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Résumé

Autoefficacité des infirmières autorisées travaillant en salle d'urgence en matière d'évaluation et de prise en charge des femmes victimes de violence

Erin Hollingsworth et Marilyn Ford-Gilboe

L'avancement des connaissances au sujet des facteurs qui influent sur l'autoefficacité des infirmières autorisées intervenant en salle d'urgence auprès des femmes victimes de violence ne peut que contribuer à l'amélioration des soins. La présente étude avait pour but d'analyser cette question en rapport avec l'évaluation et la prise en charge. Les questions et les hypothèses de recherche retenues découlent de la théorie de Bandura sur l'autoefficacité. On a d'abord effectué une analyse secondaire (N = 158) des données d'une étude intitulée *Violence against Women: Health Care Provider Study.* Même si les questions de l'enquête n'avaient pas été formulées à l'origine dans le but d'opérationnaliser les concepts décrits par Bandura, elles se sont avérées de bons indicateurs. On a ensuite établi quatre échelles à partir du bassin d'éléments recueillis, pour ensuite les valider par une analyse factorielle et les utiliser pour opérationnaliser les variables de l'étude. On a constaté une corrélation positive entre l'information sur l'autoefficacité dont disposaient les infirmières autorisées des services d'urgence et leur autoefficacité réelle en matière d'évaluation et de prise en charge des femmes victimes de violence (r = .73, p < .001), leurs attentes et leurs interventions effectives (r = .55, p < .001), ainsi que les résultats attendus (r = .56, p < .001). Enfin, on a effectué une analyse par régression multiple hiérarchique pour évaluer la mesure dans laquelle l'information et les attentes en matière d'autoefficacité, de même que les résultats attendus, pouvaient permettre de prédire les interventions pratiquées par les intéressées. Le modèle aura permis d'expliquer la variance dans une proportion de 40 %. Les résultats confirment l'utilité de la théorie de Bandura et révèlent une complexité des réactions qui doit être comprise à la lumière de l'autoefficacité et des facteurs qui en favorisent le développement.

Mots clés : femmes victimes d'agression, autoefficacité, services d'urgence

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Registered Nurses' Self-Efficacy for Assessing and Responding to Woman Abuse in Emergency Department Settings

Erin Hollingsworth and Marilyn Ford-Gilboe

Enhanced knowledge regarding the factors that influence and support the self-efficacy of emergency department (ED) registered nurses and their provision of care to women who have experienced abuse is necessary for the promotion of optimal health care. The purpose of this study was to examine the self-efficacy of registered nurses with respect to assessing and responding to woman abuse in the ED. Study hypotheses and research questions were derived from Bandura's theory of self-efficacy. A secondary analysis ($N = 158$) of data from the Violence against Women: Health Care Provider Survey was completed. Originally, survey questions were not developed to operationalize the concepts outlined by Bandura. However, they were found to be good indicators. Four scales were developed from the item pool, validated through factor analysis and used to operationalize study variables. Positive relationships were found between self-efficacy information available to ED registered nurses and their self-efficacy for assessing and responding to woman abuse ($r = .73$, $p < .001$), self-efficacy expectations, and actual clinical responses related to woman abuse ($r = .55$, $p < .001$) and outcome expectancies related to assessing and responding to woman abuse ($r = .56$, $p < .001$). Hierarchical multiple regression examined the extent to which self-efficacy information, self-efficacy expectations and outcome expectancies predicted ED registered nurses' clinical responses to woman abuse. Overall, the model explained 40% of the variance in ED registered nurses' clinical responses to woman abuse. Results provide additional support for Bandura's theory and demonstrate that the clinical responses of ED registered nurses are complex and must be understood in terms of self-efficacy and the factors that support its development.

Keywords: woman abuse, self-efficacy, emergency nursing, clinical practice

Introduction

Historically, woman abuse has received little attention, due in part to the widely held public belief that it is a "private" problem. This belief has resulted in widespread societal failure to recognize woman abuse as a legitimate social problem, in addition to a criminal act comparable to any other form of violence (Begin, 1992). Woman abuse is often defined as

— but is not limited to — physical, sexual, psychological, verbal, social, spiritual, and financial abuse occurring in intimate, kin, and dependent relationships (National Clearinghouse on Family Violence, 2006). It is estimated that as many as 23% of Canadian women experience abuse by an intimate partner in any given year (Clark & DuMont, 2003) and that 25% to 30% of Canadian and American women experience physical abuse by an intimate partner at some point in their lives (DeKeseredy & MacLeod, 1997; Johnson & Sacco, 1995). Given that the mental and physical health effects of woman abuse have been well documented (Campbell, 2002; Golding, 1999), interest is increasingly focused on developing appropriate services, including health services, to support women who have been abused. Yet Perley (1992) characterizes health-care agencies, and the professionals who work for them, as "insensitive" to the needs of women who have experienced abuse. Not surprisingly, battered women have identified health professionals as the least effective source of help among formal support systems (Bendtro & Bowker, 1989).

Many national and professional organizations, such as the Family Violence Prevention Fund (2004) and the Registered Nurses' Association of Ontario ([RNAO], 2005), have advocated for universal screening for woman abuse in health-care settings, despite a lack of definitive evidence of its effectiveness in identifying women who have been abused and responding to their needs (Datner et al., 2004; Wathen & MacMillan, 2003). Universal screening entails the posing, by health professionals, of specific questions regarding abuse to *all* women in order to identify those who have experienced abuse so that support and referral can be initiated (Datner et al.). Beyond the issue of universal screening, Humphreys and Campbell (2004) propose that appropriate clinical responses to woman abuse include assessing the woman's level of risk and developing a safety plan, conducting a thorough health assessment, identifying personal strengths and support systems, and identifying appropriate goals with the woman in collaboration with other health professionals, in order to provide support. In the absence of widespread organizational support for universal screening, the responsibility for identifying and responding to woman abuse frequently lies with practitioners, including registered nurses.

In Canada, the emergency department (ED) provides the majority of urgent/emergent care, representing an estimated 5.1 million visits in 1999 (Canadian Association of Emergency Physicians, 2004). A meta-analysis conducted by Wilt and Olson (1996) found that the incidence of abuse among American women presenting to the ED is between 4% and 30% for current abuse and 11% to 54% for lifetime abuse. Consistent with US rates, 13.9% of 768 adult women who presented to two Canadian EDs were found to have experienced abuse in the previous

year (Wathen et al., 2006). Thus, the ED is a key setting for identifying and supporting women who have experienced abuse (Davis & Harsh, 2001; Ellis, 1999; Haywood & Haile-Mariam, 1999; Zun, Downey, & Rosen, 2003).

For the ED, providing appropriate care to women who have experienced abuse is often a challenge. This is a fast-paced environment serving patients who vary in gender, age, race, religion, ethnic background, and socio-economic status and who present with a wide range of health problems (Ellis, 1999). Consequently, health professionals who work in the ED must possess broad clinical knowledge and skills and be able to efficiently manage large patient volumes and varying levels of patient acuity. Because women who have experienced abuse may present in a variety of ways, ED staff must be knowledgeable and adaptable in order to identify abuse and respond appropriately. Particular features of the ED, such as limited privacy, long waiting times for non-urgent matters, and lack of continuity of health-care providers, make the ED a less than ideal setting for providing care to women who have been abused. In spite of this, women who have experienced abuse do access the ED for injuries and health problems related to abuse, and, for some, the ED may be their only contact with the health-care system (Dearwater et al., 1998).

In the ED, RNs represent the first contact at triage and often provide the majority of ongoing care (Ellis, 1999), resulting in a unique opportunity for nurses to assist women who have experienced abuse. Research (Davis, & Harsh, 2001; Dearwater et al., 1998; Ellis; Erickson, Hill, & Siegel, 2001; Varvaro & Gesmond, 1997) has documented many barriers to providing appropriate care in the ED to women who have experienced abuse. Little attention has been given to factors that encourage health professionals to integrate appropriate clinical responses into their practice. Self-efficacy, an individual's confidence in his or her ability to enact a specific behaviour, has been consistently identified as a predictor of enacting that behaviour (Gage, Noh, Polatajko, & Kaspar, 1994; Holloway & Watson, 2002; Kuijer & de Ridder, 2003; Parjares, 2002), yet this concept has not been used to understand RNs' self-efficacy for assessing and responding to woman abuse in the ED setting. This study was undertaken to develop such an understanding.

Theoretical Framework and Literature Review

Bandura's (1977, 1997) theory of self-efficacy provides one explanation for individual behaviour. According to Bandura (1977), environmental, behavioural, and cognitive factors work together in a "triadic reciprocal" fashion to influence behaviour, each exerting various levels of influence on behavioural outcomes in specific situations.

Two types of expectations form the foundation of self-efficacy theory: efficacy expectations and outcome expectancies (Bandura, 1977, 1997). An efficacy expectation is an individual's belief in their personal ability to enact a specific behaviour in order to produce a desired outcome, whereas an outcome expectancy is a belief that performing a specific behaviour will result in a specified outcome (Bandura, 1977). Both efficacy expectations and outcome expectancies are important influences on behaviour (Bandura, 1977, 1997). Although an individual may believe that certain actions will lead to a desired outcome, if they perceive little ability to enact the behaviour, they may choose not to attempt the behaviour. Similarly, individuals may choose not to enact behaviour or make little effort if their self-efficacy is high but they believe that enacting the behaviour will result in negative outcomes.

Self-efficacy expectations are thought to vary on three dimensions: (a) level, the perceived difficulty of enacting the behaviour of interest; (b) generality, the range of activities or domains that self-efficacy expectations address; and (c) strength, the effort or perseverance required to accomplish a task (Bandura, 1977). Furthermore, self-efficacy expectations develop from four sources of information (Bandura, 1977, 1997). *Enactive mastery experience,* actual enactment of the behaviour of interest, is thought to be the most powerful way to achieve self-efficacy. The successful enactment of a behaviour provides the impetus to attempt more complex behaviours. *Vicarious experience* involves observing others successfully enact behaviour and then appraising one's ability in relation to the attainments of others. The more similar the model and the individual, the greater the support for self-efficacy. *Verbal persuasion,* praise or encouragement for one's abilities by others, serves to reduce self-doubt and the tendency to dwell on personal deficiencies, making behavioural attempts more likely. *Psychological and affective states* are emotions and reactions such as fear, anxiety, passion, or excitement that have the potential to either amplify or diminish self-efficacy, depending on the nature of the emotion and the extent to which it affects an individual's cognitive appraisal of self (Bandura, 1997).

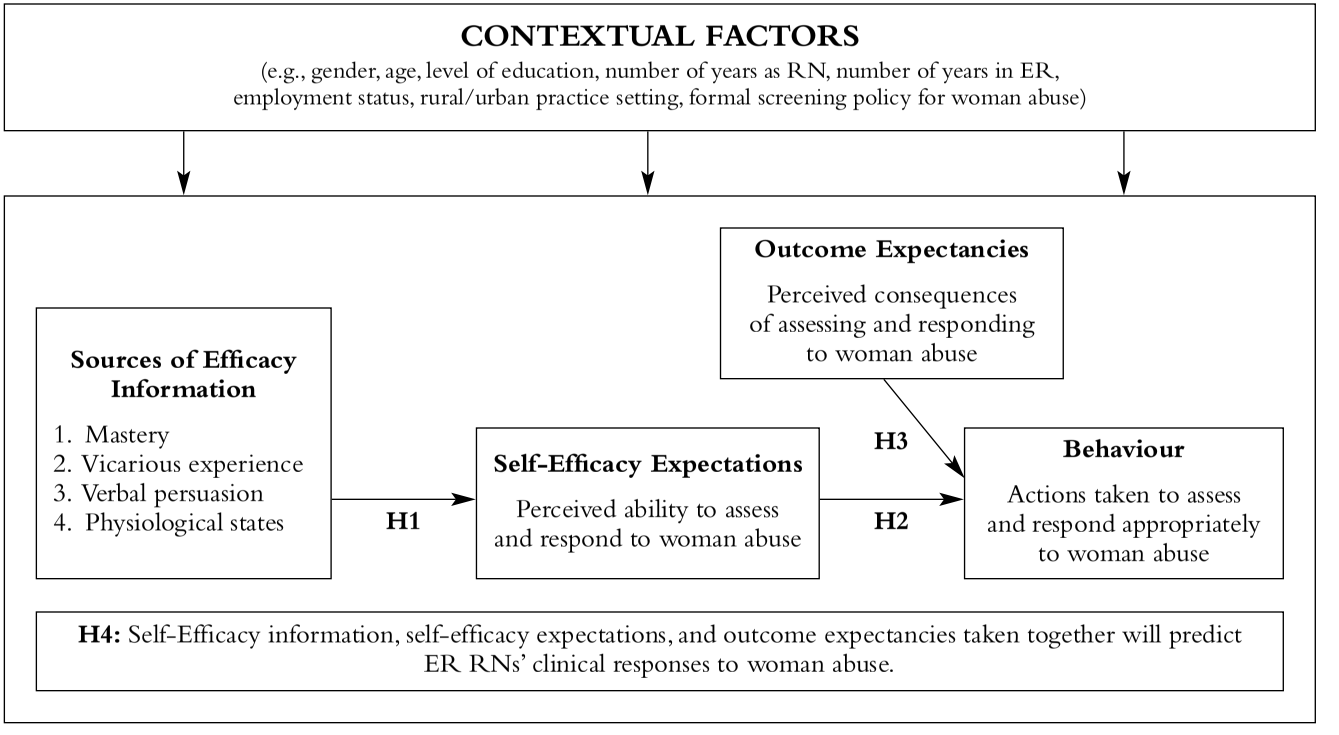
In previous health research, the concept of self-efficacy has been examined primarily in patient populations (Cook, 2004; Kuijer & de Ridder, 2003; Luszczynska & Schwarzer, 2003; Rahman, Amber, Underwood, & Shipley, 2004; Reicks, Mills, & Henry, 2004), with a focus on outcome behaviours. Few studies (e.g., Ozer et al., 2004) have examined the relationship between the health professional's self-efficacy and health-care delivery. The effectiveness of interventions designed to increase the self-efficacy of health-care providers has been examined in several studies (Cook; Farrell, Wicks, & Martin, 2004; Holloway &

Watson, 2002), including one study (Hamberger et al., 2004) that examined the effects of a comprehensive educational intervention on the self-efficacy of health professionals (N = 752) for screening and supporting female victims of partner violence. Using a pre-post test design, the investigators observed significant improvements in self-efficacy immediately post-intervention and at 6 months post-intervention, suggesting that tailored education programs are an effective means of increasing provider self-efficacy in the short term. Similar effects on self-efficacy have been documented in educational interventions in patient populations (Farrell et al.; Gaughan, 2003; Kara, 2004) and lay volunteers (Sullivan, Sharma, & Stacy, 2002), although none of these studies focused on the context of woman abuse.

The barriers associated with providing ED care to women who have experienced abuse have been well documented. Ramsden and Bonner (2002) identify several areas of concern: inadequate training and education, professional problem ownership, physical ED surroundings, the presence of male caregivers, and lack of incentives to screen. Ellis (1999) found lack of privacy for screening, lack of time, and not knowing how to ask about woman abuse to be the main barriers to screening for woman abuse among RNs working in the ED. Similar barriers have been identified among physicians (Gerbert, Caspers, Bronstone, Moe, & Abercrombie, 1999; Lachs, 2004; Renck, 1993; Sugg, Thompson, Thompson, Maiuro, & Rivara, 1999), nurse practitioners (Hinderliter, Doughty, Delaney, Rodgers-Pitula, & Campbell, 2003), and social workers (Tower, 2003) working in the ED. Each of these barriers can be thought of as a source of efficacy information (Bandura, 1977, 1997). Although many of the abovementioned studies were conducted in health-care settings with departmental policies addressing woman abuse, the lack of a formal screening process is the reality for many Ontario EDs. The impact of screening policies on the practice behaviour of ED RNs related to woman abuse is poorly understood.

In summary, despite the plethora of research related to self-efficacy and health behaviours, relatively little research has addressed the self-efficacy of RNs. Furthermore, the relationship between RNs' self-efficacy for assessing and responding to woman abuse and their actual clinical practice in any setting, including the ED, has yet to be studied. Given that the ED is a key health-care setting for women who have experienced abuse, an understanding of factors that predict RNs' clinical responses to woman abuse could inform the development of education programs and organizational structures and policies to support appropriate care for women who have experienced abuse.

Figure 1 *Hypotheses Derived from Bandura's Theory of Self-Efficacy*



Purpose and Hypotheses

The purpose of this study was to examine the self-efficacy of RNs with respect to assessing and responding to woman abuse in the ED, by testing hypotheses derived from Bandura's (1977, 1997) theory of self-efficacy (Figure 1). Hypothesis 1: *There is a positive relationship between efficacy information available to ED RNs and their self-efficacy for assessing and responding to woman abuse.* Hypothesis 2: *There is a positive relationship between the self-efficacy expectations of ED RNs for assessing and responding to woman abuse and their clinical responses to woman abuse in the ED setting.* Hypothesis 3: *There is a positive relationship between ED RNs' outcome expectancies related to assessing and responding to woman abuse and their clinical responses to woman abuse.* Hypothesis 4: *Self-efficacy information, self-efficacy expectations, and outcome expectancies taken together will predict ED RNs' clinical responses to woman abuse.*

Method

Design

A secondary data analysis was conducted using data from 158 RNs working in ED settings who participated in the Violence against Women: Health Care Provider Survey (Wright, Gutmanis, & Beynon, 2005), a large survey (N = 2,000) of health professionals practising in the Canadian province of Ontario in 2005. A descriptive correlational design was used to test hypotheses about the relationships between ED RNs' efficacy information, self-efficacy expectations, outcome expectancies and clinical responses to woman abuse, as these relationships have not been previously examined in the population of interest.

Setting and Sample

In the parent study, a random sample of 2,000 health professionals (1,000 RNs and 1,000 physicians) was drawn from the College of Nurses' of Ontario and Scott's directories. RNs who identified the ED, maternal/newborn, family practice, or community/public health, and physicians who identified family medicine, general practice, emergency medicine, or obstetrics/gynecology, as their primary practice domain were targeted for participation. The response rate was 72.2% (n = 722) for RNs and 32.8% (n = 328) for physicians. The response rate for the ED RN group is unknown. Of the 722 RNs who responded, 162 (22%) identified the ED as their primary location of practice. Four cases were unusable due to incomplete/missing data, resulting in a total of 158 participants. Based on a power analysis, this sample was found to exceed the minimum requirement for testing the study hypotheses. Using

Cohen's convention for a moderate effect size for multiple regression with three independent variables, alpha of .05, and a power of .80, a sample of 75 participants was required.

The vast majority of the RNs in the sample (n = 151, 96%) were female. The largest groups had been working in the ED environment for more than 20 years (n = 42, 27%) and for 1 to 4 years (n = 34, 22%), while the average length of time in nursing practice was 20.7 years (range = 2–43 years, SD = 9.95) (Table 1). Participants also varied widely in age. Slightly more than half (n = 92, 58%) were employed full time, the remainder part time (n = 64, 41%) or casual (n = 1, 0.6%), with 63% employed in non-teaching hospitals located across urban, rural, and mixed settings (Table 1). The majority (n = 122, 77%) of RNs had a college diploma, although some had a baccalaureate (n = 31, 19%) or a postgraduate degree (n = 6, 4%). While 71% (n = 113) reported that their employer expected them to screen for woman abuse, and only 28% had

Table 1 *Selected Demographic Characteristics of Sample (N = 158)*

Demographic	*N*	% of Total Sample
Practice setting		
Rural	35	22
Urban	73	46
Rural/urban	47	30
Missing	3	2
Type of organization		
Teaching	51	32
Non-teaching	100	63
Community	3	2
Other	2	1
Missing	2	1
Length of time in current area of practice		
Less than 1 year	1	.6
1 to 4 years	34	22
5 to 9 years	27	17
10 to 14 years	25	16
15 to 19 years	29	18
20+ years	42	27
Number of disclosures		
None	44	28
1 to 19	113	72
50 to 99	1	.6

never received a disclosure of abuse in their practice, relatively few (n = 62, 39%) had received any formal training in woman abuse. Forty-five percent (n = 70) of participants indicated that experiences of abuse in their personal lives led them to try and identify victims of abuse in their professional practice.

Data Collection

Data for the larger study were collected using a modified tailored design (Dillman, 2000). Potential participants were mailed a letter inviting them to take part in the study. One week later they were mailed a package containing a letter, a questionnaire, a stamped return envelope, and a small token of appreciation (a $2 restaurant voucher). Three weeks after the package mail-out, reminder letters and replacement questionnaires were sent to those who had not returned a completed questionnaire. Ethical approval for the parent study was obtained from the University Research Ethics board at the study site. Participants were assured of the anonymity of their responses and were informed that participation was voluntary and that they could refuse to answer any questions or withdraw from the study at any time. Return of a completed questionnaire constituted consent.

Measurement

The survey used in the parent study contained 43 items reflecting barriers and facilitators to screening for woman abuse. Regarding either their current practice or a hypothetical scenario, participants were asked to rate their agreement with each item on a four-point scale (1 = *strongly agree*, 4 = *strongly disagree*). Demographic data and information on personal and professional experiences dealing with woman abuse were also collected. Although the survey questions were not developed to operationalize concepts in Bandura's (1977, 1997) theory, many items were reasonable indicators of the four constructs of interest in this study (i.e., efficacy information, self-efficacy expectations, outcome expectancies, and behaviour). Therefore, measures of the four concepts of interest were developed from the pool of existing items in two phases.

Phase 1: Item classification and content validation. Two members of the research team classified items for their fit with theoretical definitions of Bandura's concepts of efficacy information, self-efficacy expectations, outcome expectancies, and behaviour. Seven of the 43 items were discarded as they were unclear, ambiguous, or a poor theoretical fit, leaving 36 items, of which 10 were congruent with Bandura's (1977, 1997) concept of efficacy information, 12 with self-efficacy expectations for assessing and responding to woman abuse, 10 with outcome expectancies, and 4 with behaviour (i.e., clinical responses to woman

abuse). Content validity indices (CVIs) were created for each scale based on the proportion of items deemed to be a good or very good fit with the underlying theoretical concepts (Waltz, Strickland, & Lenz, 1991). Four expert reviewers completed the CVIs, giving the following results: 0.50 for self-efficacy information, 1.00 for self-efficacy expectations, 0.80 for outcome expectancies, and 1.00 for clinical responses to woman abuse. Seven items were rated as somewhat of a good fit by one or more reviewers; six of these items related to self-efficacy information. Reviewer comments indicated that these ratings reflected difficulty assigning the items to only one source of efficacy information, and not the possibility that the item represented efficacy information more generally. Therefore, all 10 items were retained for the next phase of analysis.

Phase 2: Reliability, validity, and scale modification. For each of the four scales, an item analysis was computed to determine initial internal consistency, followed by exploratory factor analysis using principal components analysis (PCA) in order to assess the underlying structure of each scale (Table 2). Although there are no definitive rules regarding appropriate sample sizes for factor analysis, larger samples produce more stable estimates, with a sample of 300 participants sufficient for most analyses (Tabachnick & Fidell, 2001). Due to the relatively small size of the ED RN sample ($N = 158$), data provided by RNs working in obstetrical settings in the parent study were combined with those of the ED sample for this analysis, resulting in a larger sample ($N = 338$).

Table 2 ***Principal Components Analysis of Study Scales and Subscales***

Scale	Number of Items on Scale	Number of Factors	% Variance Explained	Factor Loadings	Alpha in Testing Sample	Alpha in ED Sample
Self-efficacy information	5	1	52.1	.63–.76	.74	.77
Self-efficacy expectations for assessing and responding to woman abuse	12	1	40.7	.10–.76	.85	.87
Outcome expectancies	10	1	35.8	.11–.77	.80	.75
Clinical responses to woman abuse	4	1	44.6	.56–.72	.56	.63

This decision was justified by the fact that RNs working in obstetrical settings and those working in the ED share similar professional and occupational characteristics, such as high patient turnover rates, care of families as well as individual patients, and a lack of continuity of care.

Prior to item analysis, selected items were recoded to ensure that all items reflected higher levels of the constructs they represented. Guidelines for retaining items based on item analysis include a minimum standard deviation of .40, item-total correlation between .30 and .70, a substantial decrease in the alpha if the item was deleted, and theoretical importance of the item to the construct. The results are shown in Table 3. With the exception of the self-efficacy information scale, items on each of the scales satisfied these conditions. On the self-efficacy information scale, five items were poorly correlated with the total score (r = -.12 to .12). Four of these tapped negative emotions, suggesting that they might represent a separate dimension of self-efficacy information.

Next, PCA with varimax rotation was completed for each scale using applicable items. Decisions regarding the number of factors to specify for further analysis were based upon the number of factors with Eigenvalues >1.0, inspection of the scree plot, and the pattern of initial factor loadings. Results of PCA suggested that items on three scales (self-efficacy expectations, outcome expectancies, and behaviour) each represented a strong single factor, with all items loading cleanly. In each of these analyses, the Eigenvalue and percentage of item variance accounted for by the first factor was considerably larger than for all other factors. Although 1, 2, and 3 factor solutions were computed for each of these scales, items in the 2 and 3 factor solutions did not load cleanly on one factor and the pattern of item loading was not interpretable, reinforcing the original interpretation that each of these item pools represented a single factor.

Initial PCA of the 10 self-efficacy information items suggested that either a 1 or 2 factor solution would fit the data. However, the most reliable and interpretable solution was found to contain a single factor composed of five items, representing training (mastery) and peer support (Table 3). Although a 2-factor solution was computed, after rotation four items representing training or support from peers loaded cleanly on the first factor, four items representing arousal loaded on the second factor, and two items did not load cleanly on either factor. Additionally, the reliability of each of the four item scales was lower than desired. Although the five-item solution resulted in the loss of five items from the item pool, the items that loaded on this factor fit together well from a theoretical perspective. The five items that were deleted all had low (< .30) item-total correlations based on the item analysis (Table 2), reinforcing

Table 3 *Item Analysis for Study Scales*

Item	Item Mean	*SD*	Total Correlation	Alpha If Deleted
***Self-efficacy information scale* (N = *331*)**				
I have little experience dealing with woman abuse	2.87	.67	.30	.40
Hesitant to ask about woman abuse due to lack of training	2.52	.72	.34	.38
Comfortable discussing practice situations with colleagues to help me deal with woman abuse	3.08	.51	.11	.46
Participate with colleagues to plan abuse programs	2.23	.72	.47	.33
I have support from colleagues to help me feel comfortable dealing with woman abuse	2.76	.69	.35	.38
I have opportunities for consultation re: how to deal with woman abuse	2.45	.76	.46	.32
I worry about my safety when asking about abuse	1.96	.64	-.06	.51
Think about legal outcomes when asking about abuse	2.16	.65	.12	.46
Frustrated re: lack of time to talk about woman abuse	2.38	.71	-.12	.54
Hesitant to ask, as I treat other family members	1.98	.59	-.07	.51
Alpha = 0.46				
***Self-efficacy for assessing and responding to woman abuse* (N = *322*)**				
Confident with my ability to address woman abuse	2.62	.71	.65	.84
Unable to help women experiencing woman abuse	3.11	.66	.35	.87
Able to support women experiencing abuse	2.76	.60	.51	.85
Prepared to ask if woman is at risk of abuse	2.78	.69	.69	.84
Prepared to ask if woman is not at risk of abuse	2.37	.66	.51	.85
Ready to respond if no disclosure of woman abuse	2.63	.58	.55	.85

Ready to respond if woman discloses abuse	2.86	.62	.71	.84
Prepared to share info with women who report no abuse	2.57	.60	.50	.86
Able to listen to disclosure stories	3.27	.51	.49	.87
Able to continue discussion of abuse after disclosure	3.01	.59	.54	.85
Comfortable supporting woman who isn't ready to deal with abuse	3.02	.53	.53	.85
Able to help woman access resources re: abuse	2.91	.68	.52	.85
Alpha = 0.86				
***Outcome expectancies scale* (N=*317*)**				
Since this is a private family matter, I shouldn't interfere	3.38	.59	.51	.78
There isn't anything I can do unless she asks for help	3.17	.59	.54	.77
I don't ask about abuse because she isn't ready to tell	3.09	.54	.45	.78
Reluctant to intervene in case I make matters worse	3.01	.61	.61	.76
I don't initiate the topic of abuse	2.82	.58	.47	.78
Afraid to ask in case she stops seeing me	2.98	.45	.38	.79
Hesitant to ask as it may be culturally acceptable	2.79	.66	.42	.79
Reluctant to ask as there are no community resources	3.03	.60	.38	.79
Hesitant to ask re: CAS and police involvement	3.12	.58	.48	.78
Offer no assistance since there is no effective treatment for abuse	3.48	.53	.46	.78
Alpha = 0.80				
***Clinical responses to woman abuse* (N=*331*)**				
I routinely inititate the topic of woman abuse	2.16	.68	.39	.50
I ask directly about woman abuse	2.69	.72	.38	.50
I may forget to ask about woman abuse	2.92	.66	.41	.48
I introduce the topic by discussing frequency rates	3.01	.53	.29	.57
Alpha = 0.59				

the interpretation that they did not measure the same constructs as the five items that were retained.

For each of the four scales, scores were computed by summing and averaging applicable items, such that the possible range was one to four. Three of the four scales satisfied the criterion for acceptable internal consistency of a new scale (alpha > .70) suggested by Nunnally (1978), with only the four-item behaviour scale falling short of this criterion (alpha = .59).

Data Analysis

Data were analyzed using the Statistical Package for Social Sciences (SPSS). Appropriate descriptive statistics were calculated for all study variables. Hypotheses 1, 2, and 3 were tested using Pearson *r* correlations. Hierarchical multiple regression was used to examine the extent to which efficacy information, self-efficacy expectations, and outcome expectancies predicted the clinical responses of ED RNs to woman abuse (hypothesis 4). Relationships between the study variables and demographic characteristics were investigated using appropriate measures of association. The level of significance for all analyses was $p < .05$.

Results

Descriptive statistics for the study variables are presented in Table 4. Mean scores for self-efficacy information, self-efficacy expectations for assessing and responding to woman abuse, and clinical responses to woman abuse were moderate. Interestingly, mean scores for outcome expectancies were slightly higher, indicating relatively strong perceptions of positive outcomes associated with responding to woman abuse. Few demographic variables were related to the study variables. Length of time in practice was weakly but positively related to self-efficacy information ($r = .20$, $p < .01$) as well as to ED RNs' clinical responses to woman abuse ($r = .20$, $p < .01$). Participants' perception regarding the extent to which

Table 4 ***Observed Means and Standard Deviations of Major Study Variables (N = 158)***

Variable	Mean	*SD*	Possible Range	Actual Range
Self-efficacy information	2.63	.52	1–4	1.20–4
Self-efficacy expectations	2.88	.39	1–4	2.08–4
Outcome expectancies	3.16	.32	1–4	2.50–4
Clinical responses to woman abuse	2.71	.46	1–4	1.50–4

their employers expected them to screen for woman abuse was related to all four study variables: self-efficacy information ($r = .33$, $p < .001$), self-efficacy expectations ($r = .28$, $p < .001$), outcome expectancies ($r = .29$, $p < .001$), and clinical responses to woman abuse ($r = .35$, $p < .001$).

A strong positive relationship was found between self-efficacy information available to ED RNs and their self-efficacy for assessing and responding to woman abuse ($r = .73$, $p = < .001$), providing support for hypothesis 1. Hypothesis 2 was supported by a moderate positive relationship observed between ED RNs' self-efficacy expectations for assessing and responding to woman abuse and their actual clinical responses related to woman abuse in the ER setting ($r = .55$, $p = < .001$). Consistent with theoretical expectations, ED RNs' outcome expectancies related to assessing and responding to woman abuse were positively related to their clinical responses to woman abuse ($r = .56$, $p = < .001$), providing support for hypothesis 3.

Hierarchical multiple regression was used to examine the extent to which self-efficacy information, self-efficacy expectations, and outcome expectancies predicted ED RNs' clinical responses to woman abuse (hypothesis 4). Since a departmental expectation to screen was positively related to the dependent variable, it was entered as a control variable at step 1. Consistent with Bandura's theory, self-efficacy information was entered at step 2, self-efficacy expectations at step 3, and outcome expectancies at step 4. All 158 cases were included in the analysis

Table 5 ***Predictors of Appropriate Clinical Responses to Woman Abuse***

Step	Multiple *R*	R^2	Adjusted R^2	Change R^2	*F*
1. Expectation to screen	.35	.12	.12	.12	21.39★
2. Self-efficacy information	.51	.26	.25	.13	26.53★
3. Self-efficacy expectations	.59	.35	.33	.09	27.28★
4. Outcome expectancies	.63	.40	.38	.05	25.50★
Variables in Equation	***B***		***Beta***		***T***
Expectation to screen	.11		.17		2.57★★
Self-efficacy information	.20		.02		.23
Self-efficacy expectations	.34		.29		2.82★★
Outcome expectancies	.44		.31		3.68★

★$p < .001$; ★★$p < .05$.

(Table 5). At step 1, the departmental expectation accounted for 12.1% of the variance in ED RNs' clinical responses to woman abuse, $F(1,156) = 21.39$, $p = < .001$. At step 2, sources of self-efficacy information contributed an additional 13.5% to explained variance, $F(1,155) = 26.53$, $p = < .001$, while the addition of self-efficacy expectations at step 3 resulted in a further 9.2% increase in explained variance $F(1,154) = 27.28$, $p = < .001$. At step 4, outcome expectancies accounted for an additional 5.3% of the explained variance $F(1,153) = 25.50$, $p = < .001$. The total variance explained by the model was 40.0%. With the effects of institutional expectations to screen for woman abuse held constant, self-efficacy information, self-efficacy expectations, and outcome expectancies explained 27.9% of the variance in the dependent variable, providing support for hypothesis 4. Each of the independent variables, with the exception of self-efficacy information, contributed uniquely to the prediction of RNs clinical responses to woman abuse, with outcome expectancies and self-efficacy expectations exerting the strongest effects.

Discussion

The results of this study support the utility of Bandura's (1977, 1997) theory of self-efficacy for understanding the clinical responses of ED RNs to woman abuse. Individually and collectively, each of the concepts in Bandura's theory was found to positively affect the ability of RNs working in the emergency department to appropriately assess and respond to women who have experienced abuse, thus extending validation of the theory to the ED clinical environment and context.

The moderate association found between efficacy information available to ED RNs and their self-efficacy for assessing and responding to woman abuse can be explained in several ways. RNs who work in the ED may have access to various types of efficacy information that, according to Bandura (1997), are the basis for developing self-efficacy. For example, the large number of abused women who present to the ED for care may result in increased opportunities for RNs to gain first-hand experience (i.e., mastery) or to observe the practices of other health professionals in caring for women who have experienced violence (i.e., vicarious experience). The majority of RNs in the sample had received at least one disclosure of abuse in their practice, providing a basis for reinforcing their own competence and encouraging other providers to develop appropriate care practices, through modelling or verbal persuasion, for women who have experienced abuse. Furthermore, the finding that RNs' length of nursing practice was positively related to self-efficacy information is consistent with the premise that greater experience may be a proxy for increased access to experiences that build self-efficacy. It is

not known whether RNs working in other clinical settings have similar levels of access to efficacy information to ED RNs or the effect of this on self-efficacy.

The self-efficacy of ED RNs for assessing and responding to woman abuse was positively associated with their clinical responses to woman abuse, which suggests that those with higher levels of self-efficacy are more likely to screen for woman abuse, follow up on overt cues provided by the women, and respond to such cues using appropriate support and referral. People tend to engage in activities in which they feel competent and confident (i.e., higher levels of self-efficacy) and, conversely, avoid activities that reflect low levels of confidence or self-efficacy (Bandura, 1977). Additionally, self-efficacy expectations influence the amount of effort individuals expend on certain activities and the degree to which they persevere in the face of adversity (Pajares, 2002). Given that many of the features of the ED make it a poor environment for addressing woman abuse, RN self-efficacy, when well developed, may be an important resource that can offset the environmental limitations of the ED, such as lack of privacy and time.

The strong positive relationship observed between outcome expectancies and clinical responses to woman abuse is consistent with the premise that beliefs and attitudes are powerful influences on behaviour (Gadomski, Wolff, Tripp, Lewis, & Short, 2001). Thus, the ED RNs who believed that assessing and responding to women who have experienced abuse is a futile endeavour were less likely to engage in appropriate clinical practices related to woman abuse. This finding is consistent with much of the literature documenting the barriers to screening for woman abuse, including negative attitudes and beliefs (Davis & Harsh, 2001). Conversely, ED RNs who held more positive beliefs about the benefits of assessing and responding to woman abuse were more likely to engage in appropriate clinical practices. The relatively high levels of positive outcome expectancy observed in this study contrast with the literature depicting health professionals as unsympathetic and uninterested in providing care to women who have experienced abuse (Bendtro & Bowker, 1989; Hamberger et al., 2004; Perley, 1992). It is possible that the conceptualization of woman abuse as a health issue has resulted in greater awareness and understanding of the nature of woman abuse, among health professionals, as well as increased commitment to providing care for women who have experienced violence as a legitimate part of professional practice, and not something to be relegated to other professions. External forces, both at the policy level and at the local level, may shape practice patterns. This premise is supported by the finding that participants' perceptions of organizational expectations to screen for woman abuse were related to RNs' clinical responses to woman abuse.

The finding that a combination of self-efficacy information, self-efficacy expectations, and outcome expectancies predicted ED RNs' clinical responses to woman abuse, and that each of these variables contributed uniquely to this prediction, is not surprising. Bandura (1977, 1997) proposes that motivation for behaviour is complex and is affected by environmental, cognitive, and behavioural factors. The combination of all three factors is thought to be more predictive of behaviour than any single concept on its own (Bandura, 1997). Professional nursing practice is a complex process that is shaped by many factors. The formation and maintenance of professional practice is not only an individual responsibility but also the product of one's work environment and the profession itself. The present findings suggest that the development of competent practice with women who have experienced abuse may require multiple factors. RNs who work in the ED must: (a) have confidence in their ability to address the needs of women who have experienced violence; (b) have access to means of building self-efficacy such as mentoring and support, expertise, and opportunities for ongoing education; (c) see the benefits of supporting women in order to address the effects of violence, and consider this as part of nursing practice; and (d) work in settings where there is organizational support for addressing woman abuse, including polices and systems to ensure that RNs have access to whatever time, space, and resources they need. Evidence showing that behaviour is reinforced by beliefs and personal actions is reported for other patient and professional populations as well (Gage et al., 1994; Holloway & Watson, 2002), which suggests that actions, whether direct or indirect, do not result from previous experience alone. Effective clinical practice is supported by a variety of factors, all of which must be in place in order to promote professionalism and appropriate care. Interestingly, educational interventions, which are common in self-efficacy research (Cook, 2004; Kara, 2004), are often aimed at modifying both internal and external factors in order to produce behavioural changes. In the ED setting, RNs could benefit from a similar approach in order to enhance their clinical responses to woman abuse.

Although assessing and responding appropriately to woman abuse may not be a standard expectation for RNs working in the ED setting, when such an expectation is in place it can have a positive influence on clinical responses. Such an expectation raises awareness and provides formal external validation of abuse as a health issue, supporting the need for RNs to develop the knowledge and skills necessary to respond appropriately as part of "good practice." Although there is no standard approach to the identification of woman abuse in the ED setting, individual ED departments may use a variety of identification practices, including both universal and indicator-based screening (RNAO, 2005).

This may encourage RNs to develop and use whatever knowledge and skills they need to support women who have experienced violence.

Strengths and Limitations

Although the findings of this study contribute to the knowledge base on RNs' clinical responses to woman abuse in the ED setting, several limitations must be pointed out. The use of a cross-sectional design limits our ability to draw causal inferences about the relationships between the study variables. Thus, the findings should be interpreted in terms of statistical prediction only. Additionally, the use of a self-report questionnaire, although more cost-efficient and timely than some other methods, presents the possibility of response bias (Polit & Tatano Beck, 2004).

The use of secondary data placed practical limits on the development of scales to measure concepts in Bandura's theory. It was not possible to modify scale items based on expert feedback, and there were few items that fit with theoretical definitions of some of Bandura's concepts, resulting in few items on some scales. Although the study scales demonstrated reasonable reliability and construct validity, further testing is warranted with larger, more diverse samples before they are used in other studies.

The use of a random sample drawn from the College of Nurses of Ontario directory is a strength of this study. However, it should be noted that this database relies on registrants' providing adequate and accurate information about their area of practice and experience as well as consent to release this information for research purposes. Although a random sample was drawn, there may have been systematic biases in the pool of professionals who agreed to participate. Despite these limitations, the sample was representative of Ontario ED RNs with respect to demographic variables, including age, gender, employment status, and educational background (Canadian Institute for Health Information, 2005). Replicating this study with a wider range of ED health professionals may provide further insight into similarities and differences across disciplines with respect to both self-efficacy and clinical responses to woman abuse, while providing a more profound understanding of the ways in which the work environment shapes both self-efficacy and the clinical responses of health professionals to women who have experienced abuse.

Conclusion

Health professionals, and the organizations within which they work, face the ongoing challenge of providing timely, sensitive, and competent care to women who have experienced abuse. Given that women often seek help in the ED for injuries and other health problems that result from

abuse, it is critical that effective practices be developed in this setting. The results of this study add to the support for Bandura's (1977, 1997) theory and demonstrate that the clinical responses of ED RNs to woman abuse are complex and should be understood in terms of self-efficacy and the factors that support the development of self-efficacy, their beliefs regarding the consequences of their actions, and the organizational structures within which they practise. The only way to ensure that women who have experienced abuse receive adequate, responsive care is to ensure that those providing the care are knowledgeable and are able to respond appropriately and professionally. Organizational structures, along with departmental policy and procedures, must be responsive to the needs of women who have experienced abuse and supportive of the professionals who implement the policies. Partnerships between the organization and the health professional are essential to ensuring that women who have experienced abuse receive high-quality care when they seek help in the ED setting.

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