Western Undergraduate Psychology Journal

Volume 3 | Issue 1 Article 7

2015

Preventing Relationship Abuse with the Health Belief Model

Christopher M. Kowalski
Western University

Justine Czajka
Western University

Preventing Relationship Abuse with the Health Belief Model

Christopher M. Kowalski*
Justine Czajka

The purpose of the present study is to examine the Health Belief Model (HBM) as a framework for adolescent relationship abuse prevention-focused interventions. As part of a secondary school girls' physical education course, participants (from grades nine to 12) will complete a HBM questionnaire, and a questionnaire assessing their past relationship behaviour. The participants will then be introduced to an intervention that teaches various assertive and protective reactions to problematic behaviour based on the components of the HBM. After the intervention, the girls will complete the HBM questionnaire a second time. Also, two months following the intervention, participants will be asked to complete the Past Behaviour questionnaire for a second time. It is predicted that health belief change will be positively correlated with relationship protective behavior change. Furthermore, it is expected that of the HBM factors, perceived benefits will be the strongest predictor of behavioural change, followed by perceived barriers, self-efficacy, perceived susceptibility, and perceived seriousness.

The Health Belief Model (HBM; Rosenstock, 1966) is one of the most widely tested models of health behaviours and has been very successful in predicting a plethora of health related behaviour and developing various health promotion interventions (Janz & Becker, 1984; Sohl & Moyer, 2007). Despite its tremendous generalizability within the health domain, researchers have not yet examined the effectiveness of the HBM in the context of relationship abuse in romantic dyads. This is surprising as the HBM has been referenced in the adolescent relationship abuse literature (Murphy & Smith, 2010b), but no investigation has explicitly tested the efficacy of predicting future behavior with HBM in this domain. Although intuitively, relationship abuse does not seem like a health related issue, it has been clearly associated with negative health outcomes including, but not limited to physical harm, depression, drug abuse, anxiety, post-traumatic stress disorder, and somatization (EI-Bassel, Gilbert, Wu, Go, & Hill, 2005; Murphy & Smith, 2010a; Rogers & Follingstad, 2014). The purpose of the proposed study is to examine the Health Belief Model as a framework for interventions targeted at preventing adolescent relationship abuse.

Adolescent Relationship Abuse

Relationship abuse is defined as any behaviour directed at a partner, in current or former romantic relationship, that results in emotional, social, or physical harm to that partner (Wekerle & Wolfe, 1999). Apart from health outcomes, the abuse is also associated with victimization in future relationships, a diminished social support network, and restricted autonomy (Murphy & Smith, 2010a; Wöller, 2005). Relationship abuse is prevalent in adolescent romantic relationships; in the United States it was estimated that 10.3% of adolescents in relationships had been physically abused by their partners (Kann et al., 2013). This statistic does not include social or emotional abuse, but in 2008 it was estimated that 33% of adolescent girls are socially, emotionally, and/or physically victimized by their partners (Davis, 2008). Because social and emotional abuse are often more traumatic than the physical abuse (Tolman,

*This research proposal was initially submitted for Psychology 4420F at Western University. For inquiries regarding the article, please e-mail the corresponding author at ckowals@uwo.ca.

1989), anti-relationship abuse campaigns should have a strong emphasis on these forms of abuse. Although there is evidence that violence in relationships is often bidirectional, relationship abuse against women receives more attention in research and the media (Harned, 2002). Perhaps this is warranted as it has been found that the physical and emotional effects of relationship abuse are more detrimental for females than they are for males (Harned, 2001). Although it would seem that females are more in need of aid, many interventions have been geared towards males as well as females in an attempt to stop relationship abuse before it occurs.

One theory behind relationship abuse that has received attention is the Slippery Slope Model (Murphy & Smith, 2010b). It posits that relationships often are not abusive from the beginning; however when a partner's minor transgressions are not responded to assertively, thereby reinforcing future transgressions, the transgressions will become more frequent and more serious over time. This proposed sequence is supported by reports of chronic relationship abuse victims recalling relatively minor transgressions early on in their relationships. There is also evidence that occurrences of social and emotional abuse often precede physical abuse in abusive romantic relationships (Few & Rosen, 2005, Murphy & O'Leary, 1985).

Murphy and Smith (2010a) found seven warning sign domains, including gender denigration, personal putdowns, public debasement, verbal aggression, jealousy/possessiveness, social restriction, and exit control. Gender denigration included behaviours such as comments that devalue a partner based on gender. Personal putdowns included derogatory comments made in private; not in anger. Public debasement included behaviour such as deliberately humiliating a partner in public. Verbal aggression included hostile comments in the context of an argument. Jealousy/possessiveness and social restriction included behaviours based on the need to view one's partner as personal property, and limiting partner's access to social support, respectively. Exit control includes behaviours that make it difficult for the partner to leave the relationship despite wanting to leave (e.g., threatening self-harm if left). The first four examples are viewed as warning signs and examples of emotional abuse; while jealous/possessiveness, social restriction, and exit control are viewed as warning signs and examples of social abuse.

The Health Belief Model (HBM)

The Health Belief Model is a cognitive behavioural model that was originally developed to explain why people failed to follow preventative health measures (Rosenstock, 1966). Since its inception, it has been successfully applied to a wide variety of health problems including influenza vaccinations, self-breast examinations, high blood pressure screening, bicycle helmet use, and smoking cessation (see Janz & Becker, 1984 for review). As well, despite its original purpose of being applied to preventative health related behaviour, it has also been found to predict compliance with treatment programs for already diagnosed health conditions (Carpenter, 2010; Rosenstock, 1974). Originally, the Health Belief Model consisted of four cognitions, including perceived susceptibility, perceived benefits, perceived seriousness, and perceived barriers. However, cues to action, self-efficacy, and modifying variables such as motivating factors have recently been added to the HBM as additional constructs affecting health behaviour (Rosenstock, 1966; Rosenstock, Strecher, & Becker, 1988).

Each of the cognitions and additional constructs can be used to explain health behaviour, whether on its own or in combination. Perceived susceptibility or risk refers to the individual's own assessment of how likely the action is to be committed against

him/her. Theoretically, the greater the perceived risk, the greater the chance the individual will behave in a way to decrease it. In other words, an individual who believes he is at a higher risk of being affected by a heart condition would be more likely to exercise, eat healthier, and participate in other preventative actions. Perceived benefits are the individual's belief in the efficacy of the prescribed health behaviour in preventing, treating, or ameliorating the impact of the health condition. In other words, an individual who believes that regular exercise will prevent the development of a heart condition would be more likely to exercise regularly. Perceived seriousness is the individual's perception of the severity of the consequences associated with the health-related problem. The more severe the perceived outcome, the more likely the individual is to act to avoid it. Perceived barriers are obstacles that keep an individual from pursuing new behaviour such as perceived difficulty, expense, or emotional pain. Modifying variables are personal factors that influence the likelihood of adopting the new behaviour (e.g., socioeconomic status, lack of time). One of these is self-efficacy, which is one's personal belief in their ability to accomplish something. Cues to action are factors that are critical in starting the path to adopting the new behaviour (e.g., a negative change in state, or a story in the media; Carpenter, 2010). Studies have suggested that the individual components vary in their predictive power depending on the nature of the desired health outcome (Carpenter, 2010; Janz & Becker, 1984).

In a meta-analysis of 18 studies, Carpenter (2010) found that the HBM components had differential predictive power depending on the types of campaigns including treatment and preventative health campaigns. Specifically, it was found that for preventative campaigns, perceived benefit had the strongest correlation with target behaviour (0.42); perceived barriers had the second strongest correlation (0.33); this was followed by perceived severity (0.16), and perceived vulnerability (-0.06), respectively.

The HBM model has not yet been tested in the context of relationship abuse; however, there have been studies that implicate some of the components as being important in anti-relationship abuse campaigns. For instance, Murphy and Smith (2010b) found that more frequent exposure to the warning signs was negatively correlated with perceived seriousness of these behaviours. Researchers also found that participants were not aware of the risks associated with personal putdowns, verbal aggression, jealous/possessiveness, or exit control, nor did they know how to respond to these warning signs. This study highlights the importance of anti-relationship abuse campaigns to target beliefs about the relationship such as perceived seriousness and perceived benefits. Extant research suggests that a weak sense of self-efficacy, in performing behaviours that minimize the probability of victimization, is a significant predictor of future sexual abuse, and that this component should be targeted in campaigns relating to this problem. It has been shown that relationship skill interventions that provide hands-on training are effective in increasing self-efficacy (Adler-Baeder, Kerpelman, Schramm, Higginbotham, & Paulk, 2007; Walsh & Foshee, 1998). This is further evidence suggesting that at least some of the HBM components may be effective in the context of romantic relationships.

The Present Study

The primary goal of the proposed study is to test the efficacy of the HBM model as a predictor of change in responses to problematic abusive behaviours in adolescent romantic relationships. This will be tested by observing the improvement in past relationship scores from the pre-test to the post-test. One large problem with anti-relationship abuse campaigns is the

lack of theoretical emphasis. Most campaigns, even when empirically tested, are shown to work, but without any indication of the underlying factors that make them successful. Therefore, a secondary goal of this study is to discover which components are the most important in predicting behaviour change in the context of preventative anti-relationship abuse campaigns.

The present study will only focus on high school-aged girls in heterosexual relationships. The reason for this is that adolescent girls are more likely to be subjected to relationship abuse than adolescent boys, and the consequences of relationship abuse tend be more severe (Kann et al., 2013). For this reason, female participants may perceive relationship abuse as a greater threat than males. Furthermore, the gender homogeneity in our sample guarantees that only one member of the romantic dyad is subjected to the intervention; allowing both members to attend the intervention may differentially influence subsequent relationship behaviours relative to dyads where only one member attends.

The proposed study seeks to expand on the research conducted by Murphy and Smith (2010a) who found that adolescents lacked awareness of the risks associated with some problematic abusive behaviour and also lacked knowledge on how to deal with problematic abusive behaviours. This study will test an intervention designed to target perceived severity and benefits as well as the other components of the HBM. Although there are other skills that may be important in healthy relationships, the intervention developed for the purposes of this study will only teach how to deal assertively with the problem behaviours outlined by Murphy and Smith (2010a). It must be noted that this intervention was developed for theory building purposes, that is, to test the HBM in this particular context; however, the results of this study may further aid in the development of future interventions.

Based on the evidence reviewed, we predict that the changes in health beliefs will be positively correlated with the protectiveness of behaviours that are performed in reaction to displays of relationship abuse. Moreover, based on the meta-analysis by Carpenter (2010), because the intervention is a preventative intervention, we predict that perceived benefits will be the strongest predictor of behaviour change, followed by perceived barriers, self-efficacy, perceived susceptibility, and perceived seriousness.

Method

Participants

The sample will be composed of approximately 500 female high school students from grades 9 to 12. The study will be completed as part of the physical education curriculum. All of the consenting students in each class will fill out all questionnaires and participate in the treatment, but only data from participants who have been in a heterosexual romantic relationship for at least three months will be used for the purposes of this study. This study will only be conducted in classes where all students participating are girls. Additionally, data from participants who did not attend all parts of the intervention will also be excluded from the analysis. All students will be entered into a draw to win 1 of 20 iPod touches.

Materials

Health Belief Model Questionnaire. To assess the participants' relationship abuse related beliefs corresponding to the components of the Health Belief Model, a HBM questionnaire (see Appendix A) developed for the purposes of this study will be used. This questionnaire is composed of 35 items including one item per HBM component per warning sign domain (5 x

7; Murphy & Smith, 2010a). For example, there will be one item assessing the participants' perceived severity of the consequences associated with problematic behaviour (e.g. "Possessive behaviour is okay in romantic relationships"), one item assessing the perceived benefits of dealing effectively with possessive behaviour (e.g. "There are benefits associated with preventing possessive behaviour"), and so on. All items will be answered on a Likert scale of 1 (*Completely disagree*) to 7 (*Completely agree*). The items in the questionnaire were developed based on a review of theoretical literature pertaining the HBM and an examination of existing HBM scales. To investigate the psychometric properties of this questionnaire, a pilot version of the questionnaire will be administered to a sample of university students.

Past Behaviour Questionnaire. Participants' past relationship behaviour will be assessed using an adapted version of the questionnaire developed by Murphy and Smith (2010a). Unlike the original scale, attitudes towards malevolent relationship behaviour will not be assessed. Furthermore, the adapted questionnaire will measure participants' past reactions to partners' malevolent behaviour in the last two months rather than participants' hypothesized reactions to partners' hypothetical malevolent behaviour. The first part of the questionnaire will inquire about demographic information (e.g., age, gender, sexual orientation, and relationship status), and the second part will have items regarding exposure to 21 socially or emotionally abusive relationship behaviours in the last two months (e.g., "Has this happened to you in your relationship in the past two months?"). Participants are to circle "Yes" or "No". If a participant indicates that she has been subjected to a malevolent behaviour, she will answer an open-ended item about her reactions to this behaviour (e.g., "Please describe your reactions to this behaviour"). Open-ended responses will be coded on a scale from 1 (passive/escalating) to 3 (completely protective/non-reinforcing), similar to the coding scheme used by Murphy and Smith (2010a). Responses that are rewarding, reassuring, or aggressive, and therefore, likely to either escalate conflict or reinforce further problematic behaviour, will be given a rating of 1. Passive or ambiguous responses (e.g., "ignored it", or "walked away") will be given a rating of 2. Responses will be given ratings of 3 if they involve nonaggressive assertive action (e.g., asserting a boundary or need, requesting a change in behaviour), or involve leaving the relationship and telling a trusted other if the behaviour involved a threat. Scores will be coded by three different evaluators, and inter-rater reliability will be calculated. The raters' scores will be averaged for each item, and item scores will be averaged for each participant to get the questionnaire score.

Procedure

Permission will be obtained from the school board and school principals before beginning the study. Prior to any data collection, informed consent will be collected from both students and their legal guardians.

All students who consent and acquire consent from their guardians to participate in the experiment will be seated in a classroom. To maintain anonymity, students will be seated at least one desk away from each other. Students will then be asked to complete the Health Belief Questionnaire and the Past Behaviour Questionnaire. This session should only last approximately 40 minutes, but participants will have up to 75 minutes, which is the approximate length of the class to complete the questionnaires. When the questionnaires are completed, students will be asked to remain silent in their seats for the remainder of the period with an option to read silently or to work

on assignments from other classes. This is in order to avoid the possibility of participants rushing to complete the questionnaires, and to ensure the quality of the data.

Over the following two days, all participants will participate in a relationship skills workshop led by a research assistant who will have been thoroughly trained prior to the intervention. Participants will be taught and trained in relationship skills directly relating to partner aggression, and skills that are commonly found in other relationship skills interventions concerning how to respond to problematic behaviour (Adler-Baeder, et al., 2007; Murphy & Smith, 2010a).

Day one of intervention. Students will be seated in the classroom. The research assistant will lecture the students on the importance of dealing with problematic behaviour (as described by Murphy & Smith, 2010a) in relationships. To influence perceived severity, the research assistant will discuss consequences of ineffective problem solving and inadequately dealing with warning signs in relationships such as anger, hostility, anxiety, depression, verbal aggression, dissatisfaction, and escalation to violence (Downey, Frietas, Michealis, & Khouri, 1998; Murphy & Smith, 2010a; Simpson, Rholes, & Phillips, 1996). To influence perceived vulnerability, students will be taught about the prevalence of these consequences, and that these consequences are especially common in teen relationships. Moreover, they will be taught that most teenagers do not know how to deal with different threatening situations in relationships, making them especially vulnerable to the specified consequences. To affect perceived benefits, students will be taught effective ways to deal with conflict including non-aggressive, but assertive communication and the benefits of these techniques (e.g., avoidance of the consequences of non-self-protective communication), as well as seeking social support and when and how to safely end a relationship. To reduce the perceived barriers, common barriers to effective communication will be addressed (e.g., fear, guilt, overinvestment etc.) and reduced through reassurance. Each one of these components (i.e. perceived vulnerability, perceived severity, perceived benefits, and perceived barriers) will be addressed in approximately 18 minutes per component.

Day two of intervention. In the second session of the intervention, self-efficacy will be taught. To do this, the class will take part in role-playing exercises of how to act in response to each of the problem behaviours (e.g., gender denigration, personal-putdowns, public debasement, verbal aggression, possessiveness, social restriction, and exit control; Murphy & Smith, 2010a). Students will be asked to present some of their reaction behaviour in front of the rest of the class. This part of the intervention should take approximately 50 minutes to allow for sufficient time for every student to get a chance to role-play each situation, and present at least once. After the self-efficacy portion of the intervention, students will once again complete the Health Belief Model Questionnaire. The questionnaires will take approximately 15 minutes to complete; however students will be allowed to take as much time as they need to complete the questionnaire.

Two months following the intervention, all participants will once again be seated in a classroom in the same configuration as in the first session. They will be asked to complete the Past Behaviour questionnaire to assess their reactions to their partners' problematic behaviours in the two months following the intervention. This session should take approximately 25 minutes, but students could take as much time as needed to complete the questionnaire. Once the questionnaires are completed, participants will be debriefed and the regular instructor for the course will resume with the regular course curriculum.

Data Analytic Plan

Multiple Correlation

A multiple correlation analysis will be used to examine if changes in health beliefs are related to changes in behaviour. In other words, the correlations between health belief element change scores and relationship behaviour change scores will be assessed.

Multiple Regression

In order to examine how a change in the Health Belief Model components predict changes in behavior, a change score multiple regression will be employed. More specifically, changes in Health Belief Model component scores (as assessed by the Health Belief Model questionnaire; i.e. post-test perceived vulnerability – pretest perceived vulnerability) will be examined as predictors of changes in average scores of the Past Behaviour questionnaire (i.e. post-test past behaviour score – pretest past behaviour score).

First Received: 01/21/2014
Final Revision Received: 03/31/2015

References

Adler-Baeder, F. L., Kerpelman, J., Schramm, D. G., Higginbotham, B., & Paulk, A. (2007). The impact of relationship education on adolescents of diverse backgrounds. *Family Relations, 56*, 291-303.

Carpenter, C. J. (2010). A meta-analysis of the effectiveness of Health Belief Model variables in predicting behaviour. *Health Communication, 25*, 661-669.

Davis, A. (2008). Interpersonal and physical dating violence among teens. *Focus: Views from the National Council on Crime and Delinquency*, 1-8.

Downey, G., Frietas, A. L., Michealis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Rejection sensitivity and rejection by romantic partners. *Journal of Personality and Social Psychology, 75*, 545-560.

El-Bassel, N., Gilbert, L., Wu, E., Go, H., & Hill, J. (2005). Relationship between drug abuse and intimate partner violence: A longitudinal study among women receiving methadone. *American Journal of Public Health, 95*, 465-470.

Few, A. L., & Rosen, K. H. (2005). Victims of chronic dating violence: How women's vulnerabilities link to their decisions to stay. *Family Relations, 54*, 265-279.

Harned, M. S. (2001). Abused women or abused men? An examination of the context and outcomes of dating violence. *Violence and Victims, 16*, 269-285.

Harned, M. S. (2002). A multivariate analysis of risk markers for dating violence victimization. *Journal of Interpersonal Violence, 17*, 1179-1197.

Janz, N. K., & Becker, M. H. (1984). The Health Belief Model: A decade later. *Health Education Quarterly, 11*, 1-47.

Kann, L., Kinchen, S., Shanklin, S. L., Flint, K. H., Hawkins, J., Harris, W.A., ... Zaza, S. (2013). Youth risk behaviour surveillance-United States, 2013. *Morbidity and Mortalilty Weekly Report,*1-168.

Murphy, C. M., & O'Leary, D. K. (1989). Psychological aggression predicts physical aggression in early marriage. *Journal of Consulting and Clinical Psychology, 57*, 579-582.

Murphy, K. A., & Smith, D. I. (2010a). Adolescent girls' responses to warning signs of abuse in romantic relationships: Implications for youth-targeted relationship violence prevention. *Journal of Interpersonal Violence, 25*, 626-647.

Murphy, K. A., & Smith, D. I. (2010b). Before they're victims: Rethinking youth-targeted relationship abuse prevention in Australia. *Australian Psychologist, 45*(1), 38-49.

Rogers, M. J., & Follingstad, D. R. (2014). Women's exposure to psychological abuse: Does that experience predict mental health outcomes. *Journal of Family Violence, 29*, 595-611.

Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social Learning Theory and the Health Belief Model. *Health Education & Behaviour, 15*, 175-183.

Rosenstock, I. M. (1966). Why people use health services. *The Milbank Quarterly, 44*, 94-127.

Rosenstock, I. M. (1974). Historical origins of the Health Belief Model. *Health Education Monographs, 2*, 328-335.

Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology, 71*, 899-914.

Sohl, S. J., & Moyer, A. (2007). Tailored interventions to promote mammography screening: A meta-analytic review. *Preventive Medicine, 45,* 252-261.

Tolman, R. M. (1989). The development of a measure of psychological maltreatment of women by their male partners. *Violence and Victims, 4*.

Walsh, J. F., & Foshee, V. (1998). Self-efficacy, self-determination and victim blaming as predictors of adolescent sexual victimization. *Health Education Research,* 13, 139-144.

Wekerle, C., & Wolfe, D. A. (1999). Dating violence in mid-adolescence Theory, significance, and emerging prevention initiatives. *Clinical Psychology Review,* 435-456.

Wöller, W. (2005). Trauma repetition and revictimization following physical and sexual abuse. *Fortschritte Der Neurologie · Psychiatrie, 73*, 83-90.

Appendix A

Health Belief Model questionnaire

Instructions: The following statements are related to your beliefs about various behaviours within the context of romantic relationships. We are interested in how you would perceive these behaviours in relationships. Please respond to by indicating the extent to which you agree or disagree with each statement. Mark your answer using the following rating scale:

Completely Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Completely Agree
1	2	3	4	5	6	7

	Statement	Response
1	There are benefits associated with preventing possessive behaviour by my partner	
2	I can prevent my partner from being verbally aggressive towards me in the future	
3	There are benefits associated with preventing personal putdowns by my partner?	
4	I can prevent my partner from being possessive towards me in the future	
5	Possessive behaviour is okay in romantic relationships	
6	There is something that might prevent me from being assertive if my partner publicly devalued me	
7	I can prevent my partner from publically devaluing me in the future	
8	Personal putdowns are okay in romantic relationships	
9	There is a chance that my partner would publicly devalue me	
10	Verbal aggression(e.g. name calling) is okay in romantic relationship	