# DOES SOCIAL WORK EDUCATION PREVENT UNWANTED PREGNANCY AMONG TEENAGERS' IN COLLEGES?

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## ABSTRACT

Education has the keen role in social as well as sexual health. Educational institutions which ensure sexual education as part of their curriculum has better impact on the behavior of adolescents in their social role orientations. To investigate the role of social work education, study was conducted linking the student's attitude towards unintended adolescent pregnancy, with the support of theory of planned behavior viz., attitude, subjective norm and perceived behavioral control among students of social work institutions in Bangalore, Karnataka. The study followed quantitative cross sectional study design with PLS SEM application to confirm the relationship between the variable selected for the study. The result and implication provided better insight in to social work education and student's attitude towards unintended adolescent pregnancy, during their teenage.

*Keywords:* Social work education, unwanted pregnancy, Theory of Planned Behavior (TPB), social role orientation.

# **INTRODUCTION**

Fifteen million out of 16.7 million unwanted pregnancies a year could be avoided in 35 lowand middle-income countries. It is estimated that unwanted pregnancy is covered around twelve thousand eight hundred and seventy four women, leafing to its confirmation as the largest as per the research outcome of European Society of Human Reproduction and Embryology. As it is aware the unwanted pregnancy develops irrevocable future consequences to the girls especially less than 18 years. This scenario disturbs the privileges of girls, with ever alarming consequences in terms of sexual and reproductive health, and creates severe development costs for societies, mostly in prolonging the cycle of poverty. Data on adolescent-girl pregnancy are available for 81 developing countries, representing 83 per cent of the developing world's population of women 20 to 24 years of age in 2010. The trends analysis of the prevalence of adolescent-girl pregnancy stemmed from comparing results from the two most recent surveys in 54 countries that represent 72 per cent of the population of developing countries. Adolescents, the most difficult period for an individual and is the most critical to development in the next life stages. Teenagers tend to want to explore everything and try everything they haven't experienced. Teenagers desire like adults encourage them to try what adults often do, including sexual matters (Azwar, 2000). Pornographic magazines, books, and films describe the pleasure of sex without teaching responsibility and risks which should be faced become their main references. They also learn about sex from the internet. As a result, teenagers, who were shy a few generations ago, now have sex at young age, between 10-19 years old (Yanidkk, 2009). Many factors account for the difference in the adolescent pregnancy rates among 63 Western industrialized countries. Much attention has been paid to the success of 64 European countries in averting and dropping their sixty-five rates of teenage pregnancy. In looking at the issues of adolescent pregnancy and parenting, social work profession and the professional social workers should takes into account the current practice among the urban youth in developing countries. Equal opportunity via education is also an undeniable right for children, and yet millions of girls and boys are out of school (UNESCO, 2012). Where there is less exposure to education, there is high need of social work education and public policy administration. Hence this particular study was consulted to analyze the effect of social work education on adolescent children in preventing unwanted pregnancy during their teenage in Karnataka.

## LITERATURE REVIEW

#### **Adolescence and Sexual Urge**

Teenager is defined as a transition period between childhood to adulthood, where during the period there is rapid growth, including reproductive functions, influencing developmental changes, whether physical, mental, or social (Surjadi & Charles, 2002). Generally, teenagers have high curiosity. Teenagers tend to want to explore everything and try everything they haven't experienced. The desire to be adult encourages teenagers to try what adults often do, including sexual matters (Azwar, 2000). Adolescence is the most difficult period for an individual. This period is called the most critical to development in the next life stages (Widyastuti, 2009).

It is reported by women that the sexual pleasure that they derive from the peers that include the effort and initiation that they put to retain the relationship were not that prolonging the pleasure that they had been expected (Dodson, n.d.; Luker, 1996). Pregnancies during adolescence are widely reported in several countries. However, such pregnancies when a girl is below fifteen years account for smaller percentage viz 3%. As it is reported such pregnancies are closely knit with sexual abuse of the adolescent by the existing partner or to sexual mistreatment of the adults within or outside of the family. It is pointed out in Alan Guttmacher Institute (1999a) reported that almost seven in ten girls who had sexual intercourse before the age involuntary. Here the age of the adolescent mother matters a lot. The younger the adolescent mother, the more likely that her male partner aged 10 or more years older than her. Unavailability of accurate and correct information on reproductive health forces teenagers to find access and explore themselves. Pornographic magazines, books, and films describe the pleasure of sex without teaching responsibility and risks which should be faced become their main references. They also learn about sex from the internet. As a result, teenagers, who were shy a few generations ago, now have sex at young age, between 10-19 years old (Alan Guttmacher Institute, 2001).

### **Role of Education and Sexual Awareness**

Education is a deliberate, organized practice to impart knowledge and skills, and to inspire a person's progressive passage. As it is evidenced the role of literacy includes the acquisition of knowledge and skills necessary to lead life in a meaningful way, permitting one to express ideas, make choices and solve difficulties. Such effort is not just lifted to learning facts and identifying symbols. Sexuality education is seen as transmission of appropriate sex based knowledge, values, attitudes, and roles to children. It seeks to teach boys and girls the physiological functioning and use of sex organs and the expected roles of each sex. This means that biological facts about sex are only a part and not the whole of sex education. For Ochiagha (1997), education of sexuality is a program designed to support people with adequate information and skills in dealing relationship with others and handle their sexuality personally. This is an effort to create awareness in males and females of the need to learn to take appropriate decision and responsibilities in whatever stage of development regarding of friendship, sex, mate-selection, and other marriage issues in accordance with positive socio-cultural, moral, economic, spiritual, educational/vocational expectations and aspirations.

It is envisioned that the role of sex education in school and education setting with adequate sexuality oriented programs is not just dispensing knowledge, but to develop personal and social skills. The sex education program which is part of the social work education program can contribute to psychosocial development and well-being throughout adolescence and adulthood. Education influences one's knowledge level because the person will receive new information. This assumption states that teenagers with higher education level have more rational thinking pattern, obey rules, and more discipline as well as able to separate good and bad. Though such evidences are linked to the positive outcomes of sex education, such effort in the schools and colleges still remain a sensitive and sometimes controversial issue. There are ere disagreement about the role of education setting in family life and sex education; role of parents and the information sharing of sex education, questions related to gender equality and personal responsibility; and, essentially, what institutes suitable teenage sexual behavior (Luker, 1998; Wight & Abraham, 2000; Nathanson, 1991; Bay-Cheng, 2003).

### Social Work Education and Sexuality Attitude

In a study on the provision of training in human sexuality in medical schools across the USA, Wittenberg and Gerber (2009) discovered that despite medical students valuing sexual health as part of the curriculum, they did not feel adequately prepared to tackle the subject with their patients because the time allotted for sexual health education was limited (Wylie & Weerakoo, 2011). Historically, social work education has included minimal attention to three essential foci: (1) disability; (2) sexuality; and (3) the intersection of disability and sexuality (Ballan, 2008). It is indicates that link between sexuality and disability has obtain little attention in social work education (Glasgow, 1981). There has been insufficient change in the 25 years that followed this initial observation (Ballan, 2008). Low numbers of professional preparation programs incorporate content on human sexuality.

It is well aware that there are several sensitive topics are discussed and well deliberated by the social workers the deliberations regarding sexuality and sexual behaviors are inattentive in the works and in practice (Stawgate-Kanefsky, 2000). It is evident that the social workers are ineffectively equipped to attend the sexual issues in their expert roles

(Speziale, 1997). Intimacy and sexuality are few matters that to be well defined and understood by the social workers when they engaged in social work practices especially with the adolescence, in order to extend better guidance in these areas (Boyle, 1993). Referring to a study of Australian schools of social work, it was found that whereas most social work courses allocate curriculum space for scrutiny of gender and life-cycle stages, such is not the case for sexuality (Roberts, 1986).

## **School and Sexual Awareness**

Adolescent sexuality and its consequences weigh on the minds of adolescents. College settings perform a significant part in averting sexuality concerns because students' spirits of a sense of belonging inside the college have been associated with reduced unsafe behavior.

## **Problem Statement**

The issue of unwanted pregnancy is not unfamiliar with Indian population. This issue of unintended adolescent pregnancy has far reaching implications on several social institutions around us. The scenario which we have observed in the western countries is also diffused to Indian urban and rural areas. The issues related to unwanted pregnancy is more among urban girls when compares with the rural areas. Several social work institutions are located in the urban areas. Even when adolescents are aware about the health and mortality issues related to unwanted or unintended pregnancies, the rate of occurrence has not come down at the expected level. The social work profession has long been concerned about the issues of unintended adolescent pregnancy and adolescent parenting. The question raised in this context is how far social work education can act as a catalyst or a change communication agent, among the students of social work, at least, which support in its own level any reduction in the unintended adolescent pregnancy. A study was conducted at the social work institutions and the students of social work, in order to explore the wilful quarantine from unintended adolescent pregnancy.

## **Theoretical Underpinning**

The Theory of Planned Behaviour posits that individual behaviour is determined by his or her personal intention on performing a particular behavior. In the presence of a high intention, a person is motivated to actually execute the behavior (Ajzen, 1991). The three main factors that determine intention are (1) perceived attitude on performing the behavior; (2) perceived social norms; and (3) perceived behavioral control over or self-efficacy in performing the behavior (Bandura, 1977).

In the research carried out on the intention to engage in unwanted pregnancy, different theoretical models have been applied, including the Health Belief Model (Becker, 1974; Rosenstock, 1974), the Self-Efficacy Model (Bandura, 1977), to the Theory of Reasoned Action (Ajzen & Fishbein, 1977; Fishbein, 1980; Fishbein & Ajzen, 1975) and/or the Theory of Planned Behavior (Ajzen & Madden, 1986; Ajzen, 1991; 2002). The final one mentioned, the TPB, is one of the most widely used models for attempting to explain factors that have a bearing on intention, such as in the behavior of using a condom (Albarracín, Johnson, Fishbein & Muellerleile, 2001; Carmack & Lewis-Moss, 2009; Groenenboom, Van

Weert & van den Putte, 2009; Protogerou, Flisher, Aaro & Matheus, 2012; Protogerou, Flisher, Wild & Aaro, 2013; Rijsdijk et al., 2012; Sheeran & Taylor, 1999).

In accordance with the Theory of Planned Behavior (TPB), the immediate determinant of behavior is behavioral intention, which is in turn determined by attitude towards the behavior, the subjective norm and perceived behavioral control. These three variables are based on behavioral, normative and control beliefs, respectively. Nonetheless, as the authors point out, there are factors which can limit the subjects' will to perform a determined behavior. Accordingly, perceived control, along with intention, will also be considered an immediate determinant of the behavior. Hence, from a number of different studies, a TPB model has been proposed, by adding additional variables which may allow its explanatory power to be enhanced.

## **Research Questions**

- 1. Does attitude influence wilful quarantine from unintended adolescent pregnancy?
- 2. Does social work education influence wilful quarantine from unintended adolescent pregnancy?
- 3. Does self-efficacy influence wilful quarantine from unintended adolescent pregnancy?

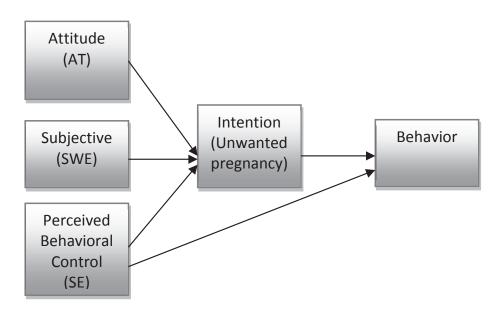
# Objectives

- 1. To analyze the direct and positive relationship between social work student's attitude and unintended adolescent pregnancy.
- 2. To analyze the direct and positive relationship between social work education and unintended adolescent pregnancy.
- 3. To analyze the direct and positive relationship between self-efficacy and unintended adolescent pregnancy.

# Hypothesis

- H<sub>1</sub> Social work student's attitude has direct and positive relationship with unwanted adolescent pregnancy.
- H<sub>2</sub> Social work education has direct and positive relationship with unwanted adolescent pregnancy.
- H<sub>3</sub> Social work student's self-efficacy has direct and positive relationship with unwanted adolescent pregnancy.

# **Theoretical Framework**



**Figure 1: Theoretical Framework** 

# **RESEARCH METHODOLOGY**

## **Research Design**

This study aimed to test the hypothesis, i.e. whether or not a relationship between the variables of attitude, social influence and self-efficacy on unwanted pregnancy among students, in order to get the meaning and implications of the problem to be solved such as improving the sexual health and sexual orientation among students by quarantining unwanted pregnancy during their adolescence. This study also wanted to find out the relationship between these three exogenous variables on endogenous variables. This causality study is designed through quantitative approach using smart PLS. the study followed cross sectional descriptive study design.

## Measurements

Questionnaire development the final set of Youth Sexual Intention Questionnaire (YSI-Q) consists of 20 items. The initial set of YSI-Q had 25 items constructed for Youth Sexual Intention (YSI-Q) and they were based on literature reviews, expert opinions and in-depth discussions with youths. Using the Theory of Planned Behavior as the framework (refer Fig. 1), the YSI-Q was developed to measure four constructs: permissive attitude towards sexual activity, perceived social norms (social work education), perceived self-efficacy and sexual intention. All of the constructs reflected the same behavior which was premarital sexual activity.

#### Validation Process

The validity of YSI-Q was assessed using content validity, face validity, exploratory factor analysis (EFA), reliability analysis and confirmatory factor analysis (CFA). EFA is useful for the identification of observed items that will best represent latent constructs while CFA is to confirm and validate the measurement model in terms of construct, convergent and discriminant validity.

Exploratory factor analysis (EFA) was performed on the first independent 150 samples. Using SPSS, factor analysis began with a decision on the number of factors to be extracted based on an eigenvalue of more than 1, scree plot and parallel analysis. Items with a factor loading of less than 0.6 or incorrectly placed based on their theoretical meaning were removed from the questionnaire.

Confirmatory factor analysis (CFA) was the final part of the validation process, convergent validity reflects the degree of items in each construct is interconnected by matching their theoretical connection and was based on three criteria: factor loadings > 0.5, average variance extracted (AVE) for each construct > 0.5 and composite reliability (CR) > 0.7.

An instrument is considered as having good discriminant validity when the items are unrelated theoretically and are indeed unrelated in the measurement model. Discriminant validity was achieved when AVE values for any two constructs were greater than the squared correlations between the two construct.

## RESULTS

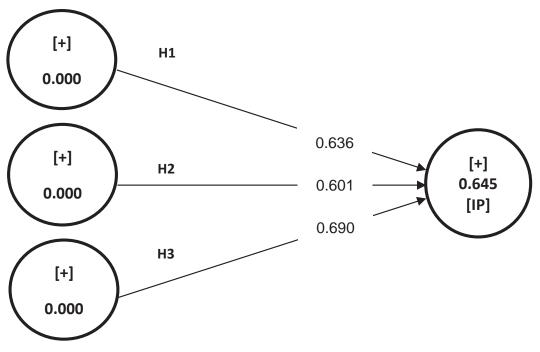
## **Internal Reliability**

The overall Cronbach's alpha value for all 20 items was 0.93. The reliability analysis for the sexual intention construct was 0.93, attitude construct was 0.89, social norms construct was 0.94 and self-efficacy construct was 0.90. All values were higher than 0.7, suggesting adequate internal reliability (see Table 2). In the final set of questions in the Youth Sexual Intention Questionnaire (YSI-Q), there were 20 items with four constructs, namely (1) intention, (unwanted pregnancy); (2) Attitude towards premarital sex; (3) Social norms; and (4) Self-efficacy.

## **Structural Model**

In this section, the result of the structural model and tests of hypotheses for this study will be initiated. Following Hair et al. (2011; 2012), this section is concerned using the standard bootstrapping process with a number of 5000 bootstrap samples of 291students to assess the importance of the path coefficients. Using the PLS bootstrapping output, the moderation effects of organizational culture was computed. Figure 2, illustrates the estimation for the full structural model. To understand the relationship between the constructs, SEM-PLS structural model analysis was conducted. The contribution of each construct of the exogenous variable is represented by the standardized beta values within the PLS structural model (Chin, 1998).

**Structural Model Direct Effect** 



**Figure 2: Theoretical Framework Direct Effect** 

Table	1:	Overall	Analysis	
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Hypothetical Relationship	Path Coefficient	Absolute t statistic value	Value of <b>R</b> <sup>2</sup>	Value of Q <sup>2</sup>
AT→IUP	0.636***	20.916	0.418	0.353
SWE→ IUP	0.601***	19.469	0.436	0.392
SE→ IUP	0.690***	42.401	0.637	0.585

Figure 2 shows the results of the structural path of the model 1, 2 and 3 based on the hypothesis (H<sub>1</sub>, H<sub>2</sub>, and H<sub>3</sub>) of the study. The model 1, 2 and 3 of the integrated figure considered as one of the major analysis, showing the direct effect attitude, social influence and self-efficacy of the social work students on intention to engage in sexually oriented behavior as a combined construct. The direct relationship showed that the predictor has significant and positive impact on predicting variable (p < 0.01) shown in Table 1. In addition, the overall validity of this structural model is evident as Q-Square values (0.353, 0.392 and 0.585) are well above zero, providing the support that the attitude, social influence and self-efficacy of the Malaysian consumers on intention to purchase goat milk factors. In other words, R<sup>2</sup> showed that attitude, social influence and self-efficacy of the Malaysian construct, explains the intention to purchase goat milk 41.8%, 43.6% and 63.7% (0.418, 0.436, 0.637) having stronger statistical power in parameter estimation (Hair et al., 2013). To sum it up, the entire three hypotheses are

empirically supported. In summary, the validity of structural models from 1-3 was verified, the  $Q^2$  values for all of the models, were greater than zero, provided the evidence of predictive relevance with empirical support for the overall path models of the study. In addition, R-square of every model delivered a figure showing sufficiently amplification abilities of the independent variables to account for variance in the dependent variable of the study. Moreover, most of the path coefficients were significant (p < 0.01).

### Discussion

The objective of this study was to ascertain the relationship between attitude, social work education and perceived self-efficacy in its influence on unwanted pregnancy among adolescent's students of social work. The study observations clearly indicate that there is direct and positive relationship between attitude, social work education and students perceived behavioral control on adolescent's unwanted pregnancy.

The attitude of female students towards sexuality is influenced by several factors in an educational environment. Greater freedom experienced by the adolescents during the college environment higher will be the misuse of such freedom. As it is well reported teenage pregnancy has an adverse effect on the wellbeing of teenagers, including a high rate of infant and maternal mortality as well as sex-related diseases such as infection by the human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) (Kyei, 2012:143; Sodi, 2009:51). Noticeable consequences of teenage pregnancy include dropping out of school, truancy, abortion, child neglect and poverty (Kanku & Mash, 2010; Kyei, 2012; Sayegh, Castrucci, Lewis & Hobbs-Lopez, 2010). When a young female becomes pregnant, her physical, social, educational and career development is significantly altered. An unwanted child has consequences for the mother's socioeconomic status, her educational attainment, her health, and her family development (Berg, 1994: 21) cited by McWhiter (2004).

Pregnant teenagers should be viewed as adolescents who experience the usual turbulence of development and need support and assistance (Sarri & Phillips, 2004:538). Social workers utilize multilevel intervention strategies through primary and secondary methods to assist pregnant teenagers, who face multiple challenges. During assessment the social worker together with the teenager makes a determination of a beneficial intervention plan. Group work is essential for pregnant teenagers as they are able to connect with others in a similar situation, and are reassured that they are not alone. Furthermore, it offers mutual aid to those grappling with feelings of sadness, contemplating suicide, fear and frustration, especially if their boyfriends have deserted them.

As the most influential construct affecting human agency, self-efficacy influences behavior. Efficacy can influence choice of behavior. Self-efficacy beliefs help determine how much effort people will expend on an activity and how long they will persevere (Bandura, 1977).

Social work education enhances the confidence level of adolescent's girl with appropriate understanding on the sexual health and can prevent the unwanted pregnancy during institutional days.

Social work institutions in academia are playing high role in understanding sexual needs and orientation, through transformative curriculum content, teaching and practicing approaches. As it is evidenced delivering inclusive sexuality education and practicing counselling like therapeutic measures for both girls that ensure in social work education has a strong component on a focus on knowledge building, which is critical in proper role orientation and emotional balance. A prior awareness of several sexuality aspects like awareness of their bodies, their rights and capabilities, fertility choices, and preventing pregnancy can support them in taking up stable social role in society in addition to better professional focus.

## Implications

The unwanted pregnancy has severe consequence which leads to dropouts. Teenagers who leave the colleges due to unwanted pregnancy before finishing their course of study, they are at a handicap in other ways as well. The psychological wellbeing of the students is affected by during dropping out of school. Most drop-outs later regret their decision to leave school. Several anticipated outcome are associated with the metal health state of the women during the unwanted pregnancy like perinatal depression, stress, and lower levels of psychological well-being and life satisfaction. The social work education and practical interventions can extend a significant contribution towards better social and sexual health outcomes by promoting adolescents' access to educational services through the improvement and support of an effective educational delivery system and counselling service in school that can avoid unwanted pregnancy among the adolescent girls. Social work Schools can also act as social support center, a trusted institution that can link adolescents, parents, families and communities.

Within the context of culturally appropriate and sensitive practice, services that are responsive to the needs and desires in the form of comprehensive health education and services for all adolescents; like sexuality education for all adolescents, including but not limited to, physiology of sexuality and sexual relations, emotional aspects of romantic relationships, pregnancy prevention (including abstinence and contraception), realistic mock parenting activities, health care, education, child-rearing education and support, social and emotional well-being support (including infant mental health and other mental health services), legal services, etc.; may be the need of the hour to tackle the issues pertaining to unwanted pregnancy is a risk factor for poor maternal mental health including perinatal depression, stress, and lower levels of psychological well-being and life satisfaction (McCrory & McNally S., 2013; Maxson & Miranda, 2011; Yanikkerem, Ay & Piro, 2013).

Social work education can enhance the adolescent girls understanding on the sexuality and sexual health by inducing positive perception and attitude among them. Being aware of their social role the adolescent girls will be equipped with better self-efficacy and confidence to focus their life towards better role and advancement.

#### CONCLUSION

This particular study was conducted to ascertain the role of social work education on adolescent girls in their attitude towards unwanted pregnancy eying its scope towards preventive outcomes. The study clearly proves that social work education has high impact on adolescent girl's attitude towards positive sexual health. The study posed three research questions to explore the relationship between independent and dependent variables. The positive relation between the causative and effect variables clearly indicates the relevance of social work education and its scope and value associated with adolescent education in general and prevention of unwanted pregnancy among adolescent girls.

#### REFERENCES

- Ajzen, I. (1991). The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes, 50, 179–211.
- Ajzen, I. (2002). Residual effects of past on later behavior: Habituation and reasoned action perspectives. *Personality and Social Psychology Review*, 6, 107–122.
- Ajzen, I., & Fishbein, M. (1977). Attitude and behaviour relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84.
- Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 22.
- Alan Guttmacher Institute, 1999a). Facts in Brief: Teen Sex and Pregnancy [Online]. <u>www.agi-usa.org/pubs/fb\_teen\_sex.html</u>.
- Alan Guttmacher Institute. (2001). Teenage sexual and reproductive behavior in developed countries. In. Jacqueline E. Darroch, Jennifer J. Frost, Susheela Singh and The Study Team, *Can More Progress Be Made*? Occasional Report No.3 November 2001.
- Azwar, A. (2000). Kesehatan reproduksi remaja di Indonesia (Adolescent Reproductive Health in Indonesia), unpublished paper presented at the: *National Congress of Epidemiology IX*, Jakarta.
- Ballan, M. (2008). Disability and sexuality within social work education in the USA and Canada: The social model of disability as a lens for practice. *Social Work Education*, 27(2), 194-202.
- Bandura, A. (1977). Social Learning Theory. In B.B. Wolman & L.R. Pomroy (Eds.), *International Encyclopaedia of Psychiatry, Psychology, Psychoanalysis,* and Neurology (Vol. 10). New York: Van Nostrand Reinhold.
- Bay-Cheng, L.Y, (2017). The trouble of teen sex: The construction of adolescent sexuality through school-based sexuality education, sex education. *Sexuality, Social and Learning, 3*(1), 61–74.

- Becker, M.H. (ed.) (1974). The health belief model and personal health behavior. *Health Education Monographs*, 2(4).
- Berg, L.B. 2009. *Qualitative Research Methods for the Social Sciences*, 7th ed. Boston: Allyn & Bacon.
- Blakey, V. & Frankland, J. (1996). Sex education of parents. *Health Education*, 96(5), 9–13.
- Boyle, P.S. (1993). Training in sexuality and disability: Preparing social workers to provide services to individuals with disabilities. *Journal of Social Work and Human Sexuality*, 8(2), 45–62.
- Carmack, C.C. & Lewis-Moss, R.K. (2009). Examining the theory of planned behavior applied to condom use: The effect-indicator vs. causal-indicator models. *Journal of Primary Prevention*, 30(6), 659–676.
- Charles, S. (2002). Sustainable Development, Agenda 21, and healthy cities: A case study from Indonesia. In health and sustainable development visions on health and sustainable development. <u>URL:file:///C:/Users/Admin/Downloads/</u> <u>sustainablehealth.pdf</u>
- Chin, W.W. (1998). The partial least squares approach to structural equation modeling. In Marcoulides, G.A. (Ed.), *Modern Methods for Business Research*. Lawrence Erlbaum, Mahwah, pp. 295 358.
- Choe, M.K., Thapa, S. & Ahmad, S. (2001). *Early Marriage and Childbearing in Indonesia and Nepal*. East-West Center Working Papers. Population Series.
- Dodson, L. (n.d.). We could be Your Daughters: Girls, Sexuality and Pregnancy in Low 238 Income America. Cambridge, MA: Radcliffe Public Policy Institute.
- Fishbein, M. (1980). A theory of reasoned action: Some applications and implications. In H. E. Howe Jr. & M. M. Page, eds. *Nebraska Symposium on Motivation*, 1979. vol. 27: Attitudes, values and beliefs, 65–116. Lincoln: University of Nebraska Press.
- Fishbein, M. & Ajzen, 1. (1975). Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. Reading, MA: Addisonó Wesley.
- Glasgow, M. (1981). Human sexuality education for clinical social workers. *The Journal of Contemporary Social Work*, 62(8), 480-485.
- Groenenboom, M., Van Weert, J. & Van den Putte, B. (2009). Condom use in Tanzania and Zambia: A study on the predictive power of the Theory of Planned Behaviour on condom use intention. In L. Lagerwerf, H. Boer & H. Wasserman (Eds.), *Health Communication in Southern Africa: Engaging with Social and Cultural Diversity* (chapter 1, pp. 13-33). Amsterdam: Savusa.

- Hair, J.F, Black W.C., Babin B.J & Anderson R.E. (2010). *Multivariate Data Analysis. 7th Ed.* Upper Saddle River: Pearson Prentice Hall.
- Hair, J.F., Sarstedt, M., Ringle, C.M. & Mena, J.A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.
- Hair, C.M. Ringle, M. & Sarstedt. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2) (2011), 139-151.
- Henson, R.K. & Roberts J.K. (2006). Use of exploratory factor analysis in published research. Common errors and some comment on improved practice. *Educational Psychology Measurement*, 393–416.
- Kanku, T. & Mash, R. (2010). Attitudes, perceptions and understanding amongst teenagers regarding teenage pregnancy, sexuality and contraception in Taung. *South African Family Practice*, 52(6), 563-572.
- Kyei, K.A. (2012). Teenage fertility in Vhembe District in Limpopo Province, how high is that? *Scholar Link Research Institute Journals*, *3*(2), 134-140.
- Luker K. (1998). Sex, social hygiene, and the state: the double-edged sword of social reform. *Theory and Society*, 27(5), 601-634.
- Luker, K. (1996). *Dubious Conceptions: The Politics of Teenage Pregnancy*. Cambridge, MA: Harvard University Press.
- Matsunaga, M. (2010). How to factor-analyze your data right: Dos, don'ts, and how-to's. *International Journal of Psychology Research*, 3(1), 97-110.
- Maxson P. & Miranda, M.L. (2011). Pregnancy intention, demographic differences, and psychosocial health. *Journal of Women's Health (Larchmt), 20*(8), 1215-1223.
- McCrory, C. & McNally S. (2013). The effect of pregnancy intention on maternal prenatal behaviours and parent and child health: Results of an Irish cohort study. *Paediatric Perinatal Epidemiology*, 27(2), 208-215.
- McWlriter, J.J. (2004). At Risk Youth: A Comprehensive Response. Oxtord: University of Oxford press.
- Nathanson, C.A. (1991). Dangerous Passage: The Social Control of Sexuality in Women's Adolescence. Philadelphia: Temple University Press.
- Ochiagha, C.C. (1999). Issues in Human Sexuality. Onitsha, Nigeria: Spiritan Publishers.
- Protogerou, C., Flisher, A., Aaro, L. & Matheus, C. (2012). The theory of planned behavior as a framework from predicting sexual risk behavior in sub-Saharan African Routh: A critical review. *Journal of Child & Adolescents Mental Health* 24(1), 15-35.

- Protogerou, C., Flisher, A., Wild, A. & Aaro, L. (2013). Predictors of condom use in South African university students: A prospective application of the theory of planned behaviour. *Journal of Applied Social Psychology*, 43, 23-36.
- Rijsdijk, L., Bos, A., Lie, R. Ruiter, J.N. Leerlooijer. & Kok, G. (2012). Correlates of delayed sexual intercourse and condom use among adolescents in Uganda: A cross-sectional study. *BMC Public Health*, 12, 817-827.
- Roberts, R. (1986b). Teaching human sexuality in social work: The neglected curriculum. *Australian Social Work, 39*(3), 17-23.
- Rosenstock, I.M. (2005). Why people use health services. *Milbank Quarterly*. 83(4).
- Saewyc E.M., Magee L.L. & Pettingell S.E. (2004). Teenage pregnancy and associated risk behaviors among sexually abused adolescents. *Perspectives on Sexual and Reproductive Health*, 36, 98-105.
- Santelli, J.S. (1999). Sexually transmitted diseases, unintended pregnancy and adolescent health promotion. *Adolescent Medicine State of the Art Reviews*, 1999, 10(1), 87-108.
- Sarri, R. & Phillips, A. (2004). Health and social services for pregnant and parenting highrisk teens. *Children and Youth Services Review*, 26, 537-560.
- Sayegh, M.A., Castrucci, B.C. & Hobbs-Lopez, A. (2010). *Teen Pregnancy in Texas: 2005* to 2015. Springer, Maternal Child Health.
- Sheeran, P. & Taylor S. (1999). Predicting intentions to use condoms: a meta-analysis and comparison of the theories of reasoned action and planned behaviour. *Journal of Applied and Social Psychology* 29(8), 1624-1675.
- Simon, S. (1999). From Neo-Behaviorism to Social Constructivism: The Paradigmatic Evolution of Albert Bandura. Bachelor of Arts Honors Thesis, Emory University, Atlanta.
- Sodi, E.E. (2009). *Psychological Impact of Teenage Pregnancy on Pregnant Teenagers*. MA (PSY) dissertation, University of Limpopo, Polokwane.
- Speziale, B. (1997). Introducing sexual diversity into social work education: A humanistic group approach. *Journal of Teaching in Social Work*, 15(1/2).
- Strawgate-Kanefsky, L. (2000). A national survey of clinical social workers' knowledge, attitudes and practice regarding sexuality. (Doctoral dissertation). Retrieved from *ProQuest Dissertations & Theses Databases*.
- UNESCO. (2012). EFA Global Monitoring Report 2012: Youth and Skills, Putting Education to Work. EGS.

- Wight D. & Abraham, C. (2000). From psycho-social theory to sustainable classroom practice: developing a research-based teacher delivered sex education programme. *Health Education Research*, 15(1), 25-38.
- Wittenberg A. & Gerber, J. (2009). Recommendations for improving sexual health curricula in medical schools: results from a two-arm study collecting data from patients and medical students. *Journal of Sex Medicine*, 6(2), 362-368.
- Wylie, K., Wood, A. & Abbasi, Y. (2011). Challenges of the sexual health (SH) of the elderly in Europe. *Entre Nous*, 72, 16-17.
- Yanidkk, W. (2009). Kesehatan Reproduksi. Yogyakarta: Fitramaya Yogyakarta.
- Yanikkerem E., Ay S. & Piro, N. (2013). Planned and unplanned pregnancy: Effects on health practice and depression during pregnancy. *Journal of Obstetric Gynaecology Research* 9(1), 180-187.