Children's Fund

VIF Variance Inflection factor
WHO World Health Organization

#### **CHAPTER 1**

#### INTRODUCTION

This chapter begins with the presentation of the background of the study on adolescents' sexual behavior. Next, statement of the problem is discussed and the objectives and hypotheses of the research are stated. This chapter continues with the discussions on the importance of the study, definitions of the main variables, theoretical background and the conceptual framework of the current study. This chapter ends with the presentation of the research limitations and chapter summary.

#### 1.1 Background of the Study

Adolescence is the second decade of life and is an increasingly critical stage across the lifespan especially from the health and social perspectives (WHO, 2005). Rapsey and Murachver (2006, p. 61) defined adolescence as the period where individuals go through a series of rapid physical development, puberty, maturation of reproductive capacity, social and cognitive developments and the attainment of the rights and responsibilities of adulthood. According to Sharpe (2003), adolescence is a unique developmental stage in which adolescent goes through and experiences sexuality as one of the common developmental tasks and the transition from childhood to adulthood. Sexuality is a normative aspect of adolescent development (Tolman & Maclelland, 2011) and is defined as biological, psychological, social-economic, cultural, ethnics and religion or spiritual factors that interplay within the individual (Low, 2009). Adolescence has also been linked to time of substantial turmoil and rebellion, where adolescent sexual behavior is generally seen as problematic (Rapsey & Murachver, 2006).

Erik Erikson's (1968) theory on psychosocial development addressed the critical period in adolescence stage on the formation of personal identity and the importance of adolescents' unconscious thoughts. Erikson (1968) defines adolescence stage as a period of "storm and stress" as adolescents struggles to explore his or her identity and place in society (Sharpe, 2003). During identity formation, adolescents strive for personal autonomy. As adolescents strive for greater autonomy, conflict will occur when they are against the people who hold authority (Sharpe, 2003). Such conflict may be prominent in their dressing, social activities and sexual expression. Sexual behavior such as kissing in the public, holding hand and dressing provocatively may be immoral as perceived by adults or parents, but adolescents may view such behaviors as a form of sexual expression and feeling of love. Tolman and Maclelland (2011) also noted sexual development during adolescent age as part of the normative development where adolescents will go through and experience sexual exploration and expression to develop their identity.

In Malaysia, adolescents' involvement in sexual intercourse become increasing in trend. Based on the survey conducted by Durex (2005), the age of the first sexual intercourse globally was 17.2 and 17.5 years old for both boys and girls respectively. The sexual study noted that in Malaysia, young people engaged in their first sexual intercourse averagely at the age of 19 years old. In other study on a sample of 4500 Malaysia adolescents, Lee, Chen, Lee and Kaur (2006) reported 5.4% of the respondents reported to involve in sexual intercourse and 17.8% of the adolescents

had been pregnant or made someone pregnant. Lee et al. also highlighted that the age of the first sexual intercourse ranges between 14 and 15 years old, with the mean age for males were 14.9 years and 14.4 years for females.

Sexual behavior such as early sexual activities may contribute to negative consequences for self and the society. Rapsey and Murachver (2006) stated several consequences of adolescent sexual behavior which include early pregnancy that has an effect on mother (single parenting, lack of social and economic support), child (abandoned babies, childhood poverty, and low birth weight), younger fathers (poverty, low educational achievement, greater social disadvantage) and family problem (due to unstable and unplanned family and sexually transmitted diseases (STDs). The reviews by Low (2009) concluded that adolescents who engage in premarital sexual activities tend to practice unsafe sex (low contraception use) that leads to the teenage pregnancy. Furthermore, adolescents who are sexually active with unprotected sexual practices contribute to an increase in the case of Sexually Transmitted Disease (STDs) (HIV and AIDS), unwanted pregnancy and abortion (Low, 2009; Yaacob & Tan, 2011). Adolescents who were sexually active in the younger age are more likely to engage in risky behavior (substance use, alcohol), risky sexual activity (multiple partner, unprotected sex behavior) and have an increase risk of adolescent pregnancy and STIs (Rose, Koo, Bhaskar, Anderson, White, & Jenkins, 2005).

In Malaysia, issues related to adolescents' sexuality is gaining public concern. There is an increasing trend in issues related to premarital sexual intercourse, sexually transmitted disease, unwanted and unsafe pregnancies and abortions, sexual diversity, HIV/AIDS and cybersex among Malaysian adolescents (Low, 2009; Yaacob, Baharudin, Juhari, Mansor, Abu Talib & Wong, 2009). Durex survey (2005) denoted about 7% of young women between the ages of 17 and 18 had experienced an unplanned pregnancy. In year 2011, statistics from Ministry of Health Malaysia (2011a) highlighted that a total of 18,652 adolescents aged between 10 and 19 years old were pregnant and about 23% of them were unmarried. It means that most of the delivered babies are illegal or out of wedlock child. Furthermore, Malaysia National Registration Department had reported that about 152,182 newborn babies were registered without father's name from the years of 2008 until 2010 (Utusan Online, 2011). The statistics denoted that Sabah (41,490) recorded a higher number of illegal babies, followed by Selangor (18,983), Sarawak (17,570), Johor (16,298) and Kuala Lumpur (12,095). On the other hand, statistics from Royal Malaysia Police stated that there are 627 cases of abandoned babies from years 1995 till June 2012 (myMetro, 2012). This phenomenon may be related to unplanned pregnancy and unprotected sexual behavior among adolescents. Furthermore, statistics from Ministry of Heath Malaysia (2011b) showed about 35% of reported HIV/AIDS infections cases are amongst teenage aged between 13 to 29 years old.

Liberal sexual activities may pose significant impacts on adolescent's themselves, their newborns and also the society. There is an increasing awareness in Malaysia to deal with this societal issue (Low, 2009). However, there are limited published studies on this issue in Malaysia. Empirical evidence on adolescents' sexual behavior in Malaysia context was searched through five predominant search engines (Scopus, Science Direct, Sage, PsycARTICLES, ESBCO Psychology and Behavioral Science),

with the keyword of sexual behavior, sexuality, Malaysia, adolescents and sexual socialization. The results showed that there are limited published research studies on this topic from year 2000 until 2012. It means that scientific study on sexual socialization influences and adolescents' sexual behavior is less investigated in Malaysia context.

There is no single variable that can fully predict adolescent sexual outcome; it may depend on the integration of both social and biological factors (Miller, Norton, Fan, & Christopherson, 1998). In discussing sexual development, Tolman and McClelland (2011) stressed that adolescent sexual development is highly related to their social process. The interaction of social context such as families, peer groups and other daily contexts may have implications on adolescent sexual decision (Crockett, Raffaelli & Moilanen, 2003) and the increasing number of cases of early sexual debut, poor contraceptive use and adolescent pregnancy (Rapsey & Murachver, 2006). Thus, adolescents' sexual behavior may be explained by sexual socialization factors.

Sexual socialization refers to the process where adolescents learn and internalize sexual related beliefs, knowledge, norms, skills and expectations for sexual relationships (L'Engle & Jackson, 2008). The term of "sexual socialization" influences" has been used in several sexual studies (Matthews, 2013; L'Engle & Jackson, 2008; Shtarkshall, Santelli & Hirsch, 2007, Martin, Luke & Verduzco-Baker, 2007; Fingerson, 2005) to investigate the sexual socialization factor impact on adolescents' sexual behavior. Bleakley, Hennessy, Fishbein, Coles and Jordon (2009) asserted that different sources of information on sexuality may have different implications on adolescents' sexual norms and behaviors. It is because these sources of information may play as a guideline and reference for adolescent to behave and practice. Various literatures showed significant relationships between socialization agents such as parents (Killoren, Updegraff, Christopher, & Umana-Taylor, 2011; Brown & L'Engle, 2009), peer (Killoren et al., 2011; Brown & L'Engle, 2009), media (Brown & L'Engle, 2009; Brown, L'Engle, Pardun, Guo, Kenneavy, & Jackson, 2006; L'Engle, Brown, & Kenneavy; 2006a) and community (Brown & L'Engle, 2009) with adolescent sexual behavior. Therefore, sources of information from various socialization agents need to be considered in studies about adolescents' sexual behavior.

Parents as the primary educator and important person in shaping adolescent sexual behavior are widely discussed in the literature. Parenting behavior is viewed as one of the highly influential family processes towards adolescent sexual behaviors. Various literatures have shown that parental factors such as parental monitoring (Kotchick, Shaffr, Forehand, & Miller, 2001; Meschke, Bartholomae & Zentall, 2000), parent-adolescent relationship quality (Kotchick et al., 2001; Crockett et al., 2003), parent-adolescent communication (Wilson & Koo, 2010; Atwood et al., 2012; Somers & Ali, 2011; Harris, Sutherland & Hutchinson, 2013; Sneed, Strachman, Nguyen, & Morisky, 2009; Nikken & Graaf, 2012; Bersamin, Todd, Fisher, Hill, Grube & Walker, 2008; Khurana & Cooksey, 2012; Aspy, Vesely, Oman, Rodine, Marshall, & McLeroy, 2007), parental control (Crockett et al., 2003; Meschke et al., 2000), parental warmth and support (Meschke et al., 2000) and perceived parental disapproval of sexual behavior (Brown et al., 2006; Ali & Dwyer, 2011; Nagamatsu,

Saito, & Sato, 2008; Bersamin et al., 2008, Atwood et al., 2012; Pai, Lee & Chang, 2010; Hampton, Jeffery, McWatters & Smith, 2005; Somers & Ali, 2011) play an important role in reducing adolescents' sexual risk behavior. However, from the various parental factors mentioned, the present study only focused on parent-adolescents sexual communication and perceived parental approval of sexual behavior.

The influence of peers may become more prominent to predict adolescents' sexual issues during adolescence. Peer influence may have both positive and negative consequences. Literatures have supported that adolescents who received higher social support (Wallace, Miller & Forehand, 2008), perceived less sexual behavior among peers (Wallace et al., 2008; Bauermeister, Elkington, Rackis-Cott, Dolezal & Mellins, 2009; Ali & Dwyer, 2011; Sieving, Eisenberg, Pettingell & Skay, 2006; Leigh & Andrews, 2002), perceived peer approval on sexual behavior (Sieving, Eisenberg, Perringell & Skay, 2006; Bleakley, Hennessy, Fishbein, & Jordan, 2008; Treboux & Busch-Rossnagel, 1990; Pai et al., 2010; Bleakley et al., 2008; Manning, Longmore & Giordano, 2005; Bersamin, Walker, Fisher & Grube, 2006; Chiao & Yi, 2011; Peter & Valkenburg, 2008; Vacirca, Oetega, Rabaglietti, & Ciairano, 2012) and sexual communication with peers (Dilorio, Kelley, & Hockenberry-Eaton, 1999; Epstein & Ward, 2008; Busse, Fishbein, Bleakly & Hennessy, 2010; Nikken & Graaf, 2012) tend to delay their first sexual intercourse and show lower intention to engage in early sexual intercourse.

Advancement in technology and globalization has made media technologies as having crucial role in human lives especially for adolescents. Due to the conservative culture and the absence of other traditional socialization agents (family and peer), adolescents tend to view sexual related media content to learn and know about sexual related issues (L'Engle & Jackson, 2008). A number of studies (Lo & Wei, 2005; Brown & L'Engle, 2009; L'Engle et al., 2006a; Chapin, 2000; Brown et al., 2006) have proven the influence and implication of sexual internet media on adolescents' sexual behavior. According to Ahmad, Pawanteh, Rahim, Abd. Rahim and Mohd (2012), exposure to sexual contents on media internet will encourage the early onset of sexual behavior among teenagers and contribute to the growing cases of unwanted teenage pregnancies, abandoned babies and sexually transmitted disease.

In relation to issues being discussed above, this study explored therelationship between various sexual socialization influences (parents, peer and media factors) and sexual behavior among adolescents in Malaysia.

#### 1.2 Statement of the Problem

Adolescents' sexual behavior tends to be viewed or seen as problematic and is culturally unacceptable especially for Asian countries. Adolescents who are sexually active may possibly create certain social problem such as unwanted and unsafe pregnancies, abortions and sexually transmitted diseases. The number of cases related to adolescents' sexual behavior is on the increase and have affected individual, family and society (Rapsey & Murachver, 2006). Teenage pregnancy can result in social, economic and psychological outcomes to the teen mother and her child (UNICEF Malaysia, 2008). Given the impression that adolescents' sexual

behavior is problematic, the strategies to prevent the spread of these negative consequences among Malaysian adolescents are essential.

Teenage pregnancy cases have been in increasing trend as reported by the Ministry of Health, Malaysia (2011a). About 23% of the teenage mothers were unmarried and the delivered babies are considered as illegal. The statistic of teenage pregnancy in Malaysia has alarmed the government, individuals, practitioners, social and policy makers to call for the prevention and intervention efforts.

Extensive evidence has demonstrated the influence of sexual socialization influence (parents, peer and media factors) on adolescents' sexual development (Bleakley et al., 2009; Sieverding, Adler, Witt, & Ellen, 2005; L'Engle & Jackson, 2008; Hull et al., 2011). Adolescents who have weak parental influences, high risk peers and excessive media influences will result in higher engagement of sexual behavior. In order to have a better understanding of the problems related to adolescents' sexual behavior, all of these factors should be included in the study to provide an overview and clearer picture of adolescents' sexual development.

Most of the literatures on adolescents' sexual behavior have been conducted among adolescents in Western countries. However, there are limited studies examining these factors on sexual behavior among adolescents in Malaysia. Therefore, this study aimed to investigate various sexual socialization influences that may contributed to sexual behavior among adolescents in Malaysia.

Based on the problem statements, the following research questions were addressed:

- 1. What are the levels of adolescents' parental factors (sexual communication with parents and perceived parental approval of sexual behavior), peer factors (perceived peers' sexual behavior, sexual communication with peers and perceived peers approval of sexual behavior) and media factors (use of sexual explicit internet material, perceived social realism and perceived utility of SEIM), with sexual behavior among adolescents in Malaysia?
- 2. To what extent parental (sexual communication with parents and perceived parental approval of sexual behavior), peer (perceived peers' sexual behavior, sexual communication with peers and perceived peers' approval of sexual behavior) and media (use of sexual explicit internet material, perceived social realism and perceived utility of SEIM) factors are related to sexual behavior among adolescents in Malaysia?
- 3. What are the factors that uniquely predict sexual behavior among adolescents in Malaysia?

#### 1.3 Research Objective

The section highlights the general objective and specific objectives of the present study.

#### 1.3.1 General Objective

This study aimed to determine the relationships between sexual socialization influences and sexual behavior among adolescents in Malaysia.

#### 1.3.2 Specific Objective

Specific objectives of the study are stated as below:

- 1. To describe personal (age, gender, ethnic, religion) and family (parents' age, parents' education level and family income) characteristics of the respondents.
- 2. To describe parental (sexual communication with parents and perceived parental approval of sexual behavior), peer (perceived peers' sexual behavior, sexual communication with peers and perceived peers' approval of sexual behavior) and media (use of sexual explicit internet material, perceived social realism and perceived utility of SEIM) factors and sexual behavior of the respondents.
- 3. To determine the relationships between parental (sexual communication with parents and perceived parental approval of sexual behavior), peer (perceived peers' sexual behavior, sexual communication with peers and perceived peers' approval of sexual behavior) and media (use of sexual explicit internet material, perceived social realism and perceived utility of SEIM) factors and sexual behavior among respondents of the study.
- 4. To determine the unique predictors of sexual behavior among respondents of the study.

#### 1.4 Research Hypotheses

Research hypotheses were formulated based on specific objectives 3, 4 and 5.

- Objective 3: To determine the relationships between parental (sexual communication with parents and perceived parental approval of sexual behavior), peer (perceived peers' sexual behavior, sexual communication with peers and perceived peers' approval of sexual behavior) and media (use of sexual explicit internet material, perceived social realism and perceived utility of SEIM) factors and sexual behavior among respondents of the study.
- H<sub>a</sub>1: Sexual communication with parents is positively correlated with sexual behavior among adolescents.
- H<sub>a</sub>2: Perceived parental approval of sexual behavior is positively correlated with sexual behavior among adolescents.
- H<sub>a</sub>3: Perceived peers' sexual behavior is positively correlated with sexual behavior among adolescents.
- H<sub>a</sub>4: Sexual communication with peers is positively correlated with sexual behavior among adolescents.
- H<sub>a</sub>5: Perceived peers' approval of sexual behavior is positively correlated with sexual behavior among adolescents.
- H<sub>a</sub>6: Use of sexual explicit internet material is positively correlated with sexual behavior among adolescents.
- H<sub>a</sub>7: Perceived realism of sexual explicit internet material is positively correlated with sexual behavior among adolescents.
- H<sub>a</sub>8: Perceived utility of sexual explicit internet material is positively correlated with sexual behavior among adolescents.

# Objective 4: To determine the unique predictors of sexual behavior among respondents of the study.

H<sub>a</sub>9: Regression coefficients for all the selected variables are greater than zero when regressed against sexual behavior among respondents of the study.

#### 1.5 Significance of the Study

This study puts effort to identify which factors are most outstanding for engagement in sexual behavior among Malaysian adolescents. It is important to establish concrete database on sexuality that can be used for program to promote healthy sexual lifestyle among Malaysian adolescents.

There are limited studies in Malaysia that have investigated the relationship between sexual socialization influences (parents, peer and media factors) and adolescents' sexual behavior Therefore, the current study may fill the knowledge gap in understanding adolescent sexual behavior from various perspectives such as parents, peers and media. The findings of the study also provided more information in this field based on scientific evidence, which will enriched the knowledge in developmental psychology field especially studies on adolescents development.

The findings of the present study also are useful for practitioners specifically for the Ministry of Education, Ministry of Health and Ministry of Women, Family and Community Development in addressing the issues of adolescent's sexuality, and consequently improves and enlightens the existing sex education curriculum for school-going adolescents. Since adolescent sexuality is a critical developmental task, the present study also important for intervention and prevention program planning by highlighting the predominance factors that may contribute to the adolescent sexual decisions and outcome behaviors. Based on this study, practitioners and policy makers may consider those dimensions when planning intervention and prevention program to enhance and empower potential protective factors and reduce possible risk factors that put adolescent at risk.

#### 1.6 Definition of Terms

This section highlights conceptual and operational definition of variables or specific terms used in the study.

#### Adolescence

Conceptual definition:

Adolescence refers to the phase of lifespan that marks the switch from childhood to adulthood (Rapsey & Murachver, 2006).

Operational definition:

Adolescence refers to school-going individual aged between 16 and 17 years old.

#### **Sexual Behavior**

Conceptual definition:

Sexual behavior refers to any form of physical intimacy that may be motivated by the desire to reproduce or to enjoy sexual gratification (Sharpe, 2009).

#### *Operational definition:*

Sexual behavior refers to respondents' scores on Sexual Behavior Inventory (Treboux & Busch-Rossnagel, 1990). High score on this scale corresponds to higher engagement in sexual behavior.

#### **Sexual Socialization Influences**

#### Conceptual definition:

Sexual socialization influences refer to the process where adolescent being influenced by learning and internalizing sexual related beliefs, knowledge, norms, skills and expectations for sexual relationships (L'Engle & Jackson, 2008).

Operational definition: Sexual socialization influences refer selected parents, peer and media factors.

#### **Parental Factor**

#### Conceptual definition:

Parental factor refers to the influences related to being a parent and especially to being responsible for a child's safety and development (Longman Dictionary of Contemporary English, 2005).

#### Operational definition:

Parental factor refers to sexual communication with parent and parental approval of sexual behavior.

#### **Sexual Communication with Parents**

#### Conceptual definition:

Sexual communication with parents refers to the amount of information parents provide their adolescents on an array of sexual topics (Fisher, 1987).

#### Operational definition:

Sexual communication with parents refers to respondents' score on Sexual Communication with Parent Scale (Longmore, Eng, Giordano & Manning, 2009). Higher score in this scale indicates more communication with parents.

#### Perceived Parental Approval of Sexual Behavior

#### Conceptual definition:

Perceived parental approval of sexual behavior refers to adolescents' perception that their parents as accept the engagement in sexual related behavior (Longman Dictionary of Contemporary English, 2005).

#### Operational definition:

Perceived parental approval of sexual behavior refers to respondents' score on Parental Approval of Sexual Behavior Scale (Treboux & Busch-Rossnagel, 1990). Higher score in this scale indicates higher parental approval of sexual behavior.

#### **Peer Factors**

#### Conceptual definition:

Peer factors refer to the influences of the people who are the same ages or who have the same type of job and social class etc. (Longman Dictionary of Contemporary English, 2005).

#### *Operational definition:*

Peer factors refer to perceived peer behavior, sexual communication with peer and friends' approval of sexual behavior.

#### **Perceived Peer Sexual Behavior**

#### Conceptual definition:

Perceived peer sexual behavior refers to the perception regarding any form of physical intimacy that may be motivated by the desire to reproduce or to enjoy sexual gratification as presented by peers (Sharpe, 2009).

#### Operational definition:

Perceived peer sexual behavior refers to respondents' scores on Perceived Peer Behavior Scale (Ball, Pelton, Forehand, Long & Wallace, 2004). Higher score in this scale corresponds to higher peers' perceived engagement in sexual behavior.

#### **Sexual Communication with Peers**

#### Conceptual definition:

Sexual communication with peer refers to co-creation of meaning and exchange of messages about sexual beliefs, attitudes, values, and/or behaviors between adolescents and peer (Warren, 1995).

#### Operational definition:

Sexual communication with peers refers to respondents' scores on Sexual Communication with Peer Scale (Longmore et al., 2009). Higher score in this scale corresponds to more sexual communication with peer.

#### Perceived Peers Approval of Sexual Behavior

#### Conceptual definition:

Perceived peer approval of sexual behavior refers to adolescents' perceptions that their peers as accept the engagement in sexual related behavior (Longman Dictionary of Contemporary English, 2005).

#### *Operational definition:*

Perceived peer approval of sexual behavior refers to respondents' score on Friends' Approval of Sexual Behavior Scale (Treboux & Busch-Rossnagel, 1990). Higher score in this scale corresponds to higher perceived friends' approval of sexual behavior.

#### **Media Factors**

#### Conceptual definition:

Media refers to the means of communication, as radio and television, newspapers, and magazines that reach or influence people widely (Dictionary.com, 2014).

#### *Operational definition:*

Media factors refer to exposure to sexual explicit internet material (SEIM), perceived social realism and perceived utility of SEIM.

#### **Use of SEIM**

#### Conceptual definition:

Use of SEIM refers to access of sexually explicit materials such as pictures and movies with clearly exposed genitals and in which people are having sex from the internet (Peter & Valkenburg, 2006).

#### *Operational definition:*

Use of SEIM refers to respondents' scores on Exposure to Sexual Explicit Internet Material Scale (SEIM; Peter & Valkenburg, 2006). Higher score in this scale indicates higher exposure to SEIM.

#### Perceived Realism of SEIM

#### Conceptual definition:

Perceived social realism of SEIM refers to the extent to which the content of SEIM is perceived as similar to real-world sex (Peter & Valkenburg, 2010).

#### Operational definition:

Perceived realism of SEIM refers to respondents' scores on Perceived Social Realism SEIM (Peter & Valkenburg, 2010). Higher score in this scale indicates high perceived social realism of SEIM.

#### **Perceived Utility of SEIM**

#### Conceptual definition:

Perceived utility of SEIM refers to the extent to which adolescents perceive SEIM as a useful source of information regarding sex and may applicable to the real world (Peter & Valkenburg, 2010).

#### Operational definition:

Perceived utility of SEIM refers to respondents' scores on Perceived Utility of SEIM Scale (Peter & Valkenburg, 2010). Higher score in this scale indicates high perceived utility of SEIM.

#### 1.7 Theoretical Framework

Bronfenbrenner (1979) emphasizes five different levels and types of environmental effects that might influence adolescents' development. The four levels ranged from the context which is closest to individual, the microsystem and then, the mesosystem, the exosystem and lastly is the macrosystem, which is a broader social context. The fifth system also known as chronosystem, explains the changes in the individual or the environment that occur over time and influence the direction of development tasks. Bronfenbrenner (1979) highlights that individual behavior and development are influenced by a variety of factors in both one's proximal (e.g., family, peer and school) and more distal (e.g., cultural values and beliefs, community characteristics) environments (Kilmer & Shahinfar, 2006).

Microsystem is the innermost environmental layer to the child, which refers to the activities and interactions that occur in the individual's immediate environments. In adolescence stage, the structures in the microsystem comprised of family, peers and school. The interactions between the individual and the subsystems determine the development of behavior (Wang'eri & Otanga, 2013). It is believed that adolescents are influenced by these people in their microsystem before doing any behavioral decision.

The second of Bronfenbrenner's environmental layers is Mesosystem. Mesosystem denotes as the connections or interrelationships among an individual's immediate settings. Bronfenbrenner addresses that the healthy development is likely to be optimized by the strong and supportive links between microsystems. Without the supportive links between microsystems, adolescents' healthy development can be adversely affected. For example, how the parents and peers interact with one another will affect adolescents' sexual behaviors.

Exosystem is the third layer of Bronfenbrenner ecological system. This system refers to the social systems that children and adolescents do not directly experience or it is the external environments that may indirectly influence their development. For instance, parents' work environments may be related to parents' income status and consequently leads to economic hardship of the family that eventually affect on parent-child relationships. Types of media consumption and perceived media realism and utility will transform wrong information that implicated to adolescents' sexual behavior.

The forth layer of ecological system theory is macrosystem which refers to the larger cultural or subcultural context in which development occurs. Macrosystem such as cultural, norms, laws, national economy, values, political and ideology are the examples in which microsystem, mesosystem and exosystem are embedded. Bronfenbrenner emphasizes that macrosystem is really a broad, overarching ideology that dictates such as how children should be treated, what and how they should be taught, how children behave so (Shaffer & Kipp, 2010). These values differ across cultures and can influence children directly and indirectly in terms of their experiences in their homes, schools and social interaction that children embedded.

Bronfenbrenner's ecological system theory (1979) was used to guide the present study in understanding the multiple facets that influence adolescents' decisions to engage in sexual behavior. Ecological theory emphasizes that adolescents' development occurs in overlapping systems, which both affect and are affected by the adolescents (Jordahl & Lohman, 2009). Occurances and attributes of one system will affect other systems, which in turn, affect an adolescent's decisions and behavioral outcome. These effects can have both positive and negative influence on adolescents' development. If adolescents were negatively influenced by the high risk environment, they will have high risk and negative development that will lead to unhealthy lifestyles.

Generally, adolescents' development occurs within a broad family and social context (Ott, 2010). Ecological system theory highlights that adolescents' development is influenced by both family and social environments in a bidirectional relationship

(Bronfenbrenner, 1977; Kilmer & Shahinfar, 2006). This theory also describes development as occurring within the context of various "nested" levels that mutually interact and influence one another (Kilmer & Shahinfar, 2006). The influence may not only limit to the individual, for instance, his or her social environment, emotional, cognitive as well as psychological development, but also impact on various environmental influences that transact with him or her.

The specific interests of the present study were to examine the contribution of microsystem and exosystem of ecological system theory on adolescents' sexual behavior. The role of microsystem focuses on the attributes of the parents' and peers' in relation to adolescents' behavior. The influences of media on adolescents' sexual behavior work at the exosystem level (Muuss, 1988; Stephens, Phillips, & Few, 2009).

From the ecological perspective, parents have the most proximal influence in the microsystem (Bronfenbrenner, 1977) and the most powerful factor in shaping adolescents' sexual development (Somer & Ali, 2011). According to Wang'eri and Otanga (2013), adolescents' sexual maturation is related to their home environment. The parents also provide their adolescents with physical and psychological needs as well as positive role modeling (Wang'eri & Otanga, 2013). There were evidences on the relationship between parental disapproval of sexual behavior and adolescents' sexual engagement (Brown, et al., 2006; Ali & Daqyer, 2011; Atwood et al., 2012; Pai et al., 2010; Somers & Ali, 2011). Moreover, parent-adolescents sexual communication is also important in providing sexual information in the home setting and is proven to have significant contribution in adolescents' sexual behavior (Harris et al., 2013; Bersamin et al., 2008).

Furthermore, peers may play a critical role in the development and expression of sexual behavior in adolescence. Outside the home, adolescents are moving towards their peers who are both influential and instrumental to adolescents' sexual behavior (Wang'eri & Otanga, 2013). Kilmer and Shahinfar (2006) emphasized that peers have been found to have strong influence on adolescents' sexual behavior, and these influences appear to be stronger than parental social influence. Evidences have supported that perceived engagement in sexual behavior among peers are associated with more involvement in sexual related behavior among adolescents (Wallace et al., 2008; Bauermeister et al., 2009; Ali & Dwyer, 2011). Moreover, frequent practices on sexual communication with peer also motivates adolescents to engage in sexual behavior (Epstein & Ward, 2008; Busse et al., 2010; Nikken & Graaf, 2012). Perceived peer's approval of sexual behavior is also related to adolescents' sexual behavior (Sieving et al., 2006; Bleakley et al., 2008; Pai et al., 2010; Chiao & Yi, 2011; Vacirca et al., 2012).

In digital era, the impact of media on adolescents' sexual behavior has become more prominent (Stephens et al., 2009). Evidence supported that frequent use of SEIM will lead to more engagement in sexual related behavior among adolescents (Lo & Wei, 2005; Brown & L'Engle, 2009; Brown et al, 2006). Adolescents who perceived SEIM as real and useful also reported to more sexual engagement (Busselle, 2001; Peter & Valkenburg, 2010; Svedin, Akerman, & Priebe, 2011).

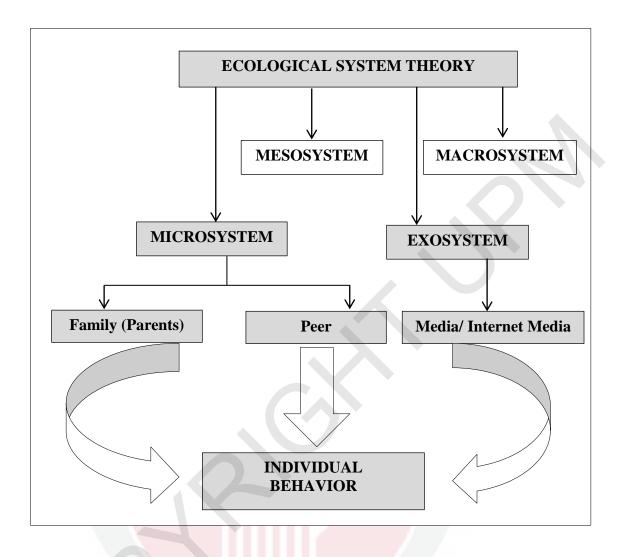


Figure 1.1 Theoretical Framework of the Study on "Relationships between Sexual Socialization Influences and Sexual Behavior among Adolescents in Malaysia".

There are various studies (Corcoran, 2000; Jordahl & Lohman, 2009; Ott, 2010; Somers & Ali, 2011; Lohman & Bilings, 2008; Boyas, Stauss, & Murphy-Erby, 2012; Wang'eri & Otanga, 2013; Stephens et al., 2009) which have applied ecological system theory on adolescents' sexual development. This theory not only includes individual's sexuality and the dydic interactions within romantic relationships, but also take into consideration the broader social relationships as well as the sociocultural and social political institutions controlling education, access to information and access to health care (Ott, 2010; Tolman, Striepe, & Harmon, 2003).

In summary, this study utilizes ecological system theory to develop the conceptual framework in understanding adolescents' sexual behavior. Specifically, this study examines the contribution of parents, peers and media factors (grouped as sexual socialization influences) in relation to sexual behavior among adolescents in urbanized cities of Malaysia.

#### 1.8 Conceptual Framework

The conceptual framework of this study was developed and constructed based on elements discussed by Bronfenbrenner's ecological system theory and research questions addressed in the previous session. Referring to Figure 1.2, this study consists of seven main variables, which are personals' characteristics, families' characteristics, sexual socialization influences (parents, peers and media factors) and adolescents' sexual behavior. These variables are grouped as antecedent variables (personal characteristics and family characteristics), three independent variables of sexual socialization influence (parents, peers and media factors) and one dependent variable (adolescents' sexual behavior).

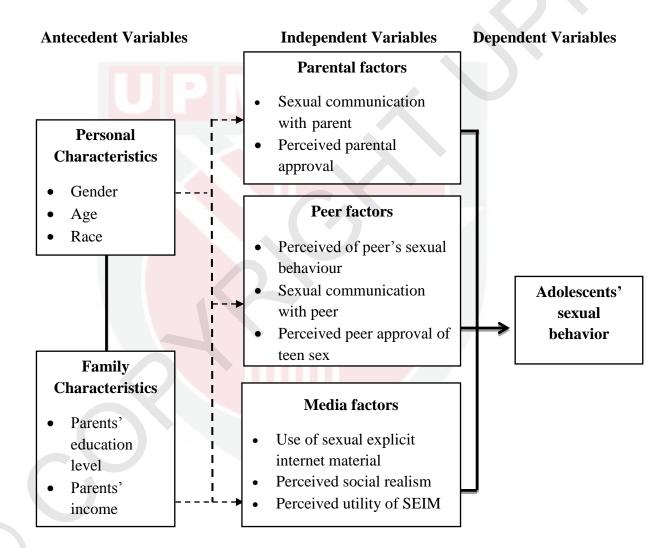


Figure 1.2 Conceptual Framework for a Study on "Relationships between Sexual Socialization Influences and Sexual Behavior among Adolescent in Malaysia".

The ecological system theory emphasizes the interaction between environmental factors and behavior outcomes. Specifically, ecological system theory assumes that adolesents who are perceived high level of parental approval of sexual behavior and practices more sexual communication with their parents will varied in their level of

sexual behavior (Brown et al., 2006; Siewerda & Blekkenhorst, 2006). Another proximal factor to adolescents is the effect of peer influences. Various research findings indicated that adolescents who perceived that their peers are sexually active, perceived their peer as approve of their sexual behavior and practices sexual communication with peers are related to higher engagement in sexual behavior (Wallace et al., 2008; Nikken & Graaf, 2012; Bleakley et al., 2008).

Studies have also found a significant contribution of media factors influence on adolescents' sexual behavior. Frequent use of sexual explicit internet media and adolescents perceived higher social realism and utility of SEIM are lead to higher engagement in sexual related behavior (Brown & L'Engle, 2009; Ahmad et al., 2012; Lo & Wei, 2005).

Ecological system theory addresses the contribution of environmental factors in creating outcome behavior. Figure 1.2 explains the conceptual framework of the current study that aimed to determine the sexual socialization influences of parents, peers and media factors (independent variables) on adolescents' sexual behavior (dependent variable).

#### 1.9 Research Limitations

There are several limitations addressed in the current study. Firstly, this study is limited in term of generalizability of the findings due to the sampling method used in the study. Sexuality is a sensitive topic to be discussed in the public, researcher was not able to utilize probability sampling technique.

Next, the present study focuses on several socialization factors in influencing adolescents' sexual behavior. In fact, adolescents' sexuality is complex and there is no single variable that can fully explain sexual practices. Future study may consider other variables such as religiosity, school education and environment as well as community and personal factors.

Besides, the present study also faces difficulty to determine the accuracy of the collected information due to the honesty of the respondents. As Rapsey and Murachver (2006) mentioned that adolescents may be unwilling to reveal and report sensitive information even when they are informed that the given information is confidential. Respondents may be dishonest when reporting their actual sexual experience and behavior. This is because sexuality is a sensitive topic to be discussed and still viewed as taboo subject in Malaysian context. Lastly, the present study is a cross-sectional research study and thus it cannot explain cause and effect in assessing adolescents' sexual behavior.

#### 1.10 Chapter Summary

This chapter begins with a brief introduction and background of the study. The association of sexual socialization influences (parents, peer and media factors) and adolescent' sexual behaviors were addressed. The problem of adolescents' sexual behaviors was highlighted especially in Malaysia context. The significance of the study was also emphasized followed the objectives and hypotheses of the study. This chapter also presents the theoretical and conceptual frameworks of the study, terminology of the definitions and limitation of the study.

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