

# **Improving the understanding of safe-sex behaviours with the use of two models in Health Psychology**

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Health psychology, which is a branch of psychology, aims to understand human health (wellbeing, illnesses, and vulnerabilities) from a biopsychosocial perspective that takes the biological, psychological, and social aspects of life into consideration. This sub-discipline broadly emphasises its role in health promotion and maintenance of health, prevention and treatment of illness, detection and focus on causes of illnesses, and overall improvement of the health care system. Health psychologists utilise a broad range of psychological theories and models developed within the sub-discipline for the above functions. This paper outlines how two theoretical models in Health Psychology, the Transtheoretical Model (TTM), and the Health Belief Model (HBM), contribute to the understanding of safe-sex behaviours.

Unplanned pregnancies and sexually transmitted diseases are noticeable problems around the globe. Almost one million adolescent women aged 19 or under become pregnant each year in the USA alone (Ventura & Freedman, 2000), and the number of adolescents acquiring sexually transmitted infections (STI), including Human Immunodeficiency Virus (HIV), approximates to 3.5 million (Chambers, & Rew, 2003). In the UK the number of new diagnoses for STIs has increased from 63% over the last ten years (Health Protection Agency, 2008). In relation to homosexual relationships, there is still a high incidence of unsafe sex, mainly in the form of unprotected anal intercourse, despite the long number of years of health promotion and education aimed at this population (Crossley, 2000).

Statistics in Sri Lanka for the year 2013 according to the National STD/AIDS Control Programme (NSACP) of the Ministry of Health indicate that there are approximately over 6000 female sex workers, 34 beach boys. The 2014 databases indicate that 18975 people have been treated for STIs during the year by the state run health clinics. NSACP reports further states that there are over 3200 adults and around 100 children identified as HIV positive in year 2014 (NSACP, 2015). These alarming tendencies have made safe-sex behaviours a key aim among the 'many' healthful behaviours modern societies strive to achieve and promote. In the attempts to promote safe-sex behaviours, it is important to understand the underline factors associated with them. Zak-Place & Stern (2004) questions, why do certain

individuals do not adopt safe-sex behaviours, while others do. The types of safe-sex behaviours widely promoted around the world include: use of condoms, use of contraceptives, limiting the number of sexual partners, abstinence from unsafe sexual activities, and screening for STI's.

Adoption of these healthful behaviours or prevention of risky behaviours depends on many social and psychological factors. The Transtheoretical Model and the Health Belief Model attempt to explain these possible causes from a broader theoretical perspective.

### **Transtheoretical Model (TTM)**

This theory mainly focuses on the readiness of the individual to change, and it describes a series of stages associated with this process. Thus, it is also called the stages of change theory (Sarafino, 2002). These stages can be divided into two as 'preaction' and 'action' stages (Banz, et al., 2004). The **preaction stages** of change are as follows:

- Precontemplation: People in this stage are not considering change in the near future. It may be that these people never considered change, never saw any need for it, or even may have decided against it.
- Contemplation: People are considering change or adopting healthier behaviours upon realisation of the existing problem. However, these people have not yet made any commitment towards it.
- Preparation: The person is ready to attempt change and plans for behavioural goals. These may include adopting safe-sex behaviours such as use of condoms, and the individuals are planning on starting it in the near future. In some instances, this could even be a stage of reducing unhealthy habits such as smoking or the use of drugs.

The **action stages** of change are:

- Action stage: This refers to the period/time (usually six months) of successful and active efforts to change a behaviour or lifestyle.
- Maintenance stage: The focus of this stage is to maintain the achieved successful behavioural changes. This stage is supposed to last throughout a life span, unless further changes are necessary. However, for research purposes, a six month period for follow up assessment is accepted.

This model also acknowledges that there is always the possibility to relapse while at any stage and that a person does not necessarily follow a linear model in passing through the stages (Horowitz, 2002). TTM is rich in the quality of integrating principles of change from a range of different theories, and is widely used in change oriented health promotion interventions (Banz, et al., 2004; Sarafino, 2002). However, the theory has its limitations in not being comprehensive by explaining why people do not change, even while they are sometimes consciously aware of the consequences of own unhealthy/risky behaviours.

### **Safe sex behaviours in light of the TTM**

One main barrier in promoting the use of condoms as safe-sex behaviours to prevent unplanned pregnancies and prevent STIs is the importance most men and women place in showing the partner their trust. Research data indicates that many who are unlikely to use condoms tend to believe that not using a condom is denoted as a gesture of trust towards the partner. A western study shows that women are more likely to use condoms or make sure their partner uses one when having sex with men who are not their primary/main partner, but do not always do so with the main partner (Horowitz, 2003). Similar findings have been made in studies with homosexual men practising ‘unprotected anal intercourse’ (UAI) (Gullette, & Tumer, 2003). Research by de Wit et al. 1994 and Rhodes 1998, show that UAI is viewed as a symbol of trust, intimacy and love (Crossley, 2000). Therefore, it is important to understand these symbolic meanings of sexual behaviours if health psychology is to understand and intervene to make any impact. Research by Gullette and colleagues on gay and bisexual men suggest that advantages and disadvantages are major components of the construct of decisional balance discussed in the TTM to make conscious movements towards an action such as the use of condoms (Gullette, & Tumer, 2003). Thus, it is important to make individuals in the preaction stages salient of the significant benefits of safe-sex behaviours in stage-matched interventions aimed at health promotion.

A systematic review of thirty-two peer-reviewed journal articles on unintended pregnancies and STI's prevention in light of the TTM concluded the following. TTM to promote safe-sex behaviours to reduce risk of unintended pregnancies and STI's is a relatively new, but an important area of research (Horowitz, 2003). This paper reviewed the original research in three broad categories; intervention studies, population studies, and validation studies. The evaluation of the intervention studies provided positive evidence

suggesting that the TTM could be used by practitioners and researchers to understand and use of stage-matched interventions to promote condoms usage and other safe-sex behaviours. The data also suggests that interventions at an earlier stage (below the age of 25) tend to show more positive effects in stage-matched interventions. However, it must be noted that long-term follow-ups have not been done to evaluate the long term impact of these interventions. There is supporting evidence to the idea of using peer leaders to educate, change attitudes and promote safe-sex behaviours among middle and high school children (Horowitz, 2003). Capacitating individuals with knowledge to change attitudes towards safe-sex behaviours through educational interventions seems successful with groups in precontemplating and contemplating stages. For individuals in preaction, action and maintenance stages, interventions to enhance self-efficacy (i.e. trust/belief in own ability to practice safe-sex without relapsing) through teaching sexual assertiveness (i.e. be confidently able to emphasise the need for safe-sex to the partner) have shown positive results (Horowitz, 2003). Studies also show that individuals in preaction stages are more likely to relapse than the ones in action stages. Thus, studies suggests that practitioners should pay attention to these groups by providing necessary stage-matched behavioural interventions and ensure periodical follow ups to encourage taking on healthful sex behaviours, which include use of condoms and contraceptives, and avoiding risky behaviours such as needle sharing in the case of drug use.

### **Health Belief Model (HBM)**

According to this model, people tend to make decisions to adopt healthy behaviours or to give up unhealthy/risky behaviours based on two assessments they make. The first of these is the perceived threat to own self; this includes the perceived seriousness of the illness/condition and perceived susceptibility of own self to the health problem/illness. Simultaneously, the person will assess the pros and cons of a behavioural change. These include the benefits/rewards that would be received (e.g. reducing health risk or becoming healthier), evaluation of costs (e.g. what one has to give up, monetary expenses) and barriers (perceived lack of self motivation towards an action, lack of time, commitments towards others, actual or perceived lack of recourses and knowledge). In addition, the HBM also emphasises the importance of self-efficacy as an internal factor determining likelihood of positive change.

HBM has generated a great deal of research and most of it supports its predictions (Sarafino, 2002). Yet, this model too is not comprehensive as it fails to explain certain habitual behaviours (e.g., *most people brush their teeth as a habit, rather than as a result of perceived vulnerability to teeth decay or realisation of its benefits*) that are not always based on the assumptions of the HBM. Another aspect that the model does not sufficiently address is the determining power of each variable in influencing change. These tend to differ on a case by case basis and the model has not developed a standard way of measuring its components.

### **Safe sex behaviours in light of HBM**

Among the research on understanding and promoting safe sex behaviours in light of the HBM, three papers will be mainly used to outline the contribution of the model.

The paper by Zak-Place and Stern (2004) attempts to identify factors that predict youths' engagement of preventive behaviours related to STI's and HIV in the light of the HBM. The research was conducted with 202 undergraduates. Results of the study indicate a high correlation between self-efficacy and use of condoms and other measures of preventing STI's, which include participating in screening for STI's and HIV. Also, the study showed a positive correlation in female students' appraisal of STD/HIV as high in severity and their likelihood of participating in screening, while such results were not present in relation to male students. Overall, the study did not support the predictions of the HBM in terms of students' sexual preventive behaviour, except for the predictive power of self-efficacy.

In the second study using the HBM, researches conducted a survey of female nursing students' knowledge, health beliefs, perception of risk, and risk behaviours regarding human papillomavirus (HPV) and cervical cancer (Danny-Smith, et al., 2006). Research data pointed out low knowledge levels among nursing students on HPV, and cervical cancer and low levels of perceived susceptibility (81% of the sample believed they were unlikely to get infected), and low perceived seriousness about the two conditions. Confirming the predictions of the HBM, the data also indicated high risk sexual behaviours among the students. Students who got an annual Papanicolaou test (Pap smear) demonstrated more knowledge of HVP and cervical cancer than students who did not. This result is further supported by Ingledue et al. (2004. in Danny-Smith, et al., 2006). Thus, taking these results into consideration, researchers highlight the importance for health educators to take initiatives to increase knowledge on the subject of HVP, other STIs and cervical cancers at high-school

and college and above levels, as it can have a significant impact on improving safe-sex behaviours.

The third study that I present discuss the low tendency among gay and bisexual men to use condoms in oral sex based on the explanations of the HBM. The study highlights a positive correlation between the perceived low susceptibility to STIs through oral sex and the failure to use condoms (Gullette et al., 2003). The same paper highlights evaluating the pros and cons of a given action which prevent adopting a healthful behaviour such as the use of condoms if more disadvantages are perceived. The perception that a partner is unhappy or unsatisfied is deemed much greater than personal safety by many individuals who opt to take a risk by not using a condom. Odest (1995) argues; ‘for many people absolute safety at the cost of human intimacy may be too high a price to pay’ (in Crossley, 2000).

Browes (2006) examines sexual health promotion through focussing on the HBM and highlights the importance of

Education plays a major role in enabling individuals to realise the potential health risks of unprotected sex-behaviours (Browes, 2006). Focussing on it through the HBM, he further emphasises the need to empower people with the skills to adopt safe-sex behaviours, as perceiving the risk itself is insufficient to enable a positive change. This may include teaching how to use a condom, where to get one, and also empowering with skills to negotiate condom use with a partner or to say no to sex. These skills could increase self-efficacy which has supporting evidence to predict safe-sex behaviours.

Finally, emphasising on a drawback of the HBM, Zak-Place and Stern (2004) highlight that standard cognitive-based assumptions of the HBM were not found to be salient with college students. Thus, they argue that it is important to explore other potential predictors beyond solely cognitive-factors, if future research data also supports these findings.

## **Concluding Remarks**

The research data outlined above highlights how the TTM and the HBM contribute to our understanding of safe-sex behaviours and how the knowledge could be used to promote safe-sex behaviours among various groups. Self efficacy is used by both models to predict behaviour change, and also to enable people to adopt safe-sex behaviours through health promotion interventions.

Following through the developments of these models, one significant feature is that both have evolved over time and incorporated principles from other theories. It is important that these models keep developing to facilitate better understanding of the varied psychological and social factors that affect health behaviours.

The validity and relevance of these models could be increased by conducting further research with diverse social and ethnic groups around the world. This process will not simply enrich the literature of health psychology, but more importantly enable practitioners to successfully use this knowledge with diverse social groups in the country for health promotion.

Thus, it can be stated that the TTM and the HBM can further be used to broaden the understanding of safe-sex behaviours, and promote healthful behaviours to prevent unintended pregnancies and STI's, by using them collaboratively with other theories of health psychology, to maximise the effectiveness of health promotion interventions.

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