Health promotion thesis essay sample

Psychology, Behaviorism



" A major proportion of deaths could be prevented if people were to change their health-behaviours" Human behaviour plays a central role in the maintenance of health and the prevention of disease. Health-risk behaviour can be defined as any activity undertaken by people with a frequency or intensity that increases risk of disease or injury (Steptoe & Wardle, 2004). The health risk behaviours might cluster together into a risky lifestyle. Much of the mortality and morbidity is caused by individual behavioural patterns, polluted environment or poverty. Statistics show that half of the premature death from the 10 leading causes in developed countries is caused by preventable factors, such as: tobacco use, alcohol abuse, physical inactivity, unhealthy dietary habits, risk sexual practices, non-adherence to effective medication regimens and to screening programs (Gray, 1993). Health risk behaviours also influence cognitive performance, emotions, and the overall quality of life (Hawkins & Anderson, 1996). Although epidemiologic data on the relationships between these behaviours and various health outcomes were available in the early 1980s, many refinements in knowledge have occurred since then.

Causal conclusions have been strengthened by more sophisticated research designs, and program implementations. The impact of these risk behaviours on health is of such magnitude that it has become one of the priorities of the most important national and international health organizations (Rutter & Quine, 2004) Considering the importance of health-risk behaviour as the target of interventions that facilitate the decrease of morbidity and mortality and augment quality of life, this essay has several aims: first, to describe and critically analyse the most important psychological models that intend to

explain and predict health behaviour and second, to discuss their effectiveness in relation to behaviour change strategies that would help develop a theory and evidence-based practice in health psychology, integrated with the current evidence-based practice of clinical psychology and cognitive-behavioural psychotherapies. (e. g., evidence-based psychotherapy). HEALTH BEHAVIOR CHANGE MODELS

Human behaviour plays a central role in the maintenance of health and the prevention of disease. Growing evidence suggests that effective programs to change individual health behaviour require a multifaceted approach to helping people adopt, change, and maintain behaviour. For example, strategies for establishing healthy eating habits in children and adolescents might be quite ineffective for changing maladaptive eating behaviours—that is, when they are used to substitute one pattern for another—in the same population (e.g. Jeffery et al. 2000). Similarly, maintaining a particular behaviour over time might require different strategies than will establishing that behaviour in the first place (e.g., Ockene et al 2000). Models of behaviour change have been developed to guide strategies to promote healthy behaviours and facilitate effective adaptation to and coping with illness. Armitage and Conner (2000) in a review on social cognition models of health behaviour describe three categories of models: motivational, behavioural enactment and multi-stage. Motivational models are based on the assumption that drive is enough for successful behavioural enactment and therefore focus on the motivational factors that determine performance.

As intention is considered to be the most proximal determinant of behaviour, it is widely used as the dependent variable in research founded on motivational models (Godin & Kook, 1996). The behavioural enactment models have developed as a response to the criticisms brought to motivational models. Consequently, behavioural enactment models centre on the action control strategies that help translate motivation into action. Last but not least, multi-stage theories are considered the most complex ones because they include variables that facilitate the adoption of behaviour as well as variables that guarantee its maintenance (Armitage & Conner, 2000).

1. Motivational Models

The motivational models have been created to predict health behaviour at particular points in time. They were also elaborated in order to discover the variables that determine health behaviour and assess their ability to predict it (Armitage & Conner, 2000) Health Belief ModelOne of the earliest theoretical models developed for understanding health behaviours was the health belief model. The Health Belief Model (HBM; Rosenstock, 1974) assumes that the likelihood of a person engaging in a specific health behaviour is a function of several beliefs: the extent to which she/he believes that she/he is susceptible to a particular illness; her/hi sperception of the severity of the illness consequences; perceived barriers/costs of adopting a health behaviour; perceived benefits of adopting the targeted health behaviour.

The HBM has been applied, among other things, to influenza inoculation, screening for Tay-Sachs disease, exercise programs, nutrition programs, and smoking cessation (Strecher and Rosenstock 1997). An important contribution of the model is the recognition that prevention requires people to take action in the absence of illness. This continues to be useful, for example, in explaining women's reluctance to perform breast self-examination or obtain mammograms (Rimer 1990). One problem with the HBM is that it does not specify how the different beliefs influence one another or how the explanatory factors are combined to influence behaviour. This resulted in different studies using numerous combinations of variables or different ways of analysing variables: multiplying vulnerability and severity (Conner & Norman, 1994) or subtracting barriers from benefits (Wyper, 1990).

Protection Motivation Theory

Protection Motivation Theory (PMT; Rogers, 1975) developed starting from the scientific literature that argued for the effectiveness of fear-arousing communication. The level of induced fear influences the adoption of adaptive responses in a linear way. It has been shown that a medium level of fear brings forth cognitive responses that lead to behavioural implementation. PMT has been used as a framework for predicting various behaviours: reducing alcohol use (Stainback & Rogers, 1983), enhancing healthy lifestyles (Stanley & Maddux, 1986), exercise, enhancing diagnostic health behaviours and prevention of sexually transmitted diseases (Van der Velde & Van der Pligt, 1991). The Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB; Ajzen & Fishbein, 1980; Ajzen, 1991) was developed in an attempt to broaden the applicability of the TRA by including perceived behavioural control as an additional predictor of behaviour. The basic assumption of TPB is the fact that beliefs are the fundamental determinants of any behaviour and therefore, risk behaviour can be changed by modifying the underlying beliefs. According to the TPB, attitudes, social norms and perceived behavioural control influence intention that represents the proximal determinant of behaviour. Perceived behavioural control is the individual's perception regarding the extent to which performing a certain behaviour is easy or difficult. The concept is similar to the one of self-efficacy (Bandura, 1986). The relationship between perceived behavioural control and behaviour suggests that we are more likely to engage in behaviours over which we have control. Perceived behavioural control is influenced by both internal factors (i. e., skills, information, abilities, emotions, personal deficiencies) and external factors (i. e., opportunities, dependence on others, barriers). Thus, perceived behavioural control is determined by perceived presence or absence of resources and opportunities and the perceived ability of these to induce or hinder performance.

The TPB has been widely used because it offers a clear theoretical account of the links between attitudes, intentions and behaviour. Also, it states how these constructs should be operationalised, which makes the design of behaviour change interventions easier. Fishbein and Ajzen (1975) provide a frame for understanding the ways in which models like the TPB can be used to change behaviour. Successful behaviour change can be achieved when

intentions are changed thorough either attitudes, subjective norms or perceived behavioural control. Fishbein and Ajzen (1975) also present two strategies for changing beliefs: introducing new salient beliefs or changing existing prominent beliefs of the target population. Both the Theory of Reasoned Action and the Theory of Planned Behaviour have been used to predict several health behaviours: smoking, drinking, dental behaviour, health screening (Conner & Sparks, 1996) and AIDS preventive behaviour (Terry, Gallois, & McCamish, 1993). However, Godin and Kok (1996) conducted a review that showed components of the TPB to explain on average 41 percent of the variance in intention, but only 31 percent of the variance in behaviour.

Social Cognitive Theory

Social cognitive theory (SCT; Bandura, 1986) states that behaviours are performed if people believe that they have control over the outcome, perceive few external barriers towards reaching their goals and have confidence in their ability to achieve these. Self-efficacy and outcome expectancies (related to the situation and to action) represent the two central concepts of SCT. People can feel susceptible to an illness, expect to benefit if they change their behaviour, and perceive their social environment as encouraging the change, but if they lack a belief that they can indeed change, their efforts are not likely to succeed. Substantial empirical evidence suggests that self-efficacy beliefs (and the related concept of optimism) are reliable predictors of behaviour, and that they mediate the effects of intervention on behaviour change, including a number of health-related

behaviours (e. g., Bandura et al 1987; Ewart 1995, Kaplan et al 1994, Scheier et al 1990,).

A growing body of literature supports the importance of self-efficacy in initiation and maintenance of behavioural change (Bandura 1977, Marlatt and Gordon 1985, Stretcher et al 1986)). Self-regulation is a concept that derives from cognitive social learning theory (see Bandura 1986, Baumeister et al 1998, Carver and Scheier 1998, Compas et al 1999, Eisenberg et al 1997), and it includes what many people call "will power." Self-regulation includes cognitive and behavioural processes that involve the initiation, termination, delay, modulation, modification, or redirection of a person's emotions, thoughts, behaviours, physiological responses, or environment (Compas et al 1999). Self-regulation can be critical in such health-protective and health-maintaining behaviours as eating a healthy diet, engaging in regular exercise, and managing stress. Conversely, the failure or breakdown of self-regulatory efforts can be crucial in some risky behaviours, such as smoking, poor dietary management, and a sedentary lifestyle.

2. Behavioural Enactment Models

Motivational models of health behaviour are based on the assumption that there is an almost perfect association between intention and behaviour. However, meta-analyses have shown that motivational models explain a large proportion of the variance in intention but not of behavioural variance (Conner & Armitage, 1988) Implementation Intentions

Studies have shown that intentions are not perfect predictors of action, as they explain only 20 or 30 % of behaviour variance. The question arises " what happens to the ones that have good intentions but fail to turn them into action?" In order to provide an answer, Orbell and Sheeran (1998), suggest there are strategies that help translate intentions into action. One of these strategies is represented by the concept of implementation intentions (Gollwitzer, 1999). According to Gollwitzer (1990; 1993) and Heckhausen (1991), following the motivational phase that ends with the formation of a goal intention, there is a volitional phase during which plans are made to ensure behavioural enactment. These plans have been called implementation intentions and they take on the specific form of "I intend to do X at time and place Y". Empirical evidence has been provided that the formation of implementation intentions increases the likelihood that a goal will be achieved (Gollwitzer & Brandstätter, 1997).

Previous meta-analyses (Sheeran, 2002) have shown implementation intentions to have a "medium" effect size on behaviour (r+= 0. 33). Also, their effectiveness in promoting behaviour has been proven for various behaviours: attendance to cervical cancer screening (Sheeran & Orbell, 2000), vitamin supplement use (Sheeran & Orbell, 1999), exercise behaviour (Milne, Orbell, & Sheeran, 2002), condom use (Sheeran Abraham, & Orbell, 1999). Interventions including action planning have been successfully applied to: maintaining a healthy diet (Verplanken & Faes, 1999), regulating alcohol consumption (Murgraff, White, & Phillips, 1996), physical exercise (Lippke, Ziegelmann, & Schwarzer, 2004)

3. Multi-Stage Models

Contrary to continuum theories, stage theories aim to match interventions to

people by identifying the stage they have reached in changing behaviour and helping them overcome the specific barriers that hinder transition to the next stages (Briedle, Riemsma, Pattenden, Sowden et. Al, 2005). The main stage models in health psychology are: the Transtheoretical Model of Change (TTM, Prochaska & DiClemente, 1983), the Precaution Adoption Process Model (PAPM, Weinstein, 1988) and Health Action Process Approach (HAPA, Schwarzer, 1992)

Health Action Process Approach

The Health Action Process Approach model (HAPA; Schwarzer, 1992) is considered to connect the motivational, behavioural enactment models and multi-stage models presented above (Armitage & Connor, 2000). The basic assumption of the HAPA model is that the initiation and maintenance of health behaviour must be considered as a process consisting of at least two stages: a motivational phase and a volition phase. The latter is further subdivided into a planning phase and a maintenance phase. In the motivational phase, an individual forms an intention either to adopt an adaptive behaviour or to change risk behaviours. The action phase describes the processes that take place after an intention to perform a certain health behaviour has been formed.

The HAPA model has been used as the basis for intervention for modifying risk behaviours like: alcohol consumption (Murgraff & McDermott, 2003) or unhealthy eating habits (Satow & Schwarzer, 1998). It was also used for interventions promoting health-enhancing behaviours: low-fat food consumption (Renner, Knoll, & Schwarzer, 2000) or performing regular

breast self-examination (Garcia & Mann, 2003; Luszczynska & Schwarzer, 2003). When applying the HAPA model to preventive behaviours, self-efficacy has been shown to represent the best predictor of intention and plans of performing breast self-examinations, while planning proved to be the best predictor of the actual behaviour (Luszczynska & Schwarzer, 2003).

HOW DO EFFECTIVE THEORIES WORK?

Previous reviews have shown that when it comes to predicting behaviour, the efficacy of motivational models is smaller compared to behavioural enactment and multi-stage theories. This has been explained by referring to the fact that behavioural enactment models clarify the intention-behaviour gap and the quality of multi-stage models to conceptualize behaviour as consisting of a number of stages that lead to behaviour change and maintenance. However, further studies should assess the effectiveness of behavioural enactment versus multi-stage models in what concerns their utility for intervention design (Armitage & Conner, 2000). Based on the research data analysed in the first part I present in Table 1 a summary of the various models and the particular behaviours where interventions proved effective.

Nevertheless, it is important to take into account, that sometimes, the effectiveness of an intervention does not necessarily mean behavioural change. For instance, a study conducted by Milne et al. (2002) found that an intervention designed to promote exercise, based on protection motivation theory, resulted in changes in cognitions but not in actual behaviour change. When implementation intentions were added to the intervention, the

participants who formed these specific plans to exercise were more likely to do so, compared to those who didn't plan. These kinds of example represent arguments in favour of using experimental testing of particular change strategies, separately and in combination, in order to identify the change-generating methods causing a successful intervention (Michie & Abraham, 2004). Most meta-analyses examining the intention-behaviour relation rely mainly on correlational studies (Godin & Kok, 1996; Sheeran, Abraham, & Orbell, 1999).

Because these studies don't provide a good base for stating whether intentions have a causal impact on behaviour, Webb and Sheeran (2006) set out to explore in their meta-analysis the extent to which changes in intention lead to changes in behaviour. Results showed that a medium to large change in intention (d= 0, 66) leads to a small to medium change in behaviour (d= 0. 36). Furthermore, their study looked at the characteristics of interventions that are effective in changing intentions and behaviours. As can be seen in Table 2, findings demonstrate a strong relationship between the effect size for intention and the one for behaviour, meaning that interventions that cause great changes in intention also engender significant changes in behaviour. According to the results depicted in Table 2, interventions are most likely to determine intention and behavioural change if they are based on: protection motivation theory or the theory or reasoned action/planned behaviour, use change strategies such as social encouragement and incentives for behaving or remaining in the program and are delivered on a one-to one or group basis by a research assistant or health educator.

CONCLUSIONS

Health professionals can optimize people's risk behaviour, ensuring that they are: exposed to correct information about risk behaviours; develop a positive intention to perform a health behaviour; identify social and personal barriers to performing that behaviour; perceive themselves as having enough control over engaging in behaviour change; and have a positive affect regarding the behaviour and its outcome. The essay aimed to briefly describe the most important health psychology models that set out to explain and predict health behaviour. Also it intended to give an account of their effectiveness in providing a base for successful behaviour change strategies. Answering the question "How does it work?" helps to identify the psychological means underlying effective behaviour change interventions. These can be used to design programs that modify risk behaviour to prevent illness and promote health. However, one of the first problems that arise when trying to design efficient health behaviour change interventions is that identifying the main predictors of behaviour does not mean that one has found the determinants of behaviour change.

Researchers should focus more on applying the existing theories from health psychology and integrate them with the more advanced evidence-based theory and practice of cognitionally psychotherapies, in order to identify the determinants of the required change instead of the predictors of the present behaviour only. For example, when using the TPB to design and measure the effectiveness of an intervention, one should measure attitudes, subjective norms and perceived behavioural control toward behaviour change (Brug, Oenema, & Ferreira, 2005). HBM could be easily integrated with the more

validated ABC model of cognitive-behavioural psychotherapies (Beck, 1976; Ellis, 1962), which is the most widespread form of psychological intervention in the clinical practice, the platform of evidence-based clinical practice in psychology. Theories often only suggest what needs to be changed in order to generate behaviour modification and don't focus on how this can be induced. Future studies should explore how to translate behaviour-change predictors into successful behaviour change strategies and intervention tools.

For example, in order to increase the impact of intentions on behaviour, future behaviour change interventions should aim to promote intention stability and implementation intention formation that have been proven to facilitate the translation of intentions into action. Stable intentions were shown to resist situational pressure (Cooke & Sheer an, 2004), reduce the impact of past habits on future performances (Conner, Sheer an, Norman, & Hermitage, 2000) and facilitate behaviour change maintenance (Conner, Norman, & Bell, 2002. Because intentional behaviour change requires motivation and skills but also opportunity to change, additional development of behaviour change theory should also centre on the use of environmental change strategies like stimulus control (Rug, Enema, & Ferreira, 2005).

Behavioural interventions must also recognize that people live in social, cultural, political, and economic systems that shape behaviours and access to the resources they need to maintain good health. Health psychology models and theories provide key underpinning to health promotion and disease prevention programs at all levels of intervention: individual, group

and community. According to the statement that "there is nothing more practical than a good theory", discovering and integrating theory-rooted strategies that aim to develop motivation, abilities and environmental conditions that cause intention and behaviour change will bring an important contribution the development of a theory and evidence based practice in health psychology.