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Commentary

Nursing Theories: Relic or Stepping Stone?

June F. Kikuchi

The title of Dr. Laurie Gottlieb's editorial in a recent issue of *CJNR* devoted exclusively to student research reports says it all — "The Quality of Student Papers Augurs Well for the Future of Nursing Research" (Gottlieb, 2002, p. 3). As Dr. Gottlieb remarks, the papers indicate that nursing students are using a diversity of research methods, participating in their supervisors' research programs, and being well mentored. Also, the unprecedented opportunities that are opening up for nurses interested in pursuing a career in nursing research identified in the same issue by Edwards, DiCenso, Degner, O'Brien-Pallas, and Lander (2002) are very encouraging.

On reading the student research issue of the Journal, I was impressed with the progress that has been made and is continuing to be made in developing research expertise in nursing. At the same time, since only one study in the issue appears to be based on a nursing theory, I found myself wondering what progress is being made in terms of meeting the clarion call of the 1970s and 1980s for research based on nursing theories (or what are referred to, at times, as conceptual models of nursing). Are we no longer heeding that call, thinking that it is not necessary to base our research on nursing theories — that nursing theories are a relic of our past? This just may be the case, given what has been happening in the nursing theories arena.

Recently, Dr. Peggy Chinn (2001) sounded an alarm about the fact that, increasingly, American nursing education programs are eliminating nursing theory courses and reverting to a medical orientation. In Canada, nursing theory is being incorporated into courses other than those concerned solely with nursing theory. In their survey of 87 nurses from 47 health-care agencies in Canada, Simpson and Taylor (2002) found that nurses from only one quarter of the agencies reported that a formal conceptual model of nursing was used at their facility. Events such as the recent health-care cutbacks, loss of nursing supervisory positions, and nursing shortages were thought to be compromising the implementation and maintenance of any model:

> With time and resources as issues, getting the job done left [nurses with] no time to reflect on whether the actions and interventions followed a given conceptual model. The focus could not be on applying some grand vision of what nursing is or ought to be; rather, respondents often had to work hard simply to focus on meeting basic expectations. (p. 26)

One respondent is reported as saying, "I am having trouble with the relevance of this topic [the use of conceptual models of nursing] at this time, when our profession is struggling with staff shortages and decreasing dollars" (p. 26).

Given the circumstances under which they are working, it is understandable why nurses in practice settings are not using nursing theories to the degree envisioned a few decades ago. It is less understandable in the case of nurses in academic settings, since they do not face the same mitigating factors. Are they not more free to use nursing theories in their educational and research programs? In fact, should they not be taking the lead in teaching and seeking innovative ways to implement and preserve nursing theories in nursing practice, education, research, and administration, within today's health-care climate? They seem, however, to be moving in the direction of thinking that it is no longer necessary to base nurses' activities on nursing theories. Are they correct? To answer that question, we need to understand why nursing theories were developed in the first place and the context in which they were developed and in which they exist today.

In the 1960s and 1970s, as nursing struggled to shed its handmaiden relationship to doctoring and to become a discipline and profession in its own right, nurse scholars recognized that, if that goal was to be realized, the question *What is nursing?* had to be answered. Various conceptions of nursing were then developed by nurses who came to be known as "nurse theorists." Each conception was a particular nurse theorist's view of nursing. If nurses were to base their activities in one or another nurse theorist's conception of nursing or nursing theory, it was thought that *nursing* practice, education, research, and administration could then be developed. Since an increasing number of nurses were beginning to engage in research, but in research that was *not* based on a nursing theory, nurse researchers were informed about the need to base their research on nursing theories, so that *nursing's* body of knowledge could be developed. Consequently, nurses began to study and use nursing theories in educational, practice, and research settings.

All, however, did not go smoothly. Questions arose about the theories. Were they really theories? Some thought they were more conceptual models or conceptual frameworks than theories. Others thought that some were theories while others were not. Still others wondered how the theories were different from philosophies and ideologies. Issues emerged regarding the validity, abstractness, and co-existence of the theories, since some were contrary to others. Thorne (2003) insightfully points out that as our knowledge in such matters as worldviews and paradigms has increased, so too have our questions about nursing theories.

The fact that the issues concerning the nature of nursing theories remain unresolved to this day does not bode well for the future of nursing theories. Some proponents of nursing theories seem to think that if we were to overcome our lack of understanding (or our misunderstanding) of the nature and purpose of the theories, we would find that the issues which have emerged are non-issues — that the problem lies not with the theories but with us. Perhaps the problem lies partly with the theories and partly with us.

The nurse theorists started what will in hindsight, I think, be viewed as of historical importance. They reminded us of the importance of defining the nature of nursing. Their purpose in developing nursing theories — to define nursing in order to establish it as a discipline and profession in its own right — remains valid. The problem does not lie with their purpose. Rather, it has to do with the fact that nurse theorists, especially the earlier theorists, were working at a time when the pursuit of scientific theories was the fashion and "nursing [was] aligned with scientific inquiry" (Fry, 1992, p. 86). With the aim of preparing researchers who could develop scientific theories, graduate nursing programs focused almost exclusively, if not exclusively, on the scientific method. Under these conditions, nurses came to view all nursing questions as being scientific in nature and as requiring a scientific answer, including the question *What is nursing?*, which is philosophic in nature and thus ought to be answered philosophically.

As nurses came to realize the importance of philosophy in understanding the nature of nursing, some nursing theories came to be based on philosophic theories, or on both scientific and philosophic theories, and attempts were made to identify the philosophic underpinnings of earlier theories. What has not been clearly understood amidst all of these developments, however, is that the question *What is nursing?* is a philosophic one and must be answered philosophically, not scientifically, and that a proper philosophic response takes the form of a philosophic nursing theory (Kikuchi, 1997).

Let us now return to the question of whether it is still necessary to base nurses' activities on nursing theories. Those who think it is still necessary will have to continue dealing with entities whose nature confounds us and will likely continue to confound us, given the context within which they were developed. Those who think that it is no longer necessary to base nurses' activities on nursing theories will have to decide what comes after nursing theories. The papers published in the nursing student research issue of *CJNR* might be an indication that some have decided that nursing theories need not be replaced. This decision would likely be agreeable to those who have complained that nursing theories are constraining and fetter nurses' activities, and to those who are in favour of blurring or eliminating disciplinary boundaries. Is this really the path we ought to take?

Given the current changes taking place in the health-care system, which threaten to dismantle the nursing profession and turn it into other than what it essentially is, it is more urgent than ever that we continue to seek an answer to the question *What is nursing?*, but to seek it by philosophizing. In essence, I am recommending that we take the next step — move beyond the extant nursing theories to the development of a sound, undogmatic, and practical *philosophic nursing theory* of the nature, scope, and object of nursing. Doing so will give us the philosophic basis we need to support our endeavours in practice, education, research, and administration as legitimate and vital in the arena of health care.

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Author's Note

Correspondence concerning this commentary may be directed to Dr. June F. Kikuchi, 11338 – 126 Street, Edmonton, Alberta T5M 0R4 Canada. Telephone: 780-451-4096. E-mail: June.Kikuchi@ualberta.ca

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June F. Kikuchi, RN(Retired), PhD, is Professor Emeritus, Faculty of Nursing, University of Alberta, Edmonton, Canada.

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Guest Editorial and Discourse

Incorporating Culture and Gender into Multiple Intervention Programs

Judy Mill and Nancy Edwards

The first issue of *CJNR* that focused on Culture and Gender was published in 1996. In her guest editorial, Dr. Joan Anderson reminded readers that culture and gender are socially constructed. She also presented important theoretical challenges related to the multi-layered context of people's lives and the complex interrelationships of race, class, and gender. Dr. Anderson called for a new discourse based on these theoretical insights. The challenges of multi-layered context and complex interrelationships are still highly relevant for researchers addressing matters of culture and gender. In this issue of *CJNR*, the contributors advance the dialogue initiated by Dr. Anderson by incorporating culture and gender considerations into the development of theory, the choices of methodologies and methods, and the design of interventions. We argue for the development of multiple intervention programs[1] that integrate gender and culture as key determinants of health.

Theory Development

The papers in this issue of the Journal pose important challenges for researchers in relation to theory development. Are theory and knowledge universally relevant or culturally specific? Does this depend on the context? Jakubec and Campbell highlight the dangers inherent in the indiscriminate export of knowledge to countries with a different worldview from the one where the knowledge was developed. Their thoughtful analysis of the use of a World Health Organization mental health survey in The Gambia brings into sharp focus the relationship between theory and worldviews: theory is embedded in a particular worldview, and the two are inextricably linked. The underlying assumptions of a theory must be examined before it is used in another setting. Questions

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[1] Multiple intervention programs use a combination of intervention strategies that target multiple levels of the socio-ecological system (e.g., individual, family, community, organization, and policy) to address health issues. These programs are sometimes referred to as comprehensive programs.

to consider when contemplating the use of a theory in different settings and cultures include: How do worldviews related to health differ among cultures? What are the different contextual features that may influence the utilization of theory? How might cultural differences influence the measurement of concepts within the theory?

Researchers investigating culture and gender must guard against the tendency to adopt their most comfortable philosophical position related to theory development. They must be willing to risk considering an alternative philosophical stance to transform the way research questions are framed. The thoughtful analysis of gender and stress-related disorders provided by Carter-Snell and Hegadoren offers an interesting perspective in relation to the development of gender-sensitive theory. Their review of the differential contribution of physiological and psychosocial variables in the development of stress disorders in men and women challenges readers to critically review their own presuppositions in relation to theory development generally and theory development in stress disorders specifically. Carter-Snell and Hegadoren raise concerns regarding potential biases inherent in the use of "categories" outlined in the *Diagnostic Services Manual, 4th Edition* (DSM-IV) to assess the prevalence of stress disorders. They argue that, instead of relying on groups of symptoms, we must identify and validate distinct concepts underlying stress disorders to determine their causal influences and relationships. The authors also challenge the notion of gender-sensitive theory as limited to the experience of women. They advocate for the development of a theory on stress disorders that is sensitive to the voice of both men and women.

Methodology and Methods

Conducting research within culturally, racially, and linguistically diverse communities is the reality in Canada today. The heterogeneity of communities demands the use of diverse methodologies and methods to tease out the influence of culture and gender on health and to develop interventions to mediate this influence. A diversity of methods and methodologies is reflected in the papers featured in this issue. Institutional ethnography (Jakubec & Campbell), ethnography (Banister, Jakubec, & Stein), grounded theory (Gage-Rancoeur & Purden), longitudinal survey (Secco & Moffatt), and retrospective, correlational survey (Dahinten) designs were chosen to explore a range of problems, while interviews (Gage-Rancoeur & Purden), focus groups (Banister, Jakubec, & Stein), participant observation (Banister, Jakubec, & Stein; Gage-Rancoeur & Purden), and standardized questionnaires (Dahinten; Secco & Moffatt) were used to collect data in order to answer questions related to these problems.

A gendered analysis of an experience or phenomenon may also influence the choice of research design. For example, Gage-Rancoeur and Purden's knowledge that adult daughters were more likely than sons to provide care to parents led them to focus their study on the caregiving experiences of daughters of cardiac patients. Banister, Jakubec, and Stein argue that a critical feminist perspective was required for their exploration of power inequalities in the dating relationships of adolescent girls. Furthermore, they suggest that the use of focus groups provided the adolescents with a safe environment in which to share their concerns about their dating relationships and to begin reflecting on the power imbalances within these relationships.

The use of diverse methods and methodologies to explore health issues among different cultural and linguistic populations is not without challenges. Some of the difficulties related to the translation and adaptation of psychometric instruments in cross-cultural or cross-linguistic settings are expertly summarized in the Designer's Corner feature article prepared by Kristjansson, Desrochers, and Zumbo. These authors provide a critical overview of common problems and pitfalls encountered by researchers during the translation of instruments that may lead to bias. They review problems related to lack of conceptual equivalence, lack of semantic equivalence, and differences in cultural norms regarding behaviour. Furthermore, Kristjansson and colleagues detail strategies to assist with the development of reliable and valid measurement instruments for cross-cultural or cross-linguistic research.

Secco and Moffatt's exploration of the home environment of Canadian adolescent mothers highlights some of the challenges associated with measuring the influence of ethnicity on health. They suggest that some of the differences in quality noted in the home environment of Caucasian and Métis/First Nations adolescents may be attributable to the confounding influence of poverty rather than mothering. Secco and Moffatt also point out that the explanatory power of the ethnicity variable may be compromised due to the ability to delineate only two broad ethnic categories, Caucasian and Métis/First Nations, thereby overlooking the diversity within each group.

Interventions

Health is determined by a complex interaction of factors, including culture and gender. For optimal efficacy and efficiency, intervention programs must focus simultaneously on the multiple determinants of health, rather than on a single determinant. A multiple intervention approach, based on a social-ecological framework (Smedley & Syme, 2000), is advocated for the design of health interventions. Multiple intervention programs address not only the individuals at risk, but also risk-producing environments and policies, by focusing on the individual, social, cultural, educational, political, and economic determinants of health. Ideally, multiple intervention programs are integrated across several settings such as home, workplace, and community. Programs must also ensure optimal sequencing of interventions to maximize the synergy between intervention strategies.

Research has explored and substantiated culture and gender as a determinant of health. Considerably less progress has been made, however, in incorporating this knowledge into the design of health interventions. What is the basis for this omission? Perhaps it is related to culture and gender being considered "non-modifiable" risk factors. Many researchers acknowledge the influence of these factors but believe that little can, or should, be done to modify them. This may be an accurate assessment if gender is narrowly delineated as sex and culture is equated with ethnicity. However, the conceptualization of gender and culture as the socially constructed roles of men and women brings these concepts within the realm of "modifiable." In addition, our desire to be culturally sensitive and politically correct and our reluctance to challenge the status quo may restrain our efforts to ensure that health interventions are designed to mitigate the influence of culture and gender. For example, culturally specific attitudes and practices may increase women's vulnerability to HIV infection. Long-standing beliefs that limit women's power in relation to men, practices that favour the education of boys over girls, and policies that result in higher levels of poverty among women have been documented in Sub-Saharan Africa (Aggleton, 1996; Campbell, 1997; Mill & Anarfi, 2002; United Nations Development Programme, 1997). These beliefs, practices, and policies increase women's vulnerability to HIV infection. Although they are embedded in the complex fabric of a culture, it is essential that their impact be critically examined and if necessary challenged. The words of Mohandas Gandhi almost a century ago may be germane to the conundrum faced by researchers trying to balance respect for cultural differences with the responsibility to challenge those differences that have a negative impact on health: "It is good to swim in the waters of tradition, but to sink in them is suicide" (Editorial in *Navajivan*, June 28, 1925).

Several of the articles in this issue of the Journal have implications for health interventions that are based on a gendered analysis of an experience. Gage-Rancoeur and Purden's exploration of the caregiving experience of the daughters of cardiac patients substantiates the growing awareness of the significant contribution and commitment of women as caregivers. The compelling account of the health consequences of the unequal power dynamics in the dating relationships of adolescent girls provided by Banister, Jakubec, and Stein documents the need for health interventions that challenge mainstream culture and foster the empowerment of adolescent girls. Similarly, Dahinten's work supports the notion that the social construction of gender influences the perpetration of various forms of sexual harassment among males and females and by males and females. Furthermore, her finding that the coping strategies of girls, in response to sexual harassment, are different from and more varied than those of boys points to the need for differential prevention interventions. Dahinten's work increases our understanding of sexual harassment as a function of gender and reminds us that gendered analysis must include the experiences of boys and men in addition to those of girls and women.

The Future

The breadth and depth of the papers published in this issue demonstrate that a focus on culture and gender is alive and well on the landscape of nursing research in Canada today. The next generation of research on the influence of culture and gender on health must demonstrate the integration of mixed methodologies, merging the strengths and perspectives of qualitative and quantitative methods. In addition, there is a need for the testing of interventions that incorporate sensitivity to or modification of the impact of culture and gender on health.

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Judy Mill, RN, PhD, is Assistant Professor, Faculty of Nursing, University of Alberta, Edmonton, Canada, and holds a CHSRF (Canadian Health Services Research Foundation) post-doctoral fellowship. Nancy Edwards, RN, PhD, is Professor, School of Nursing and Department of Epidemiology and Community Medicine, University of Ottawa, Ontario, Canada, and holds a CHSRF/CIHR (Canadian Institutes of Health Research) Nursing Chair in Community Health.

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Résumé

«Alors, qu'est-ce que je dois faire moi?»: Les préoccupations des adolescentes en matière de santé, en rapport à leurs fréquentations amoureuses

Elizabeth M. Banister, Sonya L. Jakubec,
et Judith A. Stein

Cette étude ethnographique explore les préoccupations en matière de santé de 40 adolescentes âgées de 15 et 16 ans, en rapport à leurs fréquentations amoureuses. Les résultats révèlent la présence d'une interaction complexe dans ces relations entre les dynamiques relationnelles filles / garçons et les processus de socialisation. Dans l'intention d'éviter des comportements pouvant mettre leur santé en péril, les participantes devaient composer avec des relations de pouvoir et négocier avec leurs partenaires et leurs pairs. Paradoxalement, tout pouvoir supplémentaire qu'elles acquéraient risquait de mener à de violentes confrontations, à une perte de pouvoir et à d'autres compromis relativement à leur santé. Le désir chez les filles d'avoir un partenaire surpassait leur désir d'éviter certains éléments pouvant menacer leur santé, comme l'abus de substances et les comportements violents. Cette dynamique peut être comprise en fonction d'un déséquilibre de pouvoir s'inscrivant dans un système patriarcal. Les résultats soulignent la gravité des problèmes dans le domaine de la santé des adolescentes et le besoin de procéder à des interventions remettant en question la culture dominante et favorisant l'autonomisation des adolescentes.

Mots clés : adolescentes, pouvoir, santé, fréquentations amoureuses, ethnographie

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"Like, What Am I Supposed to Do?": Adolescent Girls' Health Concerns in Their Dating Relationships

Elizabeth M. Banister, Sonya L. Jakubec, and Judith A. Stein

This ethnographic study explored the health-related concerns, within dating relationships, of 40 female adolescents aged 15 and 16. The results reveal a complex interaction of male/female relational dynamics and socialization processes in these relationships. To avoid behaviours risky to their health, participants had to negotiate power relationships with partners and peers; yet, paradoxically, any increase in their power could increase the threat of violent confrontation, loss of power, and further health compromises. The girls' desire to have a dating partner outweighed their desire to avoid health threats such as substance abuse and violence. This dynamic can be understood in terms of patriarchal power imbalances. These findings point to the gravity of adolescent girls' health issues and the need for interventions that challenge mainstream culture and that foster empowerment among female adolescents.

Keywords: adolescent girls, power, health, dating relationships, ethnography

Background

Recent increases in options and opportunities for adolescent girls (Azzarto, 1997) could place their health at risk, since they may experience difficulty in asserting their desire to take advantage of these options and opportunities (Brown, 1991). Health issues such as adolescent pregnancy and parenthood, unprotected sex, sexually transmitted diseases including HIV/AIDS, smoking, drug and alcohol abuse, and date-related and partner violence are major public concerns (Koniak-Griffin, Mathenge, Anderson, & Verzemnieks, 1999). All of these health issues can be exacerbated by power imbalances in relationships. There is considerable evidence that rates of sexual assault and harassment, relational victimization, and date-related violence are most prevalent in early adulthood (Boney-McCoy & Finkelhor, 1996; Halpern, Oslak, Young, Martin, & Kupper, 2001; Pedersen & Aas, 1995), with lower age being a consistent risk factor for both experiencing and perpetrating acts of violence (Silverman, Raj, Mucci, & Hathaway, 2001). Approximately 40% of adolescents experience physical aggression in dating relationships (Gray & Foshee, 1997; O'Keefe, 1997), with significant numbers remaining in such relationships despite the abuse (Bethke & DeJoy, 1993; Sugarman & Hotaling, 1989). Adolescent girls are three to four times more likely than boys to experience emotional or physical relational injury (Sugarman & Hotaling), yet they have difficulty recognizing that such injury is being inflicted (Banister & Schreiber, 2001). In such relationship, girls have difficulty protecting themselves against unwanted sex and are virtually unable to protect themselves against HIV/STDs or unplanned pregnancy (Holland, Ramazanoglu, Scott, Sharpe, & Thomson, 1990).

During adolescence, individuals tackle the developmental task of forming an adult identity by making sense of themselves in the larger social context. For young women in Western society, this struggle is characterized by heightened vulnerability. Patriarchal culture brings pressure upon them to conform to the conventional ideal of female passivity, the "good and perfect" girl (Heilman, 1998; Taylor, Gilligan, & Sullivan, 1995). Related cultural pressures to please through caring, nurturing, self-sacrifice, and passivity influence their relationships with self and with others (Tolman, 1999). In situations of conflict in particular, if they negotiate openly, sharing their thoughts and feelings, they run the risk of violating the ideal of female passivity. It has been suggested that societal expectations surrounding femininity that devalue adolescent girls and demand their passivity are behind many of the common health concerns for this group (Slater, Guthrie, & Boyd, 2001). Cultural ideals as presented in the media also put pressure on adolescent girls to strive for a particular body image (i.e., slender figure with large breasts and a small waist) designated as "beautiful." These pressures contribute to health issues related to self-esteem and body image, such as eating disorders, anxiety, depression, and violent behaviour (Mahorwald, 1995; Pipher, 1994).

Many female adolescents are victims of interpersonal violence as a result of power imbalances in their relationships. Power imbalance is the antecedent to abusive behaviour and victimization (Dutton, 1995; Walker, 1989). Abusiveness, whether mental or physical, on the part of the male partner in a dating relationship presents a serious health risk for adolescent girls.

To summarize, dating relationships provide a microcosm within which are played out the patriarchal ideals of mainstream culture: women must be passive and servile; women must have beautiful bodies; women must suppress their own needs in interpersonal conflicts with men. These ideals can have negative health effects for adolescent girls, as they contribute to risky sexual behaviour, abuse of drugs and alcohol, poor lifestyle such as harmful eating habits, low self-esteem, and acquiescence to violent behaviour on the part of a dating partner.

There is a paucity of literature on young women's perspectives on their own health (McKay & Diem, 1995), particularly as it relates to their dating relationships. Considering the risk for serious health issues inherent in such relationships, an essential step in planning health-promotion interventions for female adolescents is to solicit their perspectives (Banister & Schreiber, 2001). The present investigation formed the first phase of an extensive study designed to describe adolescent girls' health issues and to develop interventions targeting these issues. Forty adolescent girls (aged 15 and 16) from a mid-sized city on the west coast of Canada were recruited. During this first phase, completed in June 2002, the health concerns of the young women were explored and themes identified. These themes will be used in developing and testing a variety of group interventions with a population of western Canadian female adolescents.

Theoretical Framework

The study was approached from a critical, feminist, and relational perspective on human development. A critical perspective assumes that knowledge is created rather than discovered and that "methodologies based on critical theory provide a critique of ideology, attempt to reveal hidden power imbalances to achieve emancipation, and ensure that knowledge is available in the public domain" (Mill, Allen, & Morrow, 2001, p. 115). A feminist perspective recognizes gender inequities, power inequalities, and the oppression of women and uses that knowledge for emancipatory purposes (Miller, 1991). A relational perspective assumes that young women's development integrates their search for selfhood with their search for connections (Gilligan, 1990) and that adolescent development is stimulated by caring, supportive, and trusting relationships (Sullivan, 1996).

Method

In this study an ethnographic research approach was taken (Denzin, 1997; Tedlock, 2000) in order to gain an emic, or insider, perspective of participants' health-related issues in their dating relationships. In this inductive research method, the participants' "thick descriptions" (Geertz, 1973), which convey the central meanings of their experiences (Denzin, 2000), provide the empirical data (Fetterman, 1989). The research question was: *What are adolescent girls' health issues related to their dating relationships?*

Sample

Recruitment notices were placed on bulletin boards at five sites: two traditional secondary schools, one alternative secondary school, one First Nations school, and one youth clinic. Each site was known for its ethnic and socio-economic diversity and had a relatively large number of adolescents considered vulnerable (at risk for unplanned pregnancy, dropping out of school, etc.). A site "gatekeeper" (e.g., teacher, school counsellor, or clinic nurse) obtained the names of girls who had been in a relationship for 1 month or longer (Wolfe, Wekerle, & Scott, 1997) and who were willing to participate in the study. The lack of difficulty in accessing participants indicated that the staff and youths at these sites attached a high degree of significance to young women's dating concerns and wished to learn more about these concerns by supporting the research.

The university's human research ethics committee reviewed and approved the study. The youth clinic, the school district, and the Chief of the band associated with the First Nations school also reviewed the study and consented to its being conducted in their communities. Written informed consent was obtained from each participant prior to data collection. Each girl was told that her participation was voluntary and that she could withdraw from the study at any time without repercussions. The participants were informed about the limits of confidentially and anonymity within each group. To reduce the risk of violation of confidentiality, each group was invited to create its own "code of conduct"; this served to illustrate the importance of respecting the principles of confidentiality and anonymity within the group (Banister, 2002).

The sample consisted of 40 adolescent girls (15 and 16 years of age) comprising five groups of approximately eight members each.

Focus-group sessions were held during regular school hours at the school sites, which resulted in a very low attrition rate for all four of the school-based groups (only two participants withdrew, both due to scheduling conflicts). The focus group at the youth clinic met after school; most of those participants lived nearby. At that site, one participant dropped out after the first session and another joined the group at the second session.

Data Collection

The research team comprised five graduate-student research assistants, who facilitated the focus groups, and a principal researcher, who saw to the research design and the training and supervision of the research assistants. The team met weekly for ongoing training and supervision in qualitative data collection and analysis. Group discussions (Madriz, 2000; Wilkinson, 1999) and participant observation (Adler & Adler, 1994; Angrosino & de Perez, 2000) were used to gather qualitative data.

Approximately four 90-minute focus-group sessions were conducted with each of the four groups between September and December 2001. The sessions were audiotaped and later transcribed. An assortment of healthy refreshments was offered at each session to help build rapport (Banister, 2001).

The research assistants also gathered data by observing individual members and interactions within each group. They kept field notes to record observations of three central features of the social situation, "place, actors and activities" (Spradley, 1980, p. 39). They also noted details on the social situation at each site such as informal interactions between male and female students in the school corridors.

When engaged in participant observation — an integral aspect of the ethnographic method — the research assistants simultaneously observed and participated, observing their own participation as well as that of the adolescents (Escobar, 1993). Accordingly, they kept reflexive journals containing personal accounts of their own experiences and those of the participants (Banister, 1999; Tedlock, 2000). These accounts were woven into the data collection and analysis process and became part of the analytical construct of the study (Bogdewic, 1992). The principal investigator also kept detailed field notes and a reflexive journal during informal visits and meetings at each site prior to, during, and after the data-collection period. The research assistants communicated electronically with each other and with the principal investigator in order to convey important observations made during the weekly focus-group sessions and at the sites.

Data Analysis

In analyzing the data, the researchers attempted to uncover the meaning for the participants of health issues within their dating relationships (Spradley, 1979). The research assistants analyzed all the transcriptions of their own focus-group sessions and at least one transcription from each of the other sites; the principal investigator analyzed the entire data set. Concurrent with the process of individual analysis, the research assistants and the principal investigator held meetings to compare and contrast emerging categories and to identify preliminary themes (Kvale, 1996). The use of several analysts, and thus a number of perspectives, serves to enrich the analysis (Kvale). The team engaged in a recursive process of collecting and analyzing data, followed by further questioning and observing, until they deemed that "theoretical saturation" had been reached and new instances of the phenomenon would not lead to new categories (Strauss & Corbin, 1994).

Prior to and during each focus-group session, the research assistants discussed the emerging analysis with the participants, to verify the analysis and allow the adolescents to collectively share further insights into their dating experiences (Lincoln & Guba, 1985). In addition, the principal investigator checked with four groups of participants to verify the accuracy of the final thematic analysis (Lincoln & Guba). One of the co-authors, an independent master's-level nurse with expertise in adolescent mental health issues, conducted an external credibility check by reading a random selection of transcripts to independently identify major categories. This helped to ensure the applicability of the results (Lincoln & Guba). In addition, the results were shown to a number of practitioners at various sites in the community, who perceived them as congruent with their practice experiences.

Results

Ethnographic Text

Issues of power and control played an important part in the participants' dating relationships, and the power was unbalanced in favour of the boys. The influences of patriarchal thinking were evident. The participants constructed the meaning of their relationships in the context of their peers of both sexes, and they experienced difficulties in making choices in their lives. In terms of their intimate relationships, these difficulties were profound and complex, involving issues of power and control, sexual politics, the use of drugs and alcohol, the risk of abuse and violence, and the dilemma of whether or not to terminate an abusive relationship. There were clear links between the way in which dating relationships were conducted and the potential for negative health consequences.

Paradoxes of Power and Control: "They Try to Control You"

The participants saw their dating relationships as fraught with power imbalances, so that their behaviour was influenced by their dating partners. According to Wolfe, Wekerle, and Scott (1997), controlling behaviours in dating relationships are designed to elicit submission and obedience. The girls reported that their boyfriends expected them to behave submissively: "They want you to wait by their side to be told what to do." Such expectations were compounded by a tendency for the participants to define themselves as passive objects of male attention and power (Heilman, 1998) or as the target of physical and emotional abuse: "They treat me like stuff, like, really bad."

The participants reported that they spent an excessive amount of time — much more than their boyfriends — ruminating about what the other partner was thinking or feeling and about the status of the relationship. They stated that this was particularly troublesome after a confrontation or if the boy was not fully committed to the relationship. The participants' focus continually drifted to their attempts to explore the experience of the boy. During periods of rumination, they wondered how they could have handled an incident effectively: "I wonder what he's thinking." "I'm always wondering how sincere they are about you." "How long is it going to last?" "How much does the guy really like me?"

One participant expressed her anguish over a recent incident, assuming responsibility for the way it had unfolded:

> *You just think and you over-think, like, too many things, and you drive yourself crazy, like, what could I have said? or what did I do?*

The participants often expressed inappropriate concern for the partner, assuming a high level of responsibility for the functioning of the relationship that could have unhealthy or even dangerous consequences for them such as self-blame or lack of assertiveness.

The fact that the participants were preoccupied with their own role in maintaining the relationship is not surprising given that, historically, female reasoning has been based on concern for the "other" (Gilligan, 1982). The participants repeatedly described feelings associated with worry, preoccupation, and confusion. Much of their preoccupation pertained to fear of relational disconnection, particularly if they were unsure about their boyfriend's commitment. This fear of loss is understandable given the social pressure on a young woman to have a boyfriend (Banister & Schreiber, 2001); indeed, an adolescent girl's definition of self in the social order is strongly influenced by the "subculture of boyfriend and girlfriend relationships" (van Roosmalen, 2000, p. 211).

The underlying quality of the relationships was one of disempowerment and anxiety for the female partner. From a position of disadvantage in the relationship, the girls had to negotiate behaviour that could have profound and long-term health implications in terms of sexuality and the use of drugs and alcohol.

The Role of Sex Within the Relationship

The participants described sex as their means of negotiating control within the relationship. They consistently described sex as "part of what you do" or as part of the negotiation to "keep the guy." Rarely did they speak of their own sexual desires or enjoyment. These findings are consistent with Hird and Jackson's (2001) conclusion that the sex decisions of adolescent girls centre on accommodating male needs and maintaining the relationship, thus affirming the "heteronormative role [of women] as the gate-keepers of active male sexuality" (p. 41). The participants were so fearful of "losing the relationship," and thus their social status, that they subordinated their own needs to the sexual needs (and likely social status needs as well) of their boyfriend.

Power differentials influence a girl's ability to negotiate safer sex (Holland, Ramazanoglu, Scott, Sharpe, & Thomson, 1992). A young woman's ability to engage in safe sex depends not only on her own personal empowerment but also on her power relationship with her boyfriend (Amaro, 1995). A boy's negative reaction to condom use will tend to reduce condom use (Harlow, Quina, Morokoff, Rose, & Grimley, 1992). Many participants reported engaging in unprotected sex despite the health risks. When asked what advice they would give other girls, they overwhelmingly stated that they would tell them to wait until they are older before agreeing to have sex with their boyfriend — fitting advice in a social milieu in which girls' sexual experiences are determined by patriarchal, gender-based stereotypes that disempower females to the extent of compromising their physical, emotional, and social well-being (van Roosmalen, 2000).

Paradoxical Mediators of Control in Relationships: Drugs, Alcohol, and Violence

Just as the participants were disempowered to act in their own interests sexually, so they were disempowered in terms of drug and alcohol use. Their behaviour appeared to be influenced, again, by their acquiescence to the patriarchal attitudes of their partner. Conflict around drug and alcohol use was as common as conflict around sexual behaviour. Indeed, the two issues often went hand in hand, invariably in unhealthy ways.

The participants' accounts featured the various and conflicted influences of alcohol and drug use on sexual negotiations. In many of the sessions, the girls presented alcohol or drugs as a "normal" aspect of parties and dating. They reported that when they used drugs or alcohol at parties, they occasionally engaged in sex. Some reported that partying caused them to shed their sexual inhibitions, which in some instances was accompanied by pressure from boys to take part in sexual "threesomes." Many girls who experienced a loss of control in such situations avoided taking personal responsibility for their own behaviour concerning alcohol, drugs, and sex. "He got her all drunk and everything," said one participant, implying that the boy was entirely responsible for a girl's inappropriate drug or alcohol consumption and subsequent risky sexual behaviour.

Faced with the options around their sexual behaviour, the girls often had to choose between, on the one hand, consuming drugs or alcohol — against their better judgement — for the "sake of the relationship," and, on the other hand, refusing to indulge and, presumably, placing the relationship at risk. Neither option held a great deal of appeal for the girl, yet a decision would be made; if she did not make a choice, the ultimate decision would, by default, be left to the boy.

The impact of decisions regarding drug and alcohol use was apparent in non-sexual as well as sexual aspects of the relationship. One participant said she and her boyfriend would "go at each other" when one of them wanted to use marijuana and the other did not: "That's probably the biggest problem that I have in my relationship." Other participants reported feeling angry when they were not interested in taking drugs or drinking and the boy was: "I just sat there and watched him get drunk." Some who drank alcohol with their boyfriend said the effects were highly destructive for the relationship: "I don't like drinking that much, because, I don't know, I always…we always seem to get into fights when we drink"; "I'm afraid to drink…he gets aggressive and I get emotional." These difficulties, however, did not provide enough impetus for some of the participants to change their drinking patterns, as the following discussion reveals:

> Participant 1: *Yeah, like, you know, we've gone into fights before and we…like, you know, we get, like, I yell at him and he yells at me.*
>
> Participant 2: *When you fight, it's big!*
>
> Participant 1: *Yeah, like, we build anger up inside of us and we go off ranting and all of a sudden one thing sets us off.*
>
> Participant 3: *You should not drink together!*

In contrast, other participants described illegal substances as a "social lubricant," enabling them to be more honest in expressing their feelings and relational needs. When a young woman fears that open communication will disrupt the relationship, she may decide to use substances as a "communications crutch," to help her express her concerns to her partner (Brown & Gilligan, 1992). For the participants, drugs were both a means of expressing their feelings in spite of this fear and a means of escaping their fear and suppressing their feelings. Some described alcohol and drugs as a futile means of alleviating the pain they endured in the dating relationship. One girl confided:

> *I just started drinking more and staying away from him. Some people are depressed and they keep on drinking. They think drinking will help [ease the pain] but it just makes it worse… I learned from lots of experience.*

Adolescent girls may experience difficulty in forming a strong, egalitarian female self (van Roosmalen, 2000) in the face of pressures to comply with their boyfriends' wishes. This problem is particularly evident in conflict situations: when a girl attempts to negotiate a way of sharing her thoughts and feelings, she runs a risk of violating the ideal of female passivity and being labelled a "bitch" (Banister & Schreiber, 2001). This risk can be viewed as "treacherous: laced with danger, a sign of imperfection, a harbinger of being left out, not chosen" (Gilligan, 1982, p. 32).

Substance abuse, in particular the type of binge drinking (Silverman et al., 2001) in many of the party scenarios described in the focus-group sessions, has been associated with both physical and sexual violence. Aside from the obvious physical harm, the use of alcohol and illegal drugs, as reported by the participants, can compromise well-being in a variety of ways. Alcohol and drug use initiates a spiral of reduced agency: the girls are unable to say "no" to activities that will further reduce their ability to say "no," and this may lead to subsequent health compromises such as coercion and violence within the dating relationship.

Violence as a Trade-off in Dating Relationships

The consumption of alcohol and drugs by the participants and their boyfriends often led to the use of abusive language or violence. However, participants reported that even without the use of alcohol or drugs, name-calling and physical violence were commonplace in their dating relationships:

> *His buddy called me a stupid bitch, and I was angry because I was kind of friends with this guy. It was totally degrading…him being my boyfriend's best friend. So I called him, and I didn't even get an apology, and I don't see my boyfriend doing anything about it.*

From the boy's point of view, a retraction or apology was unwarranted in such instances. If a girl complained about this kind of treatment, the best that she could expect was a further insult: "Can't you take a joke?"

The participants also discussed the theme of jealousy as a precursor to abuse. Many of them were troubled by their boyfriends' jealousy and anger:

> *He didn't like it when I would even go to your guy [speak to another girl's boyfriend]. He hated it. He just wanted to punch that guy right in the face. So when I hugged a guy it was twice as [bad].*

Participants reported experiencing feelings of conflict and confusion along with the violence in their intimate relationships. Even those who identified themselves as victims of abuse found it extremely difficult to leave the relationship. One girl's description speaks to this turmoil:

> *People get confused in relationships, and they're stuck, and they're, like: What am I supposed to do? Should I stay here and be with somebody that wants to be with me although they're abusing me, like, emotionally and physically?*

This girl is facing a serious dilemma: whether or not to remain in a relationship that does little to enhance her sense of self-worth. The meaning of the relationship has been informed not by the young woman's own voice or feelings but by a mainstream patriarchy that has defined the role of women. Such a relationship may have serious negative consequences for the girl's health and personal safety.

"Trying to Keep the Guy": Patriarchy and the Paradox of Social Isolation

Given the ongoing threat of coercion and emotional and physical violence in such dating relationships, coupled with the apparent absence of any positive experiences, one may well ask what is the appeal. Indeed, some participants spoke of an underlying desire to not be in a relationship, saying that adolescent couples "weigh each other down" and limit each other's opportunities for learning and growth both within and outside of the relationship. In spite of the disadvantages, however, the pressure to pair usually prevailed. The participants faced a paradox when they considered terminating a dating relationship: they believed that if they left the relationship they would be exchanging the isolation and abuse, along with a degree of social acceptance and status, for even greater isolation. One participant reported: "I've basically lost all my friends because of him." Such difficult choices demonstrate the pressure within Western culture to pair off into heterosexual dating relationships. Hird and Jackson (2001) suggest that women's romance socialization and the discourses of pairing within Western society contribute to the incidence of abusive relationships by assigning social status to having a boyfriend. The experience and status of being in a relationship seem to outweigh the destructive effects. Van Roosemalen (2000) speaks to this paradox:

> Teenage women are willing to overlook the unhappiness and displeasure that often arises from boyfriend-girlfriend relationships as long as they can have the experience. No matter the degree of indifference (the occasions he ignores her, or worse still, two-times on her) or his unkindness (the gossip he spreads and the hurtful remarks he makes), these girls' devotion rarely wavers. (p. 210)

According to van Roosemalen, adolescent girls adopt patriarchal assumptions that are rooted in the notion that adolescent boys are everything and girls gain status by association. This construction of the meaning of dating relationships is "one of the most important markers of adolescence in patriarchal culture" (p. 211).

The mainstream patriarchal construction of the meaning of their dating relationships offered the adolescents in the present study limited choices: if they remained in the relationship, their health and self-esteem would be compromised; if they terminated the relationship, their social status and self-esteem, and possibly their safety and health, would be compromised. For many, the system of thinking that has constructed this dilemma left them no other options and no means of escape.

Discussion and Implications

In this qualitative study, the voices of young women revealed the underlying meanings for them of health issues pertaining to their dating relationships. Such meanings are part of the dominant cultural understanding of girls' dating relationships. From a health-care point of view, the results suggest that unequal power dynamics in their dating relationships place girls at a disadvantage, with serious consequences for their health. Their difficulty in expressing their needs and desires within their intimate relationships made the participants especially vulnerable to social isolation, substance misuse, and individual and social tolerance of violence.

Wilkinson (1998) concludes that focus groups are a valuable means of obtaining data on individuals' understandings of health and illness. The present study illustrates the benefits of using focus groups to elicit rich interactive data from adolescent populations in the context of the their social world (Wilkinson, 1998). Feminist scholars (Mina & Sampson, 1992; Surrey, 1991) argue that women's groups can foster relational empowerment; providing women with the opportunity to build connections through dialogue is congruent with the ways in which women in Western culture have been socialized to understand, communicate, and construct meaning (Belenky, Clinchy, Goldberger, & Tarule, 1986; Gilligan, 1982; Miller, 1986).

Providing opportunities for adolescent girls to collectively share their intimate health-related experiences has the potential to raise consciousness, which could in turn lead to positive action and social change (Banister, 2001; Wilkinson, 1998). Furthermore, the use of feminist group strategies such as "check in" and "closing" (Chinn, 1996) can help to equalize power within the group and provide a safe forum for the honest discussion of relationship concerns (Banister, Tate, Wright, Rinzema, & Flato, 2002).

Nursing professionals should seriously consider the value of providing health care and health information to female adolescents in a group format. For example, group discussion and critical analysis of relational power imbalances can help participants challenge the assumptions behind such imbalances. Nurses can establish group environments that adolescents perceive as safe, to counter the high level of vulnerability they experience in their everyday lives. A group format can provide young women with the opportunity to share their concerns about their dating relationships. Group facilitators who are sensitive to the concerns of youths can help them to articulate their thoughts and feelings regarding conflict within their relationships. Furthermore, this format offers young women ready access to health services, with opportunities to be seen by nurses within small groups of peers instead of being seen alone. Recent experience at one of the research sites for the present study, the youth clinic, indicates that nursing professionals can reach adolescent female populations by being open to such approaches to care.

Health education for girls and women needs to reflect the reality of their lives. The results of this study indicate the need for nurse educators to take seriously the health implications of young women's relationship experiences. They need to acknowledge the complexity of such relationships and help to educate other health professionals and the adolescents themselves about issues such as the health consequences of dating violence. The present findings point to the need for interventions that challenge mainstream culture and that foster empowerment among adolescent girls. The paucity of research in this area suggests the need for further studies, the results of which should be made available not only to the academic community but also to adolescent populations.

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Correspondence may be directed to Elizabeth Banister, School of Nursing, University of Victoria, Box 1700, Victoria, British Columbia V8W 2Y2 Canada. Telephone: 250-472-4703. Fax: 250-721-6231. E-mail: ebaniste@uvic.ca

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Elizabeth M. Banister, RN, PhD, is Associate Professor, School of Nursing, University of Victoria, British Columbia, Canada. Sonya L. Jakubec, RN, MN, is Assistant Professor, School of Nursing, Okanagan University College, Kelowna, British Columbia, and a PhD student in the Faculty of Nursing, University of Calgary, Alberta, Canada. Judith A. Stein, RN, MN, is a PhD student in the School of Nursing, University of Victoria.

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Résumé

Les troubles de stress et l'appartenance sexuelle : les implications en matière de théorie et de recherche

Cathy Carter-Snell et Kathy Hegadoren

De nombreuses études épidémiologiques signalent des taux de prévalence plus élevés chez les femmes, comparativement aux hommes, en ce qui a trait aux troubles liés au stress, tels que le trouble de stress aigu, le syndrome de stress post-traumatique et des troubles de dépression graves. Les troubles liés au stress entravent la capacité de travailler et de mener une vie familiale normale et augmentent le risque de suicide. La présence d'une plus grande vulnérabilité chez les femmes est liée à de multiples facteurs. Les différences physiologiques comptent parmi les indices différentiels. La nature et la signification du traumatisme, l'accessibilité des ressources et le recours à des catégories de diagnostic restrictives comptent parmi les facteurs qui augmentent, de façon significative, le risque de problème de santé à la suite de circonstances stressantes ou d'un traumatisme. Il est essentiel de mieux comprendre l'impact individuel de chaque facteur et les interactions inter factorielles pour mieux cerner le développement de troubles liés au stress. L'élaboration d'une théorie exhaustive des facteurs dynamiques-statiques tenant compte des rapports sociaux entre les sexes, qui explore le rôle de facteurs clés identifiés dans les recherches qualitatives et quantitatives, est essentielle. L'auteure discute de la modélisation axée sur l'équation structurelle comme méthode d'évaluation de théories.

Mots clés : stress, stress post-traumatique, dépression, appartenance sexuelle, évaluation

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Stress Disorders and Gender: Implications for Theory and Research

Cathy Carter-Snell and Kathy Hegadoren

Numerous epidemiological studies report increased prevalence rates for women as compared to men for stress-related disorders such as acute stress disorder, posttraumatic stress disorder, and major depressive disorder. Stress disorders disrupt work and home life and pose a high risk for suicide. Multiple factors contribute to the increased vulnerability in women. Physiological differences account for some of the differential. Other factors that make a significant contribution to the overall risk for health problems in response to stressors or trauma include the nature and meaning of the trauma, accessibility of resources, and restrictive diagnostic categories. Increasing our knowledge of the individual impact of each factor as well as the interactions among the factors is central to understanding the development of stress disorders. Comprehensive sex- and gender-sensitive middle-range theory, which explores the role of key factors identified in qualitative and quantitative research, is required. The authors discuss structural equation modelling as one method of theory testing.

Keywords: stress, posttraumatic stress, depression, gender, review

Women are more vulnerable than men to stress-related disorders. Acute stress disorder (ASD), posttraumatic stress disorder (PTSD), and major depressive disorder (MDD) may be considered stress-related disorders. These disorders have profound consequences. They can lead to long-term health-care demands and can have significant social and financial consequences. It is well recognized in the literature on stress that the incidence of PTSD after a trauma is higher among women than men (Breslau, Davis, Peterson, & Schultz, 1997; Zatrick et al., 2002). The literature on MDD also indicates increased risk for women, with females being three times more likely than males to develop MDD (Maciejewski, Prigerson, & Mazure, 2001). The implications of this risk are significant, particularly as women tend to experience more severe symptoms after a major trauma and to have poorer quality-of-life functional outcomes (Holbrook, Hoyt, Stein, & Sieber, 2001). Women with MDD or an anxiety disorder are at greater risk of suicidal ideation than men, independent of the severity of the disorder (Schaffer et al., 2000). Men tend to have significantly higher rates of completed suicide (SIEC, 1998), but an increased level of suicidal ideation may place women at higher risk for completed attempts.

There is limited understanding as to the factors that contribute to the differential vulnerability of men and women. A number of risk factors have been identified in both qualitative and quantitative research, but these factors have not been compared for their relative contribution by sex and gender.[1] Although a significant amount of research has been conducted on stress disorders, most of the early studies on PTSD involved male combat veterans with chronic PTSD, with the findings being generalized to other populations. Subsequent PTSD studies with other traumatized populations have not, in general, systematically explored gender differences, often due to small sample size or mixed trauma types. Since gender has not been considered in the development of etiological theories, some concepts or mechanisms may be missed or under-identified. The issue of sex and gender and its role in the development of stress disorders is therefore inadequately explored in the theoretical and clinical research literature.

The purposes of this paper are to review the research literature related to sex and gender differences in stress disorders, and to discuss the implications of the existing knowledge for future theory and research related to stress disorders. Key areas to be explored are physiological differences, the nature of the index trauma, resources available to cope with the assault, and diagnostic challenges related to gender.

Physiological Differences

Physiological differences between men and women may account in part for the differential vulnerability to stress disorders. A review of all the sex and gender differences in physiological functioning that have been described in the literature is beyond the scope of this paper. However, a few are particularly noteworthy. These include gender-specific differences in neuroendocrine responses, central noradrenergic and cardiovascular responses to stress, gonadal steroids, and neurological function.

Neuroendocrine Responses

The hypothalamic-pituitary-adrenal (HPA) axis is one of the key systems in stress response. The HPA axis directly controls the release of cortisol, as well as playing a role in the release of epinephrine, norepinephrine, and vasopressin in response to stressors. In rat models, females have been found to have more rapid corticosterone secretion than males in response to stress, as well as increased responsiveness to adrenocorticotropin

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[1] We use the phrase "sex and gender" in many cases, to reflect the distinction between the two in current terminology: sex refers to biological differences, while gender refers to social or cultural differences.

hormone (ACTH) (Young & Korszun, 1999), which could be the mechanism responsible for the increased arousal and startle responses seen in humans with PTSD. Individuals with PTSD have been found to have lower cortisol levels in response to dexamethasone challenges, likely as a result of denser and more hyperresponsive glucocorticoid receptors (Yehuda, 1997). These changes in the HPA axis are being seen in women who were sexually assaulted as children (Stein, Yehuda, Koverola, & Hanna, 1997). Childhood assault may therefore sensitize the HPA axis, increasing the intensity of subsequent body responses to stress and appraisal of threat. Girls have been reported to experience sexual abuse at least three times as frequently as boys (MacMillan et al., 1997). This may contribute to the prevalence of stress disorders in women. It is difficult, however, to establish casual links between childhood events and adult physiological changes within the HPA axis in response to subsequent trauma.

Noradrenergic and Cardiovascular Responses

Women's noradrenergic and cardiovascular systems have been found to be more hyperresponsive than men's, particularly under stress. Heart rate is one of the key signs of arousal measured in stress studies. Women have higher baseline heart rates, cardiac indexes, and pulse pressure than men (Nopoulos & Andreason, 1999). In addition, women are more reliant on heart rate to compensate for increased cardiac output demands, while men are more reliant on stroke volume. Estrogen affects women's baroreceptors, causing dilation and therefore increasing heart rate (McFetridge & Sherwood, 2000). The differences in cardiovascular responsiveness make it difficult to compare baseline measures of arousal in stress across genders. This is further complicated by differences in the effects of gonadal steroids.

Gonadal Steroids

Gonadal steroids can exert powerful influences within the central nervous system. They have been associated with alterations in the structure of neural tissue, affecting neurotransmitter and neuropeptide signalling, neuron excitability, and synaptic communication (Altemus & Arleo, 1999). Changes in gonadal hormone levels have been shown to affect mood. Specifically, increases in gonadal hormones have been associated with blunting of anxiety. This is in part due to the action of estrogen and progesterone on $GABA_A$ receptors, which, similar to benzodiazepines, result in increased anaesthetic, hypnotic, and anxiolytic effects (Altemus & Arleo). Thus, fluctuations in gonadal hormones may contribute to differential susceptibility to stress disorders in women, depending on the phase of the menstrual cycle. Estradiol affects the HPA axis through direct stimulation of the corticotropin-releasing hormone (CRH) gene promoter and the central noradrenergic (norepinephrine) system (Chrousos, Torpy, & Gold, 1998). Progesterone also affects the HPA axis, independently of estrogen (Young, Lopez, Murphy-Weinberg, Watson, & Akil, 2000). Levels of circulating cortisol are regulated by negative feedback control within the HPA axis. Estrogens are thought to affect the negative feedback system, resulting in delayed ACTH and glucocorticoid shut-off (Young et al.). The delay causes a steeper rise in cortisol before shutting off the release of further cortisol. In addition, estradiol is capable of downregulating glucocorticoid (cortisol) activity in the anterior pituitary, hypothalamus, and hippocampus. This can result in decreased effectiveness of the negative feedback system, potentially sustaining the stress response. Estrogen and progesterone both modulate serotonin by upregulating serotonin (5-HT2) receptors and increase serotonin synthesis, positively affecting mood (Altemus & Arleo).

Conversely, decreases in gonadal hormones may affect stress responses. In the late luteal phase (immediately prior to menstruation) there is a rapid drop in estradiol and progesterone, which leads to reduced secretion of CRH from the hypothalamus and therefore less cortisol. The drop in CRH is also associated with a drop in serotonin. Both of these changes in the late luteal phase might contribute to the woman's decreased ability to cope and to the increased dysphoria and mood disorders seen at this time (Chrousos et al., 1998). Indeed, increased seizure activity, worsening of psychiatric symptoms, and increased rates of psychiatric hospitalization have all been linked to menstrual-phase differences. It is interesting to note that the increased prevalence rates of depression in women emerge around the time of puberty (Chrousos et al.; Nolen-Hoeksma, 1995).

Reciprocally, stress and violence can affect hormone levels, mainly through the effect of stress on the HPA axis. Women who have been victims of violence show lowered estradiol levels across age groups (Allsworth, Zierler, Krieger, & Harlow, 2001). In later years (age 41–45), these women also demonstrate slight increases in follicle-stimulating hormone.

Cardiovascular responses to stress may also be altered through the effects of gonadal hormones. In periods of emotional or physiological stress (e.g., hypovolemia), heart rate, stroke volume, and diastolic blood pressure are known to increase. In a study with women in a stress simulation, McFetridge and Sherwood (2000) found that during the follicular phase of the menstrual cycle, when estrogen and progesterone are lowest, the resting diastolic blood pressure and heart rate were highest. In addition, during this phase the women were more physiologically responsive to stress and its effects. Women in the late luteal phase of their menstrual cycle demonstrated lower overall blood pressure and were less able to increase their diastolic pressure in response to stress. These findings may reflect differential ability to mount an effective cardiovascular or sympathetic response to stress related to the menstrual cycle.

Neurological Functional Differences

There are many gender differences in neurological function, some of which may affect risk for stress disorders. For instance, neuroimaging studies have demonstrated greater metabolism in the cingulate region of the brain in women compared to men (Nopoulos & Andreason, 1999). The cingulate region is a component of the limbic system, which plays a role in regulating emotions. Increased activation may interfere with higher centres in the brain, perhaps resulting in more basic behavioural patterns during stress, such as autonomic arousal and other defensive behaviours. In support of this mechanism, Nopoulos and Andreason describe limited studies that have shown more grey matter in the prefrontal cerebral cortex and temporal gyrus in women than in men, as well as greater cerebral blood flow. The prefrontal cerebral cortex and central gyrus are involved in episodic memory, critical thinking, speech, and modulation of the limbic system. Neuroimaging studies have shown that when patients with chronic PTSD are in periods of arousal, there is decreased blood flow to the prefrontal cerebral cortex and central gyrus, perhaps accounting for the clinical signs seen in arousal (Pittman, Shin, & Rauch, 2001; Van der Kolk, Burbridge, & Suzuki, 1997). The symptoms of stress disorder have been found to be more severe in women (Foa & Street, 2001), which may be a function of the flow alterations and anatomical differences.

Each of these physiological differences can be seen as contributing to women's greater vulnerability to stress disorders. Large gaps remain in our knowledge regarding the relative contribution of these differences to overall risk. There are few integrative studies that allow researchers to develop biological models of stress disorders. Any such model would be incomplete without the inclusion of psychosocial variables thought to have a profound effect on behavioural responses.

Index Trauma

A US study found that the incidence of exposure to traumatic events was actually higher for men than for women (Breslau, 2002). Despite this finding, women are recognized as developing stress disorders more frequently (Stein, Walker, & Forde, 2000). The nature of the trauma initiating the stress disorder (the index trauma) may help to explain the gender differences in vulnerability to stress disorders. Relevant considerations include the type of trauma, previous assaults, issues of power and control, the identity of the assailant, and the degree of threat.

Type of Trauma

Men's index trauma is more often combat exposure or having witnessed a trauma (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). In contrast, women are more frequent victims of sexual assault and other types of physical assault (Breslau, Davis, Andreski, Peterson, & Schultz, 1997; Kessler et al.; Maciejewski et al., 2001). Physical assault has been associated with a higher incidence of stress disorders in women than in men (Sorenson, Siegel, Golding, & Stein, 1991). Sexual assault is associated with an even higher incidence of stress disorders, with as many as 50% of female victims developing PTSD (Breslau, 2001). Women have been found to experience more severe and longer-lasting symptoms than men after an assault, particularly a sexual assault (Zoellner, Goodwin, & Foa, 2000). The increased frequency of physical and sexual assault in women may be a key factor in the gender differences.

Prior Assault

A history of prior assault is a consistent risk factor for stress disorder, especially if the prior assault occurred during childhood (Breslau, 2002). Furthermore, prior assault may affect the frequency of victimization. Women with a history of childhood assault have been found to be prone to revictimization and sexually inappropriate behaviours (Coid et al., 2001), especially if *sexually* assaulted in childhood (Field et al., 2001; Zlotnick, Zimmerman, Wolfsdorf, & Mattia, 2001). In contrast, although abused male children may be at risk for revictimization, they are also at increased risk of becoming offenders (Heyman & Slep, 2002; Salter et al., 2003). It has been estimated that 15–38% of women are victims of childhood sexual abuse, 13–20% of women experience adult rape, and at least 20% of women are repetitively assaulted ("battered") in domestic situations (Butterfield, Panzer, & Forneris, 1999). High rates of abuse and repetitive violence play a role in women's vulnerability to developing stress-related disorders and to having relationships with those who abuse power, which in turn increases their risk of further violence.

Exposure to repetitive violence brings the risk of developing complex PTSD. Complex PTSD differs from classic PTSD in terms of severity and complexity of symptoms, relational difficulties, and degree of dissociation. Complex PTSD is more closely associated with the effects of childhood abuse, repeated interpersonal trauma, or prolonged control such as in a prisoner-of-war situation (Herman, 1992). Even women outside of these extreme situations have been described as experiencing a form of captivity if they have to limit their activities due to fear or societal expectations, thus increasing their sense of powerlessness on a daily basis (Root, 1996).

Power and Control Issues

Interpersonal violence has been associated with the exertion of power and control by the perpetrator over the victim (Jewkes, 2002; Rosenbaum & Leisring, 2003), often resulting in the victim experiencing helplessness, shame, and low self-esteem. Victims of extreme childhood abuse are at risk for later substance abuse, a high-risk lifestyle, and poverty and homelessness (Morrell-Bellai, Goering, & Boydell, 2000). A social environment that includes poverty, alcohol use, and violence increases a woman's risk of sustaining interpersonal violence (Jewkes). Powerlessness is closely associated with stress disorders resulting from childhood abuse (Coid et al., 2001). Studies focusing on locus of control report consistent gender differentials and highlight the role of power differentials in relation to female victims. Women more often view themselves as having no control over what happens to them, while men more often view themselves as in control (Maes, Delmeire, Mylle, & Altamura, 2001).

It should be pointed out that powerlessness in response to sexual trauma is not unique to women. Although there have been few studies with non-institutionalized victims of male rape, it has been shown that male victims also experience feelings of shame, humiliation, and powerlessness (Hodge & Canter, 1998; Vearnals & Campbell, 2001). Male rape is often intended as a form of control and humiliation, similar to sexual assault of women, and is frequently perpetrated by heterosexual men (Hodge & Canter; King, Coxell, & Mezey, 2000). Unfortunately, very few men report their assault or present for treatment, so it is difficult to compare results. It has been suggested, however, that the effects of sexual assault are not gender-specific and that there are similar mechanisms at work between the genders in victims' self-appraisal of the assault in terms of its significance.

Psychological Significance

The psychological significance of the assault is complicated by the nature of the assailant. Most assaults against women, whether physical or sexual, are committed by a male intimate such as a parent or other relative, husband, or boyfriend (Root, 1996). In contrast, most assaults against men are committed by strangers (Hodge & Canter, 1998). An analysis of psychological symptom measures found that, among women who had been assaulted, sexual distress was more common if the assailant was an intimate, whereas fear and anxiety were more common if the assailant was a stranger (Ullman & Siegel, 1993). These emotions affect arousal and self-appraisal of the significance of the event and therefore affect stress responses (Lazarus, 2000). Furthermore, women who live with the assailant face the risk of repetitive trauma.

Degree of Threat

The degree of threat associated with the assault is another key risk factor in stress disorders. The degree of threat may differ by gender because of the types of traumas experienced and power differential issues. In the United States, "women are more frequently killed by intimates than through all other types of violence combined" (Root, 1996, p. 363). Although similar proportions of men and women experience domestic violence in North America, for women the consequences are more often fatal or life-threatening. Incidents of domestic violence frequently include sexual assault (Hines & Malley-Morrison, 2001) and are often witnessed by children, potentially increasing the woman's fear and the significance of the trauma for her. The threat to life increases with each subsequent assault (Campbell, 2002; Thompson, Saltzman, & Johnson, 2001). Stress disorders are more strongly associated with threat to life than with the presence or severity of physical injury, particularly in sexual assault situations (Ullman, Karabatsos, & Koss, 1999). Men may also experience threat, but it is reasonable to speculate that the power and size differentials between men and women increase the perceived threat to women.

Because of the limited data available on male victims of domestic violence and sexual assault, it is difficult to compare the effects of the nature of the trauma. The data that are available suggest that there may be common mechanisms and psychological sequelae underlying the development of stress disorders (Hines & Malley-Morrison, 2001). The greater prevalence of both sexual assault and poverty in women, however, may explain women's greater vulnerability. Gender-specific differences in the resources available for coping with the effects of an assault must be considered as well.

Coping Resources

There may be gender differences in the resources available to deal with the sequelae of an assault. Specifically, differences have been noted in coping mechanisms, symptoms, the use of ineffective coping strategies such as avoidance or substance abuse, education and socio-economic status, and level of partner and social support.

Coping Mechanisms

Society still often expects women to be the primary caregiver and homemaker, even if they are working outside the home. This expectation may affect their coping resources, including the energy, time, and strategies they use to meet their own needs as well as their ability to reach out to other women. Marital status can affect coping resources in different ways. Although married women may have a wider support system than single women, they often have to support their spouse's coping efforts after a sexual assault (Ruch & Leon, 1983). Coping strategies may be influenced by the woman's history. In addition to the risk of later revictimization, childhood sexual assault has been associated with altered coping resources (Coid et al., 2001; Field et al., 2001; Van der Kolk et al., 1997).

Symptom Responses to Stress

Women and men have been found to differ in the frequency and severity of symptoms following a stressor. Fullerton et al. (2001) found that after a motor-vehicle collision women were almost five times likelier than men to have avoidance and numbing symptoms, especially avoidance of thoughts and situations, to lose interest in significant activities, and to have a sense of foreshortened future; they were almost four times likelier to have significant arousal symptoms, including difficulty sleeping, difficulty concentrating, and an exaggerated startle response. The presence of peritraumatic dissociation, either at the time of the trauma or in the emergency department, has been linked to a significantly higher incidence of PTSD (Fullerton et al.). The link between PTSD and dissociation is stronger for women than for men even when the incidence of dissociation is similar (Griffin, Resick, & Mechanic, 1997; Shalev et al., 1998).

Education and Socio-economic Status

Education level and socio-economic status have been associated with risk for violence and stress disorders (Brewin, Andrews, & Valentien, 2000). Historically, education levels and pay scales are lower for women than for men. Both education level and income can affect knowledge, understanding, coping resources, resiliency, and ultimately the socio-economic resources available to deal with the effects of trauma. The lower one's status, the greater one's risk (which is exacerbated by both gender and race) of being objectified or rendered invisible (Root, 1996) — that is, the risk of being open to abuse without the perpetrator feeling remorse. Women have lower status than men in many countries, with male dominance even being dictated in some cultures. Marital conflict regarding role expectations can lead to fear, frustration, and potential violence in any culture. This risk of violence can be heightened in immigrant families as they adjust to new role expectations and experience psychosocial stressors in the absence of their usual support systems (Ritsner, Ponizovsky, Nechamkin, & Modai, 2001). Although there have been improvements over time, in 1995 women in Canada still earned barely half the net salary of men (Government of Canada, 1996). Their lower salary places more women than men below the poverty line, increases their risk of violence, and decreases the coping resources available to them.

Family and Social Support

The response of a partner to an assault can affect risk for stress disorders. When a woman is sexually assaulted, her partner may view the event as sex rather than as an assault (Burgess & Hazelwood, 2001). The distinction is critical. If her partner views it as sex, he may see the woman as "damaged goods" or as having encouraged the assailant. Higher levels of non-support have been found among partners of women who were sexually assaulted than among partners of women who were victims of other traumas (Davis, Taylor, & Bench, 1995). Even if the partner views the trauma as an assault, his response may be to seek revenge on the assailant rather than help the woman deal with her acute response to the event.

Once an assault has occurred, social networks can help reduce the risk of stress disorders (Brewin et al., 2000). Social networks influence the victim's appraisal of the situation, such as whether or not he or she views it as overwhelming. Informal social support systems may have an even more positive influence on stress than professional help (Ullman, 1996). Men have been found to rely on their partner, while women tend to reach out to a network of friends. One small study of coping differences, however, found that these may be the product of subjects' recall based on social stereotypes rather than true differences in coping mechanisms (Porter, Marco, Schwartz, & Neale, 2000). The nature of assaults commonly experienced by women, in any case, would tend to isolate them from their social networks, and such isolation would likely cause more stress for a woman than for a man (Maciejewski et al., 2001). A woman's familiarity with her assailant, in domestic violence and many other sexual assault situations, may contribute to her reaction of shame, perhaps causing her to further avoid her social networks. Such avoidance combined with the aggressor's attempts to isolate and control her would serve to effectively remove the woman from her social networks.

Women are often reluctant to disclose sexual assault of any type. Even in some North American cultures and societies, sexual assault is still viewed as the woman's fault, particularly if she had been drinking alcohol, using other recreational substances, or engaging in other risky behaviours prior to the incident. Each of these factors may affect how friends, police officers, and health-care professionals treat a woman at the time of disclosure (Popiel & Susskind, 1985). A woman's reluctance to report the incident due to concerns about social stigma may serve to further isolate her from support networks. Male victims of sexual abuse and assault are similarly reluctant to report the incident and have very limited access to social agencies or resources. Again, however, cross-gender comparison is hindered by the lack of data on the effects of resources. With either gender, failure to disclose may result in the use of ineffective coping mechanisms such as avoidance or substance abuse.

Ineffective Coping Mechanisms

Avoidance and delays in dealing with the assault are associated with increased risk of stress disorder (Dunmore, Clark, & Ehlers, 2001). Similarly, the use of alcohol and other substances may be increased as a means of coping, despite its ineffectiveness (Moncrieff & Farmer, 1998). There have been widespread warnings about the risk of "date rape" drugs such as flunitrazepam (Rohypnol) and gammahydroxybutyrate (GHB), yet these drugs are used infrequently (Ullman et al., 1999). Instead, it is alcohol which is the "date rape" drug. Alcohol is used by either the victim or the assailant in 30–70% of sexual assaults (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001). Alcohol use increases the risk of revictimization. It has been estimated that almost 100% of women with substance-abuse problems are victims of physical or sexual assault (Butterfield et al., 1999).

The effect of alcohol on coping among women who have been physically assaulted is unknown. In victims of motor-vehicle collisions, alcohol use has been found to have a protective effect against PTSD (Maes et al., 2001). It could be argued that alcohol use prior to a sexual or physical assault could have the opposite effect for women, due to social norms concerning women and the concepts of shame and blame. Shame has been associated with an increased risk of PTSD, such as numbing and dissociation, among combat veterans. Female victims are often blamed for the assault by members of their social circle, particularly if they consumed alcohol prior to the incident. This shame response could contribute to the risk for PTSD in a manner similar to that found among veterans (Mason et al., 2001).

Each of these physiological, trauma-related, and resource differences may contribute to the differential vulnerability of women to stress-related disorders. Another possible contribution to the vulnerability differential is the challenge posed by the tools used to identify stress disorders.

Diagnostic Challenges Related to Gender

There are concerns regarding the validity of the diagnostic categories as distinct entities, potential for gender bias, and risk of sampling bias with the use of the *Diagnostic Services Manual, 4th Edition* (DSM-IV), in which ASD, PTSD, and MDD are defined. The diagnostic criteria are designed to represent mutually exclusive concepts. If concepts are not unique and gender neutral, sample error and bias could result. This would, in turn, affect the variability of prevalence rates between men and women (Hartung & Widiger, 1998). Hartung and Widiger also point out that the use of diagnostic concepts can serve to distort the prevalence of a disorder in one sex or another, especially if symptoms are derived mainly from one gender. There is a risk that the use of different criteria for men and women will lead to artificial differences in prevalence and under- or over-diagnosing between groups. It could also limit comparison. Hartung and Widiger advocate for either improved, uniform gender-neutral criteria or gender-specific criteria that incorporate a measure of the level of dysfunction to allow comparison between genders.

There is potential for overlap in the diagnostic criteria and in the concepts underlying the stress disorders. This may partially explain the comorbidity of stress disorders (Brunello et al., 2001). Comorbidity may also indicate a lack of clarity of concepts underlying these diagnoses. Women are more likely to have PTSD if they have pre-existing depression, but this is not true for men after controlling for type of trauma (Breslau et al., 1997). It is unclear if PTSD and depression are distinct, comorbid entities with overlapping symptoms or if there is a progression from one disorder to the other.

Another source of sampling bias is differential reporting of assaults. If women are underreporting assaults due to shame or fear, the gender difference in prevalence of stress disorders could be even greater. On the other hand, men are known to underreport. Furthermore, much of the research has involved women who present for examination or treatment. The differences between these women and those who do not report are relatively unknown. A survey of women in the community found that those who reported had more severe injuries or experienced greater threat (Thompson et al., 2001). It cannot be assumed, however, that stress disorders are not an issue for those who fail to report.

Clearly, the diagnostic criteria need to be further examined in terms of each gender as well as their interrelationships. One possibility would be to identify and validate distinct concepts underlying stress disorders, rather than collective scales or groups of symptoms. For instance, avoidance can be seen in ASD, PTSD, and MDD. Understanding the nuances of avoidance and its parameters may allow us to determine whether different mechanisms or concepts apply for men and women.

Implications for Theory and Research

We currently lack a comprehensive theory to explain the development of stress disorders, to increase our understanding of these disorders, and to direct our prevention and intervention efforts. While many sex and gender differences are discussed in the literature, their relative contribution to the development of stress-related disorders in general is unknown. Also unknown are the reasons why some people develop PTSD, others develop depression, while still others develop combined disorders. Middle-range theories allow for examination of a specific phenomenon as well as for a closer linking of theory, research, and practice (Lenz, Suppe, Gift, Pugh, & Milligan, 1995). This level of theory could potentially allow us to more effectively explain, prevent, assess, predict, and treat stress disorders.

Theory Development

Middle-range theory requires clear identification of core concepts and linkages between concepts and measurable indicators (King, 1988). Most of the research on stress disorders and risk factors has used a DSM-IV diagnosis as the dependent variable. The underlying core concepts of these disorders have not been examined for their causal influences and relationships. Examples include avoidance, dissociation, and re-experiencing. A theory that examines these relationships could facilitate the development of strategies to attenuate the risk of developing stress disorders, as well as clarify whether comorbidity reflects parallel processes or a melding of concepts.

We propose a new, unifying model of stress development, one that combines the three major perspectives on stress: biological, environmental, and psychological (Cohen, Kessler, & Gordon, 1997). In this model the nature of the event, including past history and vulnerability issues, influence the psychological processing of the threat and the perceived significance of the event. The person then appraises the adequacy and availability of coping resources relative to the event. A negative appraisal is followed by a stress response that may be both physical and behavioural. There are many occasions when a woman will view an assault as highly threatening and significant and view her coping resources as inadequate. Severe, sustained, or repetitive stress has been shown to initiate a series of physiological responses that may affect behavioural responses and subsequent vulnerability to stress disorders. In addition, there are a number of physiological differences in the female and male stress response, so that women may be predisposed to stress disorders. A model such as that proposed could form the basis for middle-range theory.

In developing a theory for stress disorders, one must consider whether or not it should be gender-specific. Im and Meleis (2001) suggest the need for "gender sensitive" theory in order to better represent the perspective of women. They describe gender-sensitive theory as based on principles of gender equity, affirmation of women as individuals, and the right of women to have control over their own bodies. In speaking of sensitivity, however, they refer only to women. Confining research and theories to one gender may contribute to inaccurate description of the disorder, provide limited definitions, and give disproportionate weight to how the disorder is expressed in that gender (Hartung & Widiger, 1998). Furthermore, it could result in gender stereotypes becoming even more imbedded and impair objectivity in diagnosis and measurement.

It is possible that understanding gender inequality will provide the key to understanding stress disorders. For example, it is often assumed that lack of power and control in interpersonal assault of any type is limited to females. Men who have been sexually assaulted, suffered childhood abuse, witnessed significant trauma and been unable to help, or been in combat can also have power and control issues. Male sexual assault is associated with humiliation and exertion of power (King et al., 2000). It may be that male and female sexual assault victims are at similar risk for stress disorders, in which case the assault or its effects, rather than gender, would explain the different prevalence rates. If research or theory is limited to one gender or the other, these core issues will not be identified.

In view of the potentially crucial role of sex and gender, it is imperative that gender sensitivity be extended to reflect the voice of both genders in theory development related to stress disorders. In order to achieve this broader form of sensitivity in a meaningful fashion, however, it will be necessary to describe and test the theory in one gender for the physiological, environmental, and psychological aspects that are thought to differ. Data and concepts gathered from multiple research studies, using qualitative and quantitative methods, would have to be incorporated into the model. Furthermore, the use of diagnostic labels would be secondary to investigating the relationships among underlying concepts. The exploration of gender sensitivity would have to be extended to the research methods and instruments used in testing the theory.

Research Methods

Theory testing is often the first step after theory development. One way to integrate theory development and testing is structural equation modelling (SEM) (Hayduk, 1987). SEM allows for exploration of causal relationships among core concepts in a theory. A putative theory in SEM is constructed from knowledge of relevant qualitative and quantitative research as well as experiential knowledge. Data are then collected to reflect the concepts in the model. Next, the fit between the model and the population is analyzed. SEM analysis allows for testing of hypothesized causal relationships among concepts. In methods such as SEM, homogeneous samples are an essential component of theory-testing strategies and causal inference (Hayduk & Avakame, 1993). Groups with similar index traumas would have to be used for analysis initially, to allow for this homogeneity.

It should be noted that the theory-testing instruments would have to be sufficiently gender sensitive to identify gender differences and reflect core concepts for both genders. Hartung and Widiger (1998) recommend validity testing to ensure that the instruments are capable of identifying disorders in both genders. They also suggest the use of item response theory analysis to identify gender biases. The researcher would have to ensure that the instrument reflects only the concept being examined — not the aggregates of concepts — in order to avoid confusion and overlap between concepts.

Once the theory is tested in one type of trauma and with one gender, it would have to be tested across other types of trauma to test its utility. Then it could be tested with the opposite gender across different types of trauma. When testing the theory for each gender separately using SEM, it is possible that some relationships will be supported for one gender and not the other or that common relationships will be found across genders. A comprehensive theory could then be developed, one that includes common core concepts and relationships. Development and testing of separate theories would facilitate comparison of prevalence, risk factors, and efficacy of treatment, as well as subjects' perspectives.

Conclusion

Women's high risk for stress disorders may be the result of many physiological, environmental, and psychological gender differences. Alternatively, it may be a function of the increased prevalence of physical and sexual assault among women, or a function of the feelings of powerlessness, shame, self-esteem, or vulnerability associated with physical and sexual assault. The available research has been limited in its ability to allow for causal inference, and has used diagnostic aggregate labels rather than underlying concepts relevant to stress disorders.

Stress disorders have a significant impact in terms of health consequences, health-care costs, and strain on the health-care system. It is imperative that we understand causation in this process, in order to develop targeted strategies to reduce the risk of developing stress disorders. It is recommended that sexually assaulted women be studied first, because of the high incidence of and risk for stress disorders in this group. Prospective studies with female sexual assault victims without a prior history of sexual trauma would be particularly useful because of the ability to control for the difficulties inherent in attempting to retrospectively understand the contribution of childhood trauma over time. Development of a theory specifically addressing this vulnerable population might allow us to identify a wider array of core concepts and relationships. This limited theory may then provide a basis for theory testing across other types of trauma by age and by sex and gender. Until such testing is conducted, we will not be able to effectively compare the contribution of gender-specific differences (functional and physiological) with that of trauma-specific differences. In this manner, middle-range theory will emerge, which will reflect the complex relationships among concepts and be sufficiently broad to test in other populations.

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Cathy Carter-Snell, RN, MN, PhD(c), is Coordinator, Forensic Studies, Mount Royal College, Calgary, Alberta, Canada. Kathy Hegadoren, RN, PhD, is Associate Professor, Faculty of Nursing, University of Alberta, Edmonton, Canada.

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Résumé

Le harcèlement sexuel par des pairs à l'adolescence : le rôle de l'appartenance sexuelle

V. Susan Dahinten

L'auteure décrit les expériences de harcèlement sexuel vécues par 565 étudiants et étudiantes de neuvième à onzième année et se penche sur l'influence qu'exerce la construction sociale liée à l'appartenance sexuelle sur ces expériences. L'échantillonnage est constitué d'étudiants et d'étudiantes de 12 écoles situées dans deux provinces canadiennes. L'étude s'appuie sur un modèle faisant usage de sondages corrélationnels axés sur la rétrospective et des questionnaires d'auto-évaluation ont été distribués en classe. Selon les résultats, le harcèlement sexuel est prépondérant chez les adolescents et les adolescentes mais il est particulièrement problématique chez les filles en raison de la différence qualitative du harcèlement qu'elles vivent. Les filles ainsi que les garçons témoignent que le harcèlement sexuel est, en général, plus perturbateur que ne le sont des avances sexuelles non désirées. Les filles ont recours à un plus grand éventail de stratégies d'adaptation que les garçons. Toutefois, les stratégies d'adaptation passives étaient prédominantes chez les deux sexes. L'auteure émet des recommandations relativement aux programmes de santé en milieu scolaire et discute du rôle de l'infirmière dans les écoles.

Mots clés : adolescence, harcèlement sexuel, pairs agresseurs, appartenance sexuelle

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Peer Sexual Harassment in Adolescence: The Function of Gender

V. Susan Dahinten

The author describes the sexual harassment experiences of 565 male and female students in Grades 9 through 11 and discusses the influence of the social construction of gender on those experiences. The sample was drawn from 12 schools in 2 Canadian provinces. The study employed a retrospective correlational survey design, using self-report questionnaires administered in class. The results indicate that sexual harassment is pervasive among both male and female adolescents but is particularly problematic for girls due to their qualitatively different harassment experiences. Both girls and boys reported gender harassment to be, in general, more upsetting than unwanted sexual advances. Girls employed a greater variety of coping strategies than boys; however, for both sexes passive coping strategies were predominant. The author offers recommendations related to school health programming and discusses the role of the school nurse.

Keywords: adolescence, sexual harassment, peer perpetrators, gender

During the last decade there has been increasing research interest in the sexual harassment experiences of adolescents and the health effects of sexual harassment. The now classic Hostile Hallways study commissioned by the American Association of University Women [AAUW] Educational Foundation (1993) has served as a prototype for a number of other studies (e.g., Fineran & Bennett, 1999; Ontario Secondary School Teachers' Federation [OSSTF], 1995; Trigg & Wittenstrom, 1996) and the evidence has converged to suggest that the majority of male and female high-school students, in almost equal proportions, have experienced some sexual harassment while at school. There is also some evidence that girls are targeted more frequently than boys and that they are more distressed by their experiences, but there has been little investigation into the quality of adolescent sexual harassment experiences and their relationship to gender. Moreover, published research on the sexual harassment of Canadian children and adolescents is limited to a survey of middle-school students by McMaster, Connolly, Peplar, and Craig (2002) and qualitative studies by Larkin (1994) and Berman, McKenna, Arnold, Taylor, and MacQuarrie (2000). The purpose of this study was to explore gender differences in the experience and appraisal of sexual harassment among high-school students and to describe the students' ways of responding to the harassment.

Background

Prevalence of Sexual Harassment

Research findings indicate that most high-school students have experienced some sexual harassment from their peers. Studies that have asked about the entire school year (Fineran & Bennett, 1999; OSSTF, 1995; Stein, Marshall, & Tropp, 1993) or the student's entire school life (AAUW, 1993; Trigg & Wittenstrom, 1996) have found prevalence rates ranging from 83% to 92% among girls and from 50% to 79% among boys, but with far more girls than boys (31% vs. 18%) reporting that they had been harassed "often" (AAUW). Despite the evidence that sexual harassment occurs among children in elementary and middle school (Berman et al., 2000; McMaster et al., 2002; Murnen & Smolak, 2000), and suggestions that university students experience even higher rates of harassment than high-school students (Bogart, Simmons, Stein, & Tomaszewski, 1992), there has been little investigation of developmental trends in sexual harassment.

Appraisal of Sexual Harassment

Although there is evidence that adolescents sometimes disregard peer sexual harassment as teasing that should not be taken too seriously (e.g., Berman et al., 2000; Larkin, 1994; McBride, 1998), there is also evidence suggesting that students do experience emotional and behavioural sequelae as a result of the harassment, albeit with significant gender differences. In the AAUW (1993) study, a much higher percentage of girls than boys reported feeling upset and fearful as a consequence of their harassment experiences. Similar gender differences in appraisal have been found in other studies with elementary- and high-school students (e.g., Fineran & Bennett, 1999; Murnen & Smolak, 2000; Trigg & Wittenstrom, 1996), but Fineran and Bennett are the only researchers to have measured the adolescent's appraisal of the *various* sexual harassment behaviours experienced. The AAUW survey included one item asking how upset the student was immediately after being harassed, but this global appraisal measure referred to any and all forms of sexual harassment — from being told sexual jokes to being forced into sexual activity. The AAUW survey also asked for an appraisal of the various sexual harassment behaviours, but this was an "anticipatory appraisal" pertaining to a hypothetical situation. Thus, our knowledge related to the appraisal of sexual harassment in adolescence, in its various forms and contexts, is limited.

Coping with Sexual Harassment

Researchers have sought to develop valid and reliable means of assessing the coping strategies of women who have experienced sexual harassment (e.g., Fitzgerald et al., 1988; Magley, 1999). Far less work has been done with respect to adolescents' ways of coping. The AAUW (1993) study inquired about changes in the student's behaviour as a result of the harassment. Some of the resultant items could be considered coping strategies. However, none of the surveys of adolescents cited above included an actual "coping" scale. In a secondary analysis of AAUW data, Lee, Croninger, Linn, and Chen (1996) categorized some of the ensuing behaviours as educational outcomes (e.g., dropping out of a course), whereas Hand and Sanchez (2000) categorized them as behavioural outcomes (e.g., giving up a particular activity) or as outcomes that might more appropriately be considered somatic or emotional (e.g., loss of appetite).

Theoretical Framework

This investigation was part of a larger study of the relationships between sexual harassment and health outcomes among adolescents (Dahinten, 2001). The conceptual framework for the larger study was derived from a transactional theory of stress and coping (Lazarus & Folkman, 1984) which postulates that adaptational outcomes are related to people's experience and appraisal of environmental stressors, mediated by their coping responses. The present study was also informed by a conceptualization of gender as culturally imposed expectations regarding appropriate masculine and feminine behaviours (Koss et al., 1994). This gender lens suggests that the appraisal of sexual harassment experiences (i.e., the interpretation and reporting of one's feelings) and means of coping may be influenced by socially prescribed gender roles; thus sexual harassment may both emerge from and be reinforced by notions of gender (Hotelling & Zuber, 1997; Polce-Lynch, Myers, Kliewer, & Kilmartin, 2001).

Methods

Participants

Data were obtained from 217 male and 348 female English-speaking students in Grades 9 through 11 at 12 public high schools in Canada, eight in the province of British Columbia (*n* = 319; 56%) and four in the province of New Brunswick (*n* = 246; 44%). Although both the students and the schools were recruited as convenience samples, diversity was sought by sampling from five school districts, by targeting both urban and small-town schools, and by situating the study within classes that drew from the school population as a whole (i.e., mandatory life skills classes). The five school districts varied in their level of ethnic diversity; however, four of the 12 schools were the only school in the community, thus capturing the full diversity of that community. The schools ranged in size from 500 to 3,000 students (approximately).

The study was approved by the Behavioural Research Ethics Board at the University of British Columbia; written consent was also obtained from the appropriate school principal or school district superintendent prior to any recruitment activity. One week prior to data collection, the researcher visited each participating class to describe the study and distribute recruitment packages. Written parental consent was required; the students were advised that their consent was implied if they chose to complete the questionnaire on the day of the study.

Students in Grades 9, 10, and 11 accounted for 36%, 36%, and 28%, respectively, of the sample, with no significant difference in gender by grade, χ^2 (2, N = 565) = 3.30, p = .19. The mean participation rate per class was 72%. Most of the participants were Canadian-born (90%). They described their ethnic heritage as White/Caucasian (86%), Asian (7%), First Nations (3%), and Other (4%).

Data Collection

The study employed a retrospective correlational survey design using a self-report questionnaire administered in class. The questionnaire consisted of 11 sets of questions related to sexual harassment victimization, coping with sexual harassment, other school-based microstressors, various health outcomes, and social desirability. Only the instruments related to sexual harassment and coping are described below.[1] It took most students 25 to 30 minutes to complete the questionnaire. The students then participated in a debriefing session at which they were invited to make comments or ask questions about the topic of sexual harassment and were provided with written information about peer harassment and available resources.

Adolescent Sexual Harassment (ASH) scale. Peer sexual harassment was measured using the 19-item Adolescent Sexual Harassment scale developed by White (1997) as a revision of the 14-item AAUW (1993) scale. The ASH is intended to sample more broadly from the domain of gender harassment. Gender harassment pertains to negative and degrading comments or actions related to a person's gender or gender-related attributes that are sex-related but not specifically sexual in nature (Koss et al., 1994). For example, one gender harassment item that was added in the ASH is "made negative comments about your body…suggesting that you don't look feminine/masculine enough." In the present study, prin-

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[1] Details on the others may be obtained from the author.

cipal components analysis with oblique rotation yielded an almost identical two-factor solution to that found by White: Gender Harassment and Sexual Advances/Imposition, which explained 46% and 43% of the variance in responses by girls and boys, respectively. There was a moderate correlation between the two components (.38 for girls and .22 for boys) and a Cronbach's alpha value of .86 for girls and .81 for boys, indicating good internal consistency.

The ASH asks how frequently the respondent has been the target of certain unwanted behaviours by peers during the school year using a 6-point response scale (0 = *never*; 5 = *daily or almost daily*). In the present study, the ASH items and response scale were used intact but the recall period was limited to 2 months. Two sets of questions were added in order to (a) identify the gender of the perpetrators as mostly girls, mostly boys, or both girls and boys; and (b) investigate the target's cognitive appraisal of the event. For each harassment behaviour the appraisal component asked the respondent, *If this has happened to you, how stressful or how upsetting was this for you?* using a 5-point response scale (0 = *not upsetting*; 4 = *very upsetting*). The appraisal component of the ASH-R was derived from other adolescent stress scales that assess the severity of the stressor or the desirability of the event (e.g., Compas, Davis, Forsythe, & Wagner, 1987).

Coping with Harassment Questionnaire – Revised (CHQ-R). Cognitive and behavioural responses to sexual harassment were assessed using a shortened form of the 50-item Coping with Harassment Questionnaire (Fitzgerald, 1996; Fitzgerald et al., 1988) developed for use with an adult population. Eleven items were selected from the CHQ, drawing from each of the 10 coping strategies to reflect both internal (5 items) and external (6 items) responses. Shortened formats of 10, 11, and 21 items have been used by other harassment researchers (e.g., Magley & Fitzgerald, 1996; Schneider, Swan, & Fitzgerald, 1997). The response format for this scale was: 0 = *never,* 1 = *sometimes,* 2 = *half the time*, 3 = *frequently,* and 4 = *all or almost all the time*. The 11-item scale yielded a Cronbach's alpha level of .64 for girls and .76 for boys. The psychometric properties of this scale and adolescents' ways of coping with sexual harassment are discussed in more detail elsewhere (Dahinten, 2002).

Data Analysis

The analyses were primarily descriptive in nature. Responses to questions about the frequency of harassment and use of coping responses were dichotomized into ever/never experienced and ever/never used, and then analyzed by gender with chi-square statistics using the Yates continuity correction factor. A multivariate analysis of variance (MANOVA) was performed to examine the relationships between mean scores on the

Table 1 *Sexual Harassment Experiences in Past 2 Months*

Sexual Harrassment Item	**% Ever Harassed** **Girls** $n = 348$	 **Boys** $n = 217$	χ^2
Spread sexual rumors or wrote sexual graffiti about you on bathroom walls or hallways etc.	22.7	14.3	5.98*
Called you lesbian (gay) or something similar	28.8	39.6	7.06**
Made negative comments about your body suggesting that you don't look feminine (masculine) enough	36.1	43.3	2.84
Made fun or you or called you names for having too much (not enough) sexual experience	16.7	8.8	7.00**
Teased you about having PMS or your period (your hormones, e.g., your testosterone level)	44.8	6.9	90.08***
Called you a name like "butch" etc. (girl, wimp, etc.) suggesting that you are not feminine (masculine) enough	22.0	36.3	13.49***
Put down females (males) in general	64.9	42.6	27.07***
Gave you an unwelcome or crude compliment about your body or parts of your body	39.8	19.4	25.29***
Showed you a sexual cartoon or picture or told you a sexual joke that you didn't want to see or hear	33.7	15.7	22.19***
Flashed or "mooned" you	30.8	27.8	0.60
Made a sexual gesture or stared at your body in a sexual way	62.6	40.6	26.27***
Followed you around or pestered you for a date after you said you weren't interested	30.5	19.8	7.91**
Yelled something sexual or whistled or howled at you when you walked by	63.4	31.8	53.37***
Touched, grabbed, or pinched you in a sexual way	45.8	38.2	3.13
Stood too close or brushed up against you in a sexual way	40.1	35.0	1.44
Pulled at your clothing in a sexual way or pulled your clothing down or off	18.3	18.9	0.04
Blocked your way or cornered you in a sexual way	18.0	10.6	5.70*
Kissed or hugged you when you didn't want them to	24.9	19.8	1.92
Forced you to do something sexual other than kissing/hugging	10.1	6.5	2.28

Note: * $p < .05$ ** $p < .01$ *** $p < .001$

sexual harassment scale and subscales and grade and gender. Gender differences in appraisal were examined through t tests using the Bonferroni correction factor.

Results

Sexual Harassment Prevalence Rates

The majority of students in the sample (93%) reported experiencing at least one form of sexual harassment during the preceding 2 months, with higher rates being reported by girls (95%) than boys (89%): $\chi^2(df = 1, N = 565) = 6.63, p < .05$. There were no statistically significant differences in the prevalence rates by province: $\chi^2(df = 1, N = 565) = 1.28, p = .26$. A variety of harassment behaviours had been experienced by both male and female students, and the majority of students had experienced multiple forms of harassment. For example, 64% of the girls and 45% of the boys had been the target of five or more forms of harassment, with one in every four girls experiencing 10 or more forms. Forms of both gender harassment and sexual advances were included among the most common behaviours, with approximately two thirds of the girls reporting that they had been the target of sexual yells, whistles, or howls; sexual gestures or stares; and derogatory comments about females (Table 1). In contrast, no single behaviour was reported by more than half of the boys. Ten of the 19 harassment behaviours had been experienced by more girls than boys; however, higher proportions of boys than girls reported being targeted for derogatory remarks questioning their gender (e.g., being called *gay* or being called *a name like girl, wimp, etc.,* suggesting inadequate masculinity).

Total frequency scores were computed for the two subscales (Gender Harassment and Sexual Advances/Imposition) and the total scale (Table 2), and MANOVA was used to examine differences by gender and grade. A significant group difference for grade was found for the Gender Harassment subscale, $F(2, 557) = 6.578, p < .01$, and was reflected in the total Sexual Harassment scores, $F(2, 557) = 3.183, p < .05$. Dunnett T3 post-hoc comparisons (utilized because the test of homogeneity of variances was not supported) indicated that Grade 9 students experienced higher levels of gender harassment than Grade 10 students ($p < .001$). Girls were the target of both forms of sexual harassment significantly more often than boys (gender harassment, $F[1, 558] = 10.829, p < .01$; sexual advances, $F[1, 558] = 4.074, p < .05$), but the interaction term (gender-by-grade) was not found to be significant for any of the measures.

As a group, girls were targeted for sexual harassment more often than boys, and with a greater variety of harassment behaviours. The students did not, however, necessarily identify and label themselves as having been

Table 2 *Mean Scores on the Sexual Harassment Scale and Subscales, by Gender*

	Girls (*n* = 348)		Boys (*n* = 217)	
Scale / Subscale	***M***	***SD***	***M***	***SD***
Gender Harassment Subscale				
Grade 9	5.84	(5.7)	3.99	(3.9)
Grade 10	3.85	(4.3)	2.82	(3.0)
Grade 11	4.27	(5.3)	3.33	(3.8)
Sexual Advances/ Imposition Subscale				
Grade 9	5.52	(5.6)	5.32	(7.8)
Grade 10	5.93	(6.3)	3.76	(5.1)
Grade 11	5.27	(6.6)	4.33	(5.7)
Total Sexual Harassment Scale				
Grade 9	11.37	(9.5)	9.31	(9.0)
Grade 10	9.78	(9.5)	6.55	(6.8)
Grade 11	9.54	(9.3)	7.85	(8.0)

Note: Response scale = 0–5. Total range of scores: Gender Harassment = 0–35, Sexual Advances/Imposition = 0–45, Total Sexual Harassment Scale = 0–80.

sexually harassed. Among those who reported experiencing at least one of the 19 harassment behaviours, only 35% of the girls and 14% of the boys responded affirmatively to a global item in the survey that asked respondents to report whether or not they had been "sexually harassed" during the preceding 2 months. This suggests that students' perceptions and/or reporting of their peers' behaviours seriously underestimates the prevalence of sexual harassment according to the definitions commonly used by harassment researchers.

Gender Analysis of the Target-Perpetrator Dyad

As expected, cross-gender harassment accounted for almost all of the behaviours in the Sexual Advances/Imposition subscale. The pattern for Gender Harassment, however, varied according to the gender of the target. For the majority of the gender harassment items, approximately half of the female respondents reported that the behaviours were perpetrated primarily by boys, with a third reporting that they were perpetrated by both boys and girls. In contrast, a large majority of the male targets reported same-gender harassment. Thus, it seems that boys are responsible for most of the gender harassment experienced by their male and female peers, whereas both boys and girls are involved in harassment that takes the form of cross-gender sexual advances. As expected, the only gender harassment item that was primarily a cross-gender behaviour was the item on "gender put-downs."

Appraisal

The data on appraisal support the notion that females are more negatively affected by harassment than are males (Table 3). Multiple *t* tests using a Bonferroni correction factor indicated that 12 of the harassment behaviours were appraised as significantly more upsetting for girls than boys. These analyses include only those students who actually experienced the harassment. Thus, even though the sexual harassment scale asks about behaviours that occurred when the respondent *did not want them to*, many more of the boys who acknowledged being a target reported that the behaviour was not upsetting or only slightly upsetting to them. The two behaviours reported as the most upsetting for boys were being the target of sexual rumours or graffiti ($M = 1.13$, $SD = 1.41$) and being followed or pestered for a date ($M = 0.95$, $SD = 1.28$). The girls were also upset by sexual rumours, giving this behaviour the second-highest score ($M = 2.21$, $SD = 1.44$). As expected, being *forced to do something sexual other than kissing or hugging* was reported as the most upsetting experience among girls ($M = 2.94$, $SD = 1.47$). It is noteworthy that, except for the last harassment item, which clearly crosses the line into sexual assault, gender harassment behaviours were generally considered to be more upsetting, among both girls and boys, than sexual advances or sexual imposition.

Coping Responses to Peer Sexual Harassment

Both female and male students reported multiple forms of coping, although girls reported using a greater variety of responses. Half of the female respondents (51%) and a third of the male respondents (32%) reported using five or more coping strategies in response to the harassment behaviours of their peers. *Denial* was the most prevalent response among both girls (64%) and boys (57%). The other responses most commonly reported by girls were *seeking social support* (62%), *detachment* (58%), *endurance* (55%), *avoidance* (49%), and *confrontation* (46%). These five coping responses were more prevalent among girls ($p < .05$) than boys. *Relabelling* was the second most common response among boys and the only coping strategy reported by more boys than girls, although the difference did not reach statistical significance ($p = .17$). *Informal and formal complaints* was the least common response, with no statistically significant differences by gender. Among the girls who reported being sexually

Table 3 *Mean Ratings of Appraisal of Sexual Harassment Experiences Among Targeted Students*

	Girls				Boys				
Sexual Harrassment Item	***n***	***M***	***SD***	**95% CI**	***n***	***M***	***SD***	**95% CI**	***t* test**
Sexual rumors or sexual graffiti	78	2.21	(1.4)	1.88 – 2.53	31	1.13	(1.4)	0.61 – 1.65	3.55**
Called lesbian (gay)	100	1.32	(1.5)	1.02 – 1.62	83	0.78	(1.2)	0.51 – 1.05	2.65**
Don’t look feminine/masculine	125	1.94	(1.4)	1.69 – 2.19	89	0.87	(1.1)	0.63 – 1.10	6.18***
Level of sexual experience	58	1.81	(1.4)	1.43 – 2.19	19	0.95	(1.1)	0.43 – 1.47	2.39*
Teased about PMS/period (testosterone)	150	0.69	(1.0)	0.54 – 0.85	15	0.53	(0.8)	0.07 – 1.00	0.62
Called name like “butch” etc. (wimp etc.)	75	1.36	(1.4)	1.04 – 1.68	74	0.61	(0.9)	0.40 – 0.82	3.90***
Put down females (males) in general	221	1.22	(1.2)	1.06 – 1.38	89	0.42	(0.8)	0.25 – 0.59	6.82***
Unwelcome/crude compliment	138	1.91	(1.4)	1.68 – 2.15	40	0.83	(0.9)	0.55 – 1.10	5.95***
Sexual cartoon or sexual joke	117	0.75	(1.0)	0.57 – 0.94	34	0.56	(0.8)	0.27 – 0.85	1.02
Flashed or “mooned” you	108	0.31	(0.7)	0.19 – 0.44	55	0.35	(0.9)	0.09 – 0.60	-0.24
Sexual gesture or stare	217	0.95	(1.2)	0.80 – 1.11	84	0.13	(0.4)	0.04 – 0.22	9.13***
Followed or pestered for a date	106	1.34	(1.2)	1.11 – 1.57	41	0.95	(1.3)	0.55 – 1.36	1.74
Yelled, whistled, or howled	219	0.73	(1.0)	0.59 – 0.86	65	0.12	(0.6)	0.01 – 0.26	6.27***
Touched, grabbed, or pinched	160	1.16	(1.2)	0.98 – 1.34	81	0.16	(0.6)	0.03 – 0.29	8.79***
Stood too close or brushed against you	139	0.91	(1.1)	0.72 – 1.10	72	0.19	(0.7)	0.02 – 0.36	5.52***
Pulled at your clothing in a sexual way	63	1.62	(1.5)	1.24 – 2.00	40	0.35	(1.0)	0.03 – 0.67	5.11***
Blocked or cornered in a sexual way	62	1.00	(1.1)	0.73 – 1.27	22	0.23	(0.9)	0.00 – 0.61	3.04**
Kissed or hugged against will	85	1.47	(1.2)	1.20 – 1.74	42	0.50	(0.8)	0.24 – 0.76	5.22***
Forced to do something sexual	35	2.94	(1.5)	2.44 – 3.45	14	0.64	(0.7)	0.21 – 1.07	7.21***

Note: Response Scale: 0 = not upsetting, 1 = slightly upsetting, 2 = somewhat upsetting, 3 = moderately upsetting, 4 = very upsetting.
*$p < .05$ **$p < .01$ ***$p < .001$. Multiple t tests were performed using the Bonferroni correction factor.

harassed, 11% reported making an informal complaint (e.g., to a teacher) and 7% reported making a formal complaint through the school system. When mean frequencies were examined, social support was found to be the most frequent response among girls, although it was used less than half the time when the student experienced sexual harassment.

Discussion

Gender Differences

The results of this study corroborate the findings on gender differences of the AAUW (1993) and other studies but suggest that it is important to look beyond the more physically invasive forms of harassment. Indeed, because the harassment scale used in this study sampled more broadly from the domain of gender harassment than the AAUW questionnaire, the findings may offer greater insight into the phenomenon of gender harassment than those of other adolescent harassment studies. It was found that girls were more likely than boys to experience sexual harassment, and that they were likely to experience unwanted sexual attention (verbal, visual, and physical) slightly more often than gender harassment. However, except for forced sexual activity, gender harassment behaviours were generally appraised as more upsetting than sexual advances/imposition. This result contradicts that of Loredo, Reid, and Deaux (1995), who found that high-school students judged gender harassment to be the least severe form of sexual harassment; however, in that research, as in the AAUW study, the respondents were assessing a hypothetical situation. In the present study, being the object of sexual rumours and receiving negative comments or unwelcome or crude compliments about one's body were appraised as among the most harmful forms of harassment. It has been theorized that gender harassment serves to enforce traditional gender roles (Shakeshaft et al., 1995). For example, comments about physical appearance, whether positive or negative, "can serve to remind girls and women of the need to meet stereotypical standards of beauty" (White, 2000, p. 129), whereas spreading sexual rumours or referring to girls as "whores" or "sluts" reinforces the still pervasive double standard regarding sexual conduct. This is consistent with Shakeshaft et al.'s finding that girls who are either unattractive or physically more mature are likelier to be harassed, and explains why such seemingly contradictory comments (compliments and negative comments) about girls' bodies were appraised as almost equally upsetting. Boys also appraised gender harassment (generally from other boys) to be the most upsetting form of harassment — more upsetting than the sexual advances received from girls.

The girls appraised all forms of harassment as more upsetting than the boys. This gender difference in perception is consistent with the findings of other studies with elementary- and high-school students (e.g., Murnen & Smolak, 2000; Trigg & Wittenstrom, 1996). It may be partially due to a general emotional restriction among males (Polce-Lynch et al., 2001). It may also occur because girls are threatened by the very real possibility of escalating violence (Larkin, 1994) or because boys are socialized by their families and schools to be more accepting of all forms of aggressive behaviour and games of dominance (Hand & Sanchez, 2000). Boys are also far less likely than girls to feel shame about their sexuality (McMaster et al., 2002). However, the explanation may be more broad-based, for other researchers have found that adolescent girls tend to suffer more than adolescent boys from all kinds of social stressors (Seiffge-Krenke, 1995). Gilligan (1982) suggests that women's identity and self-assessments are highly dependent on their relationships, whereas men's self-assessments are less fused to their relationships. Nonetheless, the overall ratings of distress were low, even among female students.

Although in this study a measure of social desirability was only weakly associated with reports of sexual harassment, other qualitative research evidence has suggested that adolescents discount sexual harassment behaviours as mere teasing that should not be taken too seriously (e.g., Berman et al., 2000; Larkin, 1994; McBride, 1998). Comments by students in the present study support this notion. For example, one Grade 9 girl rated being called a lesbian by other girls as *somewhat upsetting* but added the following comment on the questionnaire: "They were joking, but sometimes I take things seriously." Adolescents learn that they are not supposed to take such peer behaviour seriously; they apparently learn to excuse the harasser and to blame themselves for their feelings. Girls in particular may be striving to appear in control of their lives and therefore be reluctant to admit to adult researchers that events within their social network are unacceptable or distressing to them. It is possible that adolescents are encouraged to minimize their emotional reactions because of the current conservative backlash against feminism (Hand & Sanchez, 2000). Conversely, this reaction could be an unfortunate by-product of the earlier success of feminism. Girls who have repeatedly heard that females should be strong and in control may find it particularly difficult to admit that they have been victimized by a male. Boys may similarly hesitate to admit being bothered by a sex-related experience with a female because it indicates a lack of control over the situation.

The notion of attenuated appraisal is consistent with the present finding of increased prevalence of emotionally focused compared to behaviourally focused coping, among both girls and boys. It was speculated that girls would not confront the harasser or actively seek help from school staff for fear of making the situation worse or of not being believed or taken seriously by staff. Passivity in coping, however, is not specific to sexual harassment. In a study of stress and coping among adolescents, Seiffge-Krenke (1995) found that passive coping was much more common than active coping, despite the adolescents' predictions that they would respond actively. Boys may also display less help-seeking behaviour in general because asking for help is considered "unmasculine."

In the present study, the youngest students, those in Grade 9, reported the highest rates of gender harassment. This was true for both sexes, thus reflecting same-gender harassment for the boys and cross-gender harassment for the girls. No statistically significant grade differences were found for sexual advances, although, among the boys, those in Grade 9 reported the highest level of sexual advances. These cross-gender harassment behaviours may be a reflection of girls' earlier pubertal maturation and a sexual interest that is not reciprocated by the boys in their age group. When assessing developmental trends, however, the grade structure of the schools should be taken into consideration, as harassment may occur across grade levels. For example, Grade 9 girls in a school that includes Grades 9 through 12 might experience higher levels of sexual advances than Grade 9 girls in a school that includes Grades 7 through 9, because they will have more encounters with older, more sexually mature boys. A strength of this study was its rigorous attention to appraisal and coping. Previously, only Fineran and Bennett (1999) had measured the adolescent's appraisal of the various sexual harassment behaviours experienced. It is also the first study with adolescents to incorporate the Coping with Harassment Questionnaire (Fitzgerald, 1996). Limitations include its correlational design, use of single-source data, and possibility of recall error. Finally, although an attempt was made to recruit a diverse group of adolescents by targeting a variety of schools and locations, the participants may not be representative of the student populations of the two provinces.

Implications for School Health Programs and Other Preventive Interventions

Despite the above limitations, the results offer guidance for school health research and practice. The higher rates of harassment among Grade 9 students, coupled with other empirical evidence showing that sexual harassment begins in the lower grades, suggest that prevention efforts should be instituted well before children reach high school. The high incidence of gender harassment and its negative appraisal by adolescents suggest that gender harassment should not be excluded from sexual harassment definitions and policies, and that sexual harassment prevention should be included as part of more general anti-bullying interventions (McMaster, Connolly, Peplar, & Craig, 1997). Preventive efforts may be furthered if gender-related derogatory comments, teasing about promiscuity, insults or vulgar comments about people's bodies, and inappropriate sexual advances are conceptualized as part of an escalating school climate of decreased empathy, interpersonal disrespect, bullying, and violence (Hand & Sanchez, 2000).

The Role of the Nurse

The public health or school health nurse is ideally situated to bring a population-based perspective to the prevention of sexual harassment and the amelioration of its sequelae among adolescents, by ensuring that sexual harassment, and the issue of the social environment, are considered important aspects of comprehensive school health programming. More specifically, as part of the school health team, nurses can contribute to primary and secondary prevention by advocating for, and participating in, the development of sexual harassment policies, procedures for responding to complaints, and the inclusion of sexual harassment in life skills curricula. Nurses can help high-school students become more adept at recognizing stressful situations and assessing the efficacy of their coping responses. They can also promote healthful ways of coping with stress. Finally, nurses should be alert to the potential for gendered violence, whether in intimate relationships or at the school or community level; it has been theorized that tolerance of sexual harassment in schools encourages the victimization of girls through sexual assault and dating violence and promotes abusive behaviour in boys (Stein, 1995).

Gender has come to be recognized as a powerful determinant of health, and the findings from this study related to gender harassment and same-gender harassment among male adolescents indicate that gender-related power can be used against both sexes. The results should generate concern that boys who are targeted for frequent gender harassment will become victims of rougher forms of bullying. Thus, the school nurse should not neglect gender harassment as a potential health issue among male students. The nurse should also advocate that life skills curricula include an exploration of gender construction in addition to discussions of healthy sexuality and relationships, social skills training, and assertiveness skill-building for intimate relationships.

Conclusion

This study has described the sexual harassment experiences of a diverse group of male and female students in Grades 9 through 11. One of the unexpected findings was that both male and female students reported gender harassment to be more upsetting than unwanted sexual advances.

Moreover, the examination of gender differences in adolescents' rates of victimization, appraisal of the situation, and methods of coping serves to inform our understanding of sexual harassment as a function of gender — that is, the findings support the notion that our social construction of gender influences the perpetration of various forms of sexual harassment among males and females, by males and females, and the notion that adolescents' gendered experiences influence how they appraise and cope with that harassment.

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Comments or questions may be directed to V. Susan Dahinten, School of Nursing, University of British Columbia, T201-2211 Wesbrook Mall, Vancouver, British Columbia V6T 2B5 Canada. Telephone: 604-822-7437. Fax: 604-822-7466. E-mail: dahinten@nursing.ubc.ca

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V. Susan Dahinten, PhD, RN, is Assistant Professor, School of Nursing, University of British Columbia, Vancouver, Canada.

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Résumé

La recherche en santé mentale et la domination culturelle : la construction sociale de la connaissance à des fins de développement international

Sonya L. Jakubec et Marie Campbell

Ce travail ethnographique institutionnel s'appuie sur l'expérience de la première auteure en tant qu'intervenante en développement international, éducatrice et infirmière en santé mentale communautaire en Afrique occidentale, pour illustrer comment la recherche officielle et les politiques portant sur les services de santé mentale reflètent la domination occidentale sur le plan académique, corporatif, économique et culturel. S'appuyant sur une analyse textuelle critique d'un questionnaire utilisé dans le cadre de demandes de subvention adressées à des agences d'aide internationale et de prêts, les auteures démontrent comment les processus officiels privilégient les politiques et les approches de recherche occidentales et supplantent les perspectives locales. Pour être efficaces dans leur travail de développement en Afrique, les infirmières, les chercheurs et les décisionnaires doivent apprendre à reconnaître les attitudes de domination subtiles inhérentes aux approches occidentales. Les auteurs proposent que la recherche internationale et les politiques de développement international mettent en priorité la compréhension des connaissances locales plutôt qu'une approche privilégiant des cadres d'interprétation complexes et généraux.

Mots clés : santé mentale internationale, domination culturelle, ethnographie institutionnelle

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Mental Health Research and Cultural Dominance: The Social Construction of Knowledge for International Development

Sonya L. Jakubec and Marie Campbell

This institutional ethnographic work uses the first author's experience as an international development worker, educator, and community mental health nurse in West Africa to illustrate how official research and policy on mental health services reflect Western academic, corporate, economic, and cultural dominance. Focusing on a critical textual analysis of a survey intended to support funding applications to international aid/lending agencies, the authors show how official processes privilege Western policies/research approaches and subordinate local perspectives. If nurses, researchers, and policy-makers are to be effective in carrying out development work in Africa, they must learn to appreciate the subtle exertion of dominance inherent in Western approaches. The authors propose that understanding local knowledge be foregrounded rather than backgrounded to the complex global interpretive frames for international research and international development policy.

Keywords: international mental health, cultural dominance, institutional ethnography

Introduction

> The question of ruling practices that masquerade as development is very difficult to pry apart from the ideology of caring that motivates nurses. Those who experience it can feel the contradictions. (Campbell & Gregor, 2002, p. 126)

This institutional ethnographic work questions the assumed benefits of development work in cross-cultural research. It uses the first author's experiences as a development worker, educator, and mental health nurse in West Africa to demonstrate that official research and policy regarding mental health services in developing countries are part of Western cultural dominance. As such, the analysis should serve to further our understanding of the increasingly vocal resistance to international development that sometimes appears to be a generalized critique of globalization. A careful textual analysis of a survey developed by the World Health Organization provides the basis for the argument that official knowledge about mental health in The Gambia, West Africa, privileges Western ideas and practices. An analytic focus on knowledge is central to this argument. The knowledge generated by surveys such as that of the WHO is crucial to the development and management of mental health intervention programs in developing countries. Yet the knowledge generated and the treatment based on that knowledge are shaped by ideas and interests that are not those of the people they are designed to help.

The analysis was conducted by the first author as part of her master's of nursing thesis (Jakubec, 2001). The second author supervised the research and helped to develop the conceptual framework for the paper. For clarity, the first author's voice will be used throughout. In the thesis research, I (Sonya Jakubec) analyzed my own work in The Gambia to illustrate the contradictory nature of development work in general and mental health nursing in developing countries in particular. On the one hand, mental health patients in The Gambia needed help, and as an experienced Canadian mental health nurse I felt that I had much to contribute to the mental health team. On the other hand, I saw a different picture emerging. What is analyzed is the "help" offered by a well-meaning nurse as part of a "world mental health" framework that carries certain cultural implications.

Background

Between 1996 and 1998 I served as technical advisor to a community mental health team in The Gambia, having been recruited by a British non-governmental international development agency. My responsibility was essentially to assist in building a community health program in this impoverished country. Through orientation programs, I was trained to adapt my skills and knowledge to new, resource-poor settings as well as to customs, ethics, and values specific to The Gambia. I brought with me, as would any Canadian nurse, a respect for the cultural practices of the country in which I would be living and for the views of the four Gambian nurses with whom I would be working. I learned to be attentive to predominant local beliefs and traditional healing methods, which included a belief in spiritual disease causation, extensive family involvement in care, and treatment by healers known as *marabouts*. The Gambian nurses were Western-trained and moved comfortably between Western and traditional beliefs surrounding mental health. The team's work practices had been shaped in the context of diverse belief systems, values, and practices. The population served by the team comprised five main ethnic groups. Most patients approached traditional healers first in their pursuit of treatment for mental health problems. In order to function effectively in this setting, I took local language lessons, participated in an extensive in-country cultural training program, and attended local ceremonies and other events. I also closely observed and tried to learn from my colleagues and the Gambians who I befriended and with whom I resided. This process of observation, questioning, and immersion was, for me, an important means of understanding nuances, taboos, and cultural mores, and of supervising nursing staff, teaching, and offering clinical guidance to colleagues in an appropriate way.

As I approached the end of my 2 years in The Gambia I began to look for base or long-term funding to help sustain the work of my team. The team had worked hard and accomplished much: the mental health program was growing and was seen as a successful health resource in the country. But I was aware that, as an outsider, I had access to resources that my Gambian colleagues did not. Included in the advice I received on attempting to secure continued funding was a strong suggestion that I collect "better data" on the need for the service being offered, in terms of both the clients and their treatment. I was directed to the Gambian national office of the WHO, where, after some consultation, it was suggested that I begin to collect data on mental health. The Pathways Study material was put in my hands, and I eventually sought and received Canadian government funding to conduct a study. After completing one term of a master's program at the University of Victoria, I returned to The Gambia in 1999 and conducted the study as a member of a large team of mental health workers. The Pathways Study consisted of a questionnaire administered during routine "encounters" with new patients over a 1-month period. There are several pages on the patient's history of being examined, diagnosed, and treated over the course of an illness or series of illnesses up to the point of the present encounter with the psychiatric system. This paper does not report the findings of the Pathways Study nor critique the questionnaire itself. Rather, it concerns the construction of knowledge *through* the Pathways Study.

Institutional Ethnography

Institutional ethnography is an approach to studying everyday life in which the analyst looks at "how things are organized." It draws on Dorothy Smith's (1990a, 1990b, 1999, 2002) theory of the social organization of knowledge, in which "experience" is the starting place for an inquiry. Something that is experienced by an actual person in an actual setting is examined in order to discover the forms of social organization that constitute it as it is known and responded to by insiders (Campbell, 1998). The notion of "standpoint" is central to Smith's institutional ethnography. Knowing and knowledge, Smith claims, are always located somewhere; thus an institutional ethnographer works from and "explicates" a problematic from a particular standpoint. Smith's interest in developing a methodology for social analysis that attends to a particular standpoint emerged from her (feminist) concerns about men's views being taken as normative (Smith, 1987). Smith and other feminists have suggested that the subordination of women originates in just such "invisible" knowledge practices. This view has strong appeal for nurses whose experiential knowledge lacks professional authority. It can also be useful in analyzing the troublesome issues of post-colonial development work. Smith takes Foucault's (1984) view that knowledge and power are linked. Smith's commitment to social equality brings to her scholarly research a theorized interest in identifying the role of power in the knowledge practices that permeate everyday life. She argues that people's lives are ruled, at least in industrialized societies, by the textual coordination of action (Smith, 1990b). In institutional ethnography, the goal is to determine empirically how that kind of rule is organized and how all of those involved (both the ruled and the rulers) make it function. This analytic interest points researchers towards textual analysis and text-based or mediated practices.

Institutional ethnography was the methodology of choice for my investigation, because it offered a way of analyzing the Pathways Study texts, the use of which became a condition for securing further support from aid/lending agencies. The whole scenario surrounding the Pathways Study had been puzzling me. That is to say, it was not immediately clear to me why any new account of the work of my mental health team was necessary given that information on our work in The Gambia had already been collected. Smith's writings on the social organization of knowledge offer some insight. She explains that texts function as part of the social relations of any setting and serve to unite people in coordinated action. Such a conceptual framework seemed useful for my attempts to understand the contradictions and conundrums I saw in the demand for "better data." It offered me a way of treating the Pathways Study as a step in the textual organization of "getting mental health work done."

An institutional ethnographic inquiry is framed, not around a hypothesis, but around a problematic "in the everyday world" (Smith, 1987). The underlying belief about social reality (ontology) is that people "enact" social life; thus a social inquiry must be framed in such a way as to capture accounts of what people do (Campbell & Gregor, 2002, pp. 90–91). All research strategies are approaches to the analysis of data, but they do so in different ways. The institutional ethnographer focuses on how people's actions, lives, and experiences are socially organized. Smith's (1987) concept of social relations is central to such inquiry. Social relations is an ontological notion about social life whereby people act knowledgeably as they conduct their lives and are therefore participants in weaving their personal actions into the social fabric. The goal of the institutional ethnographer is to explicate how people's actions are socially organized and put together to result in what is observed and recounted. Informants understand the meaning of their everyday experiences but do not have a firm grasp of the social organization of these experiences. My explication draws what is missing in people's stories, or in observational data, into the analysis. Ethnographic data provide clues to connections between everyday life and its social organization. The institutional ethnographer follows these outwards to their source. This is how the notion of social relations as organizing the setting becomes a methodological tool. The research questions were: *How does the Pathways Study work? What are its governing social relations? What does it accomplish?* Treating the Pathways Study as governed by social relations serves both to identify the impetus for and implementation of the Pathways Study and to determine how, on the basis of the study itself and the knowledge it generates, a continuing coordinated action occurs. The data of analysis were the study itself — its texts and their origins in various discourses — and the methods I used in conducting the original study.

Data

Institutional ethnography's focus on the social organization of everyday life calls for two levels of data (Campbell & Gregor, 2002, p. 60). The first is ethnographic, in the anthropological sense, and may include interviews or, as with this inquiry, participant observation. My work as a technical advisor included experiential involvement in everyday mental health work, with colleagues and patients, in The Gambia. This experience was my means of studying the organization of the everyday work of mental health nurses in The Gambia. My accounts were supplemented by entries in a journal that I kept on my experiences as a practising nurse and development worker, photographs and slides documenting the workings of the team, and letters that I had sent to colleagues, friends, and family members in Canada.

The second level of data consisted of the Pathways Study documents, the actual survey instruments, and several of the completed questionnaires. The inquiry also entailed a search of the literature on the Pathways Study — its origins and various applications — and a search of the development literature.

Analysis

As the mental health team "activated" the text of the Pathways Study in The Gambia, we participated in its social relations. Smith explains that texts carry social organization across the experiential boundaries of settings. The activation of the survey form brings its organization into the local setting. For Smith, "texts speak in the absence of speakers" (1990b, p. 211). As we nurses activated the text, we began to relate to our patients *through the form*. This section of the paper analyzes this process, using the text as data explicated through institutional ethnography.

Organizing and "Encountering" Patients: Not So "Routine" Information

At the top of the first page of the Pathways Study is the title "Encounter Form," followed by several lines of instructions to guide the interviewer's "encounter" with the patient. Health workers are instructed to carry out their "usual full clinical assessment, with particular attention to the sequence in which symptoms were developed" (WHO, MNH/NAT/ 87.1).

The basic data to be collected (see Figure 1) were the name of the facility at which the patient was seen, the name of the nurse who filled in the form, the date, the patient's initials, the date when the patient was first seen by any mental health service, the date when symptoms first appeared, the time elapsed since the symptoms first appeared, and the diagnosis (translated into the language of the International Classification of Diseases-10, or ICD-10; World Health Organization, 1993). Other data to be collected were the name of the person who first saw the patient, how that contact was initiated, the symptoms that caused the patient to seek help, and any specific treatment. This process was to be repeated for any and all other referrals described by the patient.

Activating the Encounter Form

My experiential account indicates that as the text was activated it began to demonstrate cultural domination. I begin by arguing that the "usual full clinical assessment" conducted by my mental health team could be described as anything but routine but transferring these assessments to the Encounter Form began to make them so.

As The Gambia's only community mental health service, the team had to journey to remote areas of the country in what were called treks. Just getting there was an adventure, owing to the rugged terrain, lack of secure supplies of fuel, and other factors. As we travelled throughout the country, we would see both registered patients and their relatives, brought along as new consultations. Sometimes the queue would comprise hundreds of people, while others would wait outside seeking the shade of trees. Still others would be seen along the way at the compound of the local *marabout*. The team functioned in an informal manner. We would visit people in their homes or, in the case of the smaller health centres, at

Figure 1 ***Excerpt from a Completed Encounter Form***

1. BASIC INFORMATION
1.1) Name of facility at which the form is filled in: *CMHT office*
1.2) Form filled in by: *MA*
1.2) Date: *31 May 1999*
1.4) Patient's initial: *MJ*
1.5) Date first seen by mental health services: *31 May 1999*
1a.) What was the first symptom developed by the patient?: Isolative, loss of appetite
1b.) How long ago? (number of months): *3 years*
1c.) State diagnosis: *Schizophrenia + specific ICD-10 classification number XXXX*

(WHO, MNH/NAT/87.1)

tables set up outdoors under a gazebo. Occasionally we would make an initial or follow-up assessment at the riverside, at the roadside, or in a store.

As with all interactions in The Gambia, every conversation with a patient, family member, or member of the health centre staff began with an exchange of greetings, ritual questions/answers, and blessings/prayers. The Gambia being a small country, the Gambian nurses on the team would often run into extended family members or acquaintances. As we moved about the countryside, the team members would chat with various people, from the patients with mental illnesses, to their relatives and friends, to village leaders and rural health workers, thereby establishing personal connections. An interview might be brief, but it would be filled with laughter, village news, or the stories of the people or families being assessed, often shared over food, which was almost always offered to us at some point in the journey. Rarely would the mental health team consult with a patient alone. The entire family might be present if the assessment took place in a home. Visits to the local healer, where perspectives and treatment strategies would be shared with the *marabout*, were an opportunity to engage in the kind of informal education in which the team specialized. Often the cause of a disorder would be interpreted as personal or social distress, misfortune, loss, or extreme poverty, possibly connected to what was referred to as a *juru*, or curse. The *marabout* would offer charms, prayers, or spiritual healing for the manifestations of the curse.

The Pathways Study transformed the team's way of conducting routine assessments. The questionnaire served as a template for our interactions, with the nurses interviewing people in order to get specific answers and interpreting their comments in terms of the survey categories. With the increased emphasis on diagnosis came an increased emphasis on "appropriate" treatment — that is, Western psychiatric treatment.

I noticed that my colleagues seemed to enjoy working with the questionnaire. As suggested in the instructions, it was easy to implement, eliminating some of the conversation and informal interactions in the interview process. I sensed that the Gambian nurses found that using the structured, standardized tool and writing down their findings enhanced their "professionalism." The survey structure also facilitated the team's control over the queues. One day I was surprised to hear one of my colleagues shout "Next!" as he processed the patients. This struck me as a complete departure from the usual conversational approach whereby patients were treated as members of families and communities.

It was not just the style of interaction that changed. The questionnaire itself altered basic understandings of mental health and proper treatment. It required the interviewer to interpret people's stories in terms of psychiatric and Western medical notions of causation and treatment. One woman's first symptoms, as told to a *marabout*, are recorded on the Encounter Form as "meditates a lot, withdrawn, thinking too much (not able to bear children)." After several months her symptoms worsened, to include "tearfulness, insomnia and loss of appetite." When the woman approached the community mental health team she was given a diagnosis of "depression" and prescribed medical treatment. The actual availability of such prescribed medical treatment would vary. The Gambian state supplemented what medications could be obtained through the WHO drug programs, and occasionally well-intentioned donors would send supplies of psychiatric drugs that were made available as a one-time-only gift. However, a chronic shortage of medications did not affect the team's evolving understanding of the "best way" to treat patients.

The Encounter Form required that local needs and mental conditions be reported in institutional language. To complete each survey, the team would take an observed case (already worked up through the questions of the trained mental health nurse), interpret the symptoms based on Western notions of causation, and make a diagnosis. This activation of the text would, as in the above example, translate a person's suffering into "depression," a condition to be treated pharmaceutically.

Pathways Texts as Elements of Social Organization

My text analysis also explicates the relation between the survey text that we used in The Gambia and a number of mental health and international development discourses, reinforcing my argument that the Pathways Study is a form of cultural dominance. The theory of institutional ethnography tells me that texts "carry" and establish certain relations among the people who read and use them. My inquiry was directed at the trans-local relations being organized in The Gambia through our participation in the Pathways Study.

In practice I acted as a member of the team, completing Encounter Forms according to the instructions. However, as Smith points out, "the everyday world is not fully understood within its own scope. The everyday world is organized by social relations not fully apparent in it" (1987, p. 92). People make sense of texts in the context of their social situation (McCoy, 1995), consciously and unconsciously interpreting and giving meaning to texts from external settings and drawing them into their own, everyday worlds.[1] Smith (2002) further explains:

> Texts as read and written in the everyday actuality of people's work coordinate what people are doing in one local setting with work done by others elsewhere or at different times… Not everybody reads a given text in the same way, but for every site into which a given text is inserted one side of the text-reader conversation is fixed and unchanging from site to site to site. (p. 34)

When people engage competently with texts such as surveys and other data-collection tools, they use the resources of the text itself to determine how it is *intended* to be read. Thus informed, they are able to understand and follow the instructions as well as the unwritten rules. The practitioner's competency with the text's words and symbols makes possible the application of some of the text's meanings to the local setting. In terms of my research, this meant investigating the discourses whose meanings are (or will be) drawn into the local setting through the various ways that the Pathways Study and its findings are (or will be) activated. This text-reader conversation begins with the Encounter Form, my analytic entry into the social organization of the Pathways Study. To read the text analytically is to search for clues to its discursive origins. I need to know what extra-local messages are carried into my work setting. These connections lead to a fuller understanding of what the Pathways Study is doing in Africa and elsewhere.

The Encounter Form provides a number of textual clues to its discursive antecedents. Initials in its top left corner inform the reader of its origins. A referencing code, "MNH," makes an authoritative connection between the form and WHO research guidelines and protocols. I knew from my initial contact with the WHO's Gambia office that MNH refers to a group of studies within the WHO's mental health division. The title

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[1] This kind of text-reader conversation in institutional ethnography draws on Smith's (1999) engagement with Russian language theorists such as Bakhtin (1981) and Volosinov (1983).

MNH/NAT/87.1 ties the Pathways Study to the WHO libraries in Geneva that distribute the documents through its various national offices (in this case, in the capital city of The Gambia). Thus, I identified the definitive link not just between the Gambian national office and the Pathways Study, but also to its initiators, Gater, Almeida, Sousa, and Barrientos (1991), and other discussants of the Pathways Study. Gater and his associates in the Mental Illness Research Unit at the University of Manchester report their research in an influential article, "WHO Activities Aimed at Improving the Quality of Mental Illness Care" (1991, p. 761). Their work in initiating the Pathways Study is vital to how the survey is to be read. It establishes the WHO's methodology for improving mental health as expressed in the survey and other documents.

The reference to "Annex 1" at the top right corner of the Encounter Form is another indication of how the Pathway Study fits within the WHO's other studies. It identifies the Encounter Form as an annex of a report that outlines a whole program of research, including the goals, required resources, protocols, methods, and analyses of the various studies, thus showing that the documents can, in combination, build a clear understanding of mental health circumstances, training needs, and so on. The chief aim of the Pathways Study, according to an introductory document, is "to describe the pathways which patients with mental illness take in each centre" (WHO, MHN/NAT/87.1) This introductory document reveals other aims and discourses of Pathways research (see Figure 2). Quick referral to a specialist psychiatric service is particularly important. Concern about delays in getting patients to Western psychiatric care is Gater's motivation for initiating the Pathways Study — "appropriate help...as soon as possible after the beginning of patient's contact with services" (Gater et al., 1991, p. 762). All Pathways research, it should be noted, assumes the benefits to patients of a quick referral from the time of initial contact with a service provider, whether a general practitioner in Manchester or a local healer in a developing country. This assumption is implicit in the research as a feature of the dominant medical discourse of psychiatry in which Gater's work is rooted.

Pathways Survey and the Construction of "Delay"

A typical completed Encounter Form concerns a patient with one or more symptoms (such as sleeplessness or illusions) who had sought help from a practitioner — often a local healer who provided a charm or a herbal remedy — several months or even years previously. To properly read the Pathways data on "referrals," one must be familiar with Gater et al.'s (1991) perspective on "delays" as manifested in the questionnaire. The questionnaire constructs a patient's story as a sequence of help-seeking. A proper reading (and activation) makes note of the length of time it

Figure 2 ***Aims of the Pathways Study***

For a variety of practical reasons it [the survey] begins with patients coming to mental illness services with new illnesses, and it aims to answer questions such as the following:

Pathways of care:

What *paths* do people with mental illnesses follow in the course of their search for help?

How long does it take to pass the various nodes in the path?

And which symptoms *hasten the process of referral* to a specialist psychiatric service?

(WHO, MNH/NAT/87.1; italics added)

took the patient to reach some form of Western psychiatric assessment (presumably, the encounter during which the questionnaire is completed). The categories and the instructions to the interviewer construct each case in terms of the survey's meanings. Implicit in the text are connections to the authorizing organizations and their discourse. Only when the concept of "delay" is seen as developed by Gater et al. can the Encounter Form be read in this way.

Gater's research establishes a connection between local and extra-local sites, between efficient referral to Western treatment and efficient service — those who seek help from local healers are likely to experience delays in accessing "appropriate" care. Once patients' involvement with local healers is understood, Gater et al. (1991) suggest, a variety of ways of "hastening referrals" (p. 773) become possible. They recommend training in recognizing psychiatric symptoms. Recall that in implementing the Pathways Study I observed some negative effects of "hastening referrals" in this manner. As my team became orientated to the Encounter Form, whereby each symptom must fit into a diagnostic category, they stopped paying careful attention to the patient's account and began associating symptoms with a diagnosis. While the sort of clinical training suggested by the Pathways Study can be beneficial, it can also give rise to difficulties. Once the focus is on delay in access to Western treatment, the practitioner-patient interview becomes based on efficiency. This reliance on Western science to diagnose a condition and prescribe the most "effective" or "helpful" treatment sits in contradiction to the lack of medical resources in many developing countries — potentially, however, creating new markets for Western corporations. Underlying such interventions is the danger that traditional approaches will be subordinated, displaced, and discredited.

Delays and "Development"

How can this happen in the context of international development, which would seem to have a philosophy entirely different from that of business? My text-reader conversation offers some insights. Reading a mental health text to determine its social relations leads one to question the research interest in what international health experts call "the burden of disease." This concern fits with the World Bank's interest in efficiency and productivity as laid out in the report *Highly Indebted Poor Countries* (World Bank, 2002). Desjarlais, Eisenberg, Good, and Kleinman (1995) describe the connection among health, health care, and productivity: the burden of prolonged illness, in terms of loss of productivity, on individuals and families is considered to be one of the most significant health and social problems internationally. The increasing interest in promoting and studying the pathways that patients take in accessing appropriate psychiatric care is expected to have an economic pay-off (Gater et al., 1991; Sartorious & Harding, 1987; Sartorious et al., 1993).

The World Bank, through its Mental Health Policy Department, closely monitors the financing of mental health services. It issues mental health "do's and don'ts" for both donors and countries seeking loans or other forms of funding (World Bank, 2001). For instance, the information collected via the Pathways Study is intended to assist the Gambian government. In 1999 The Gambia was preparing a Five-Year Health Action Plan to obtain training resources from the WHO and to obtain aid from international funding/lending bodies such as the World Bank and the International Monetary Fund. Marten de Vries, Secretary General of the World Federation for Mental Health, has cited the role of "productivity, work, and the 'disability adjusted life years' lost through the 'burden of disease,' with managing the scourge of depression" (de Vries, 2001). This helps to explain the rationale of hastening psychiatric referrals in order to promote productivity. The Pathways Study is part of what I view as the "world mental health" framework (Jakubec, 2001, p. 7), whose purpose is to support the economic development and productivity of "under-productive" nations — nations that are increasingly plagued by illnesses that rob individuals of the ability to participate in the market economy. In developing countries such as The Gambia, according to this discursive framework, mental illness must be treated efficiently and appropriately in order to support development. Development is guided and supported by aid and lending agencies that, while "helping," also have a distinct view of how such development should proceed. All of these activities, and their textual representations, I suggest, are the basis of a new form of colonization through development, international aid, and tied trade.

Explicating Everyday Practices of Dominance

"Why do they hate us?" (Davis, 2002). Events in the past year have prompted North Americans to reflect on this question. I suggest that nurses who are involved in international development are implicated in some of the practices of dominance that arouse hatred internationally. I have analyzed common research tools to illustrate that their texts have colonizing implications. Mental illness is a problem that people in developing countries need help in overcoming. Sometimes the products of Western research and development will be the solution. Clearly, however, the mental anguish faced by people living in abject poverty cannot always be explained by psychiatry nor properly treated with pharmaceuticals. Methods of knowing that interpret local conditions in terms of psychiatric categories are part of the problem. The results of my analysis suggest that we can best understand the colonizing implications of this kind of interpretation of people's experiences by first acknowledging our own complicity in the process. This analytic agenda aims to recover an account of what is occurring in everyday practice — behind the slogans — in the developing world and elsewhere. This kind of analysis can contribute to a new way of thinking and to ways of working that actually address people's needs.

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Correspondence may be sent to Sonya Jakubec, School of Nursing, Okanagan University College, 3333 College Way, Kelowna, British Columbia V1V 1V7 Canada. E-mail: sjakubec@ouc.bc.ca

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Sonya L. Jakubec, RN, MN, is Assistant Professor, School of Nursing, Okanagan University College, Kelowna, British Columbia, Canada, and a PhD student in the Faculty of Nursing, University of Calgary, Alberta, Canada. Marie Campbell, PhD, is Professor Emeritus, Faculty of Human and Social Development, University of Victoria, British Columbia.

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Résumé

Les filles de patients cardiaques : le processus de prestation de soins

Donna-Michelle Gage-Rancœur et Margaret A. Purden

Cette étude prospective et exploratoire examine le rôle de soignante joué par des femmes ayant un parent hospitalisé pour des problèmes cardiaques. De façon plus précise, l'étude se penche sur l'élaboration et l'évolution du rôle de soignante pendant la période d'hospitalisation et durant la période suivant l'hospitalisation. Des données ont été recueillies auprès de neuf femmes par le biais de commentaires émis par les participantes et d'entrevues non structurées et semi-structurées. La prestation de soins exécutée par des femmes ayant un parent cardiaque était caractérisée par un processus non linéaire d'acquisition de « compétences », lequel incluait la recherche de connaissances, la consolidation des connaissances et les interventions menées à partir de ces connaissances. Dans un processus secondaire d'auto-évaluation de leurs connaissances, les participantes circulaient d'une dimension à l'autre. De plus, leur degré d'engagement reflétait quatre styles distincts de soins, qui relevaient de la culture familiale en matière de prestation de soins. Les infirmières peuvent être plus efficaces dans leurs interventions auprès des femmes qui prennent soin d'un parent en déterminant la position de celles-ci dans le processus d'acquisition de « compétences » et en agissant en fonction de cette position. Les infirmières doivent également tenir compte des opinions et des traditions familiales face à la prestation de soins.

Mots clés : maladie cardiaque, prestation de soins, femmes prenant soin d'un parent, processus de prestation de soins, famille, prestation de soins par un membre de la famille, différences liées aux rapports sociaux entre les sexes, soins informels

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Daughters of Cardiac Patients: The Process of Caregiving

Donna-Michelle Gage-Rancoeur and Margaret A. Purden

This prospective, exploratory study examined the caregiving role that adult daughters play when a parent is hospitalized for a cardiac condition. Specifically, the study addressed the development and evolution of the caregiving role during the hospital stay and in the post-discharge period. Data were collected from 9 daughters using participant observation and unstructured and semi-structured interviews. Daughters' caregiving was characterized by a non-linear process of "knowing" that included knowledge seeking, consolidation of knowledge, and acting on the knowledge. In a secondary process of self-assessment concerning their knowledge, the participants moved back and forth among the 3 dimensions. In addition, their level of involvement was defined by 4 different caregiving styles, based on the family's caregiving culture. Nurses might collaborate more effectively with women caring for a parent by determining their position in the "knowing" process and tailoring the intervention accordingly. Nurses should also be sensitive to families' opinions and traditions regarding caregiving.

Keywords: cardiac illness, caregiving, caregiving daughters, caregiving process, family, family caregiving, gender differences, informal care

Introduction

The percentage of the population that is 65 years and older is on the rise, and it is midlife daughters who provide much of the informal care to this ageing population (Robinson, 1997). While age-related changes increase an elderly parent's need for support, the presence of a chronic illness such as heart disease necessitates even greater involvement on the part of the family caregiver. It often entails helping the parent adjust to hospitalization for an acute exacerbation of their condition. Indeed, hospitalization for cardiac disease is increasing in Canada, with elderly persons accounting for more than 75% of the patient population (Health Canada, 2000). The high incidence of coronary-related disease in the elderly and the prevalence of daughters in caregiving roles point to the need for research on the caregiver-care recipient dyad. Previous studies on family caregiving for the elderly have focused on either daughter-parent caregiving in the community (Bull & Jervis, 1997; King, 1993) or the experiences of the spouses of cardiac patients (Biegel, Sales, & Schulz, 1991). There is a paucity of research on the role of adult daughters caring for parents hospitalized with heart disease.

For caregiving situations in general, Merrill (1996) found that children either volunteered to be caregivers or were chosen by the parent. In contrast, Brody, Litvin, Hoffman, and Kleban (1995) found that daughters often became caregivers by default: other family members either were unwilling to provide care or were unable to due to poor health or full-time employment, while in 23% of cases the daughter was the only remaining child. King (1993) reports that crises such as illness in the other parent or in a caregiving sibling precede daughters' caregiving involvement. Guberman, Maheu, and Maillé (1992) identify love, family ties, the need to help others, and the needs of the care recipient as influential factors in the decision to become a caregiver. Cicirelli (1993) also describes daughters' caregiving behaviour as motivated by obligation or attachment to the parent. Crawford, Bond, and Balshaw (1994) and Stoller (1983) found that daughters provide more care to parents than sons even when employment, marital and child status, and geographic location are controlled for. Crawford et al. also report that gender differences increase when the functional ability of the parent is perceived as low. Thus, daughters appear to play a greater role than sons in parental caregiving.

In cardiac disease, motivation for spousal caregiving appears to be focused on protecting the partner from stress, physical exertion, or unhealthy activities that might bring on an attack (Biegel et al., 1991; Coyne & Smith, 1991). Spouses who are highly involved in caregiving have been found to experience poor vocational, domestic, social, psychological, and global adjustment (Purden & Frasure-Smith, 1994). However, women's reasons for becoming caregivers to parents with a cardiac condition and their experiences in caring for them have not been addressed.

Bowers (1987), in her study of caregiving, was the first to go beyond the tasks of caregiving to identify its underlying motivations. Five types of caregiving emerged: anticipatory (just in case), preventive (monitoring), supervisory (arranging, checking), instrumental (doing for, assisting), and protective (protecting the individual from threats to self-image). Conceptualizing caregiving by purpose rather than tasks revealed aspects of the role such as protective care, which had not emerged in previous studies. Daughters in Bowers's study considered protective care to be the most important and difficult form of care, because it created friction in their interactions with other family members or with health-care professionals, who did not understand this form of care.

Daughters' caregiving has also been examined from the perspective of competing demands. Matthews, Werkner, and Delaney (1989) examined the caregiving role of 50 pairs of sisters in which one sister was employed and the other was not. They found that when the parent's physical or functional status was poor, the non-employed sister provided more tangible care, while the employed sister, in contrast, had to limit her involvement. They also found that the sisters' caregiving role depended on their past experience. For example, those who had acquired medical knowledge or training in the health professions were more involved with the medical aspect of their parent's care than their sisters.

While other studies have focused exclusively on the daughter's perspective, Bull and Jervis (1997) explored the ways in which mothers and daughters worked together, and found that they used information-seeking and problem-solving strategies to determine what was effective and to establish new routines. However, no studies to date have examined daughters' information seeking or whether their information needs change during the transition from the acute phase of cardiac illness to the early recovery period, which is a particularly stressful time for both patients and families (Rankin, 1992).

Previous studies of caregiving during cardiac illness have used a cross-sectional approach, have focused on caregiving in a community setting, and have looked primarily at the caregiving role of the spouse. The present study, in contrast, explored the experiences of daughters caring for a parent with a cardiac illness in hospital and at 6 to 8 weeks post-discharge. The inquiry was guided by the following questions: (1) *What role do adult daughters play when a parent has been hospitalized for a cardiac condition?* (2) *How does this role develop and how does it change during the recovery period?*

Methods

Design and Data Collection

A prospective design was used. Data were collected through participant observation. Methods of grounded theory were used in the data analysis to examine the relationship among different aspects of the caregiving process.

In the context of her regular practice, the nurse researcher identified patients with cardiac illness whose daughters were actively involved in their care. Patients were asked if their daughters could be approached to discuss their caregiving experiences in depth. In families with more than one daughter, the daughter identified by the patient as most involved in his or her care was approached. The institution's ethical procedures regarding informed consent were followed. The patients and daughters were informed about the purpose of the study and were told that their participation was voluntary, that they could withdraw at any time, that all documentation would be stored in a secure place, and that their names would not be published or appear in any documentation.

Once a daughter agreed to participate, data were collected through participant observation and unstructured/semi-structured interviews carried out over the course of the hospital stay. Additional data were collected through interviews and conversations with the patient and other family members in order to validate the categories that were emerging through the data analysis. Where possible, follow-up interviews were conducted with the daughters post-discharge. All the women requested telephone rather than face-to-face interviews because these were easier to arrange and took less time out of their hectic day.

The number of contacts per family ranged from one to seven. The variation relates to length of hospital stay, as a longer stay afforded more opportunities to interview daughters and other family members. Data on participants' feelings, thoughts, and behaviours were obtained through such open-ended questions as "In every family, children help out in different ways; could you tell me about your experience?" or "Could you tell me how you came to be involved in helping your parent in this way?" The interviews could not be audiotaped for logistical reasons. Most of the face-to-face conversations with the daughters occurred while they were providing care to the patient. Highlights of these conversations, as well as the post-discharge telephone interviews, were recorded immediately following the interaction, and detailed field notes were completed the same day.

Sample

A convenience sample was recruited from a cardiac unit in a large metropolitan teaching hospital. The inclusion criteria were: a daughter caring for a parent who was hospitalized for a cardiac event; expected discharge within 1 month; and ability to speak English or French.

The sample consisted of nine daughters. In all families both the parent and the daughter were interviewed. In four families spouses and other daughters also served as informants. Patients ranged in age from 49 to 86 years (*mean* = 74.3 years). Five of the patients were female and four were male. In three cases the patient's spouse was also involved in some aspect of care. All of the daughters were adults; however, their ages were not obtained. Four of the nine daughters were married but only one indicated that she had children. The majority of the daughters (80%) worked outside of the home. In three of the five families with more than one daughter, the eldest daughter was the caregiver.

Analysis

The data were analyzed line by line for statements or observations regarding the nature of the daughter's caregiving and how she came to take on the caregiver role. Similar examples across clients were grouped together to create a preliminary list of substantive categories. Using the constant comparative method, the preliminary categories and their supporting data were examined for overlap. This process was continued throughout data collection. Preliminary categories were collapsed as global themes were identified. The hierarchy of emergent sub-categories, categories, and themes was confirmed and refined in a back-and-forth process as data collection proceeded (Strauss & Corbin, 1990). Data collection was terminated once it became clear that no new categories were emerging and that the data were confirming the existing set.

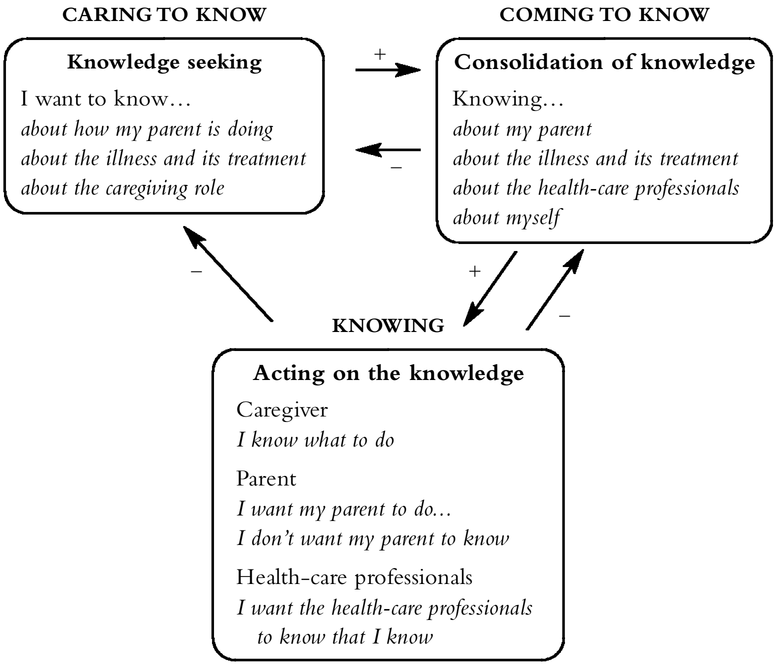
The observational and verbal data collected from conversations with multiple informants within a family and from the interviews with different families served to validate the results. For those families in which a second daughter participated in the caregiving, the information she provided was used to corroborate the emerging themes regarding the caregiving process and family styles of caring. As the categories were identified, they were shared with the informants to ensure that the interpretations were accurate (Guba & Lincoln, 1981). In addition, the nurse researcher's reactions to events were recorded to increase self-awareness so that credibility would be maintained. An audit trail was established to keep track of decisions taken during analysis (Appleton, 1995). A nursing colleague recoded a random sample of 30% of the data collected from the daughters using the coding guidelines and category definitions developed by the nurse researcher. An interrater reliability of 95% was achieved.

Findings

Caring: The Process of Knowing

The daughters were engaged in a dynamic process of "knowing" in order to care for their ill parent. They were found to move between three different dimensions in a non-linear process: knowledge seeking *(I want to know)*, consolidation of understanding *(knowing)*, and acting on their knowledge *(I know what to do).* Whenever daughters were confronted by an event such as a new medication, an unfamiliar diagnostic test, or a change in the parent's condition they would engage in active knowledge seeking. This served to increase their confidence. As they grew more confident they began to act on their knowledge in providing care. Analysis revealed an ongoing secondary process of assessing the adequacy and completeness of their knowledge, which allowed them to move back and forth among the three dimensions (see Figure 1). This process occurred both in the hospital and later at home, as daughters spent considerable time and energy seeking and processing information and attending to the physical and emotional responses of their parent.

Figure 1 ***Caregiving: The Process of Knowing***



Note: The positive and negative signs refer to the daughter's assessment of whether or not she has sufficient knowledge to move on to the next phase of knowing. A positive sign indicates that she has sufficient knowledge, a negative sign that she does not and thus must remain in the current phase.

Knowledge seeking. Daughters demonstrated commitment and perseverance in acquiring knowledge about their hospitalized parent's situation. Changes in the patient's condition, the treatment, and the hospital environment (in terms of both physical setting and personnel) necessitated their using a variety of strategies to keep informed. The data indicated that daughters wanted to "know" about the parent's subjective experience, the objective aspect of the illness and its management, and how they might take on a caregiving role during the hospital stay.

Daughters' caregiving was heavily focused on knowledge seeking, especially during the hospital stay. Strategies included waiting to see what happened, visiting and phoning the parent, and asking the nurse what the doctors had said. A more assertive strategy involved confronting or cornering the doctors for information; one woman entered the cardiac catheterization room, uninvited, minutes before her mother's angiogram in order to ask the doctor technical questions about the procedure.

Knowledge seeking, whether in the hospital setting or in the community, about the parent's status or treatment took considerable time and energy. As one daughter pointed out, "Information didn't exactly come flowing our way." The daughters' motivation for wanting to know also varied. Some felt it was their responsibility to know in order to ensure their parent's safety, while others indicated that they were simply curious about a medical procedure.

Many daughters progressed from wanting to know and seeking information to knowing about and understanding their parent's situation. Four daughters, however, had a wealth of past experience and knowledge, not only concerning their parent's response to the illness, but also concerning the health-care system. Thus, these daughters channelled their energies into consolidating their understanding.

Consolidation of understanding. Daughters had a sense of knowing the parent, the illness, the health-care system, the health-care professionals, and themselves: "You know some nurses are very nice and others are terrible"; "I have learned to cope... I can't run around like I used to." The patients also recognized that their daughters had knowledge and were able to use it: "I need my daughter — she knows a lot more about this than I do."

This phase in the process was marked by increasing confidence. Through their presence at the bedside, the daughters came to know the illness, its treatment, and their parent's responses. However, although they came to see themselves as experts, the women struggled to be acknowledged as credible authorities in the care of their parent:

> *I know her. For her to get that upset is rare. He [the doctor] was very abrupt with her. They have to know that they shouldn't talk to elderly people like that. She is already sick — she doesn't need this. She is very sensitive. I already told one of his residents and I will also complain...*

Consolidation of understanding often led daughters to act on their knowledge or to seek additional knowledge. One woman, for example, moved from knowing herself to acting on the knowledge by setting limits on her caregiving involvement:

> *Now, I find I have to do less. Now, I am the only one to visit at the hospital and make the arrangements. It is draining on me too. Yes, I have to set limits for myself and my job.*

When daughters determined that their knowledge was incomplete, they sought further information:

> *He has a new medication. I called a few pharmacies but no one had heard of it before. One place told me they could order it in for the next day. I figured out that this would mean he would miss two doses. I wasn't sure this was a good idea [so] I called a nurse at the hospital.*

Acting on the knowledge. Daughters' knowledge guided their actions with respect to their caregiving role and influenced their interactions with health-care professionals and with their parent.

I know what to do. The women took action based on their knowledge of both their parent and the situation. One mother validated her daughter's stated caregiving competence: "My daughter knew that I would be out of food so she went shopping for me before picking me up."

I want the health-care professionals to know that I know. As daughters' competence increased, they sought to share their knowledge with the health-care professionals:

> *I told the first resident we saw in the emergency [room] that she [my mother] has bad arthritis and that it runs in the family.*

They seemed to have two motives for sharing information with health-care professionals: to demonstrate that they were knowledgeable and should be consulted, and to improve the quality of care by containing the professionals' lack of sensitivity.

I want my parent to do… Frequently, daughters wanted their parent to comply with a lifestyle change, a treatment decision, or a medical restriction. In some cases they merely suggested to the parent that he or she make a lifestyle change. In other cases they were adamant about what the parent should do. One daughter told her parent, "No, you're going to quit completely! You haven't smoked while you've been in the hospital."

I don't want my parent to know. The daughters were selective about the information they shared with their parent. They also attempted to control the information that others shared with their parent. Some daughters wanted the parent as well as other family members to know what was happening: "We share it with the rest of the family so that everyone knows what is going on." Others, in order to protect the parent, concealed their own reactions or withheld information about the severity of the illness or changes in medical treatment. In some cases these attempts failed because health-care professionals shared information, unaware of the daughter's desire to protect her parent. One daughter said, "It really was not your job to tell this news to my father; it could have been very harmful."

In summary, daughters had to actively seek knowledge about the parent's condition so that they could draw on it as caregivers. They became engaged in this process for different reasons, and they used a variety of strategies to seek and act on knowledge gained about the parent, the situation, and themselves.

Factors Influencing Daughters' Caregiving Involvement

When daughters and other family members were asked how the daughter had come to be involved in caregiving, the reasons most frequently given were *close family ties* and *helping each other*. One daughter stated:

> *Our family has always been very close-knit. We go to parties together... We've always supported each other in everything, not just for health-related things, but in everything.*

The daughters' helpful and caring nature was also mentioned as a factor: "I have always been that way with everyone; even at work my boss tells me that I am so helpful." In addition, family members spoke of a family tradition of helping elderly relatives. One mother commented, "It's always the girls who take care of their parents...I also helped my mother when she was ill."

When daughters were asked how their family cared for the ill parent, four different styles of caregiving emerged: *we all support each other; my sister helps out in a different way; the chosen one;* and *I am the only one left.* These styles were corroborated in conversations with the parents and other family members. The four styles reflect the nature of daughters' caregiving and their level of involvement. The caregiving of the other family members was a contributing factor as well. Illness severity, the developmental stage of the family, and the daughters' level of involvement were of lesser importance than style of caregiving.

We all support each other. In one family the daughter explained that everyone rallied to support the ill parent. This family was distinct because of the presence of a spouse caregiver and because all the children were involved in assisting the ill parent. The spouse commented, "It's like a circle. Our kids are in the circle... when something happens they all rush in to help...we feel supported by everyone."

My sister helps out in a different way. In two families the caregiving was shared by two daughters. The sisters' roles were found to complement each other. The sister who was more involved during the parent's hospital stay either had a more flexible work schedule or was more comfortable in the hospital setting than the other sister:

> *My sister doesn't come in to visit at the hospital as much as I do. She's not comfortable in hospitals... But when my dad is at home my sister comes over during the day and she makes him supper.*

> *I came to the hospital at 10 in the morning that day. I wanted to be there to help him with the language. She [my sister] sees him more now that he is at home. She will come to visit for the whole day on the weekend with her husband.*

The chosen one. In four families only one daughter helped out even though other siblings were available. This seemed to be related to the parent's particularly close attachment to the one daughter, causing them to request help more often from her than from the other children. Similarly, these daughters were very attached to their parent. One parent stated:

> *She is very helpful to me. If I need something done I will ask her. I take the path of least resistance. [laughing] She never kicks up a fuss or complains, and she never says no. It is easier [than asking my son].*

In other cases the parent relied heavily on one daughter because she lived closest or because she had fewer work or family demands. Daughters and parents also noted that the siblings' personalities shaped their caregiving role:

> *I'm afraid my sister never came every week. She doesn't make much of an effort to visit. She never has.... No, my sister is selfish.*

I am the only one left. In two families the daughter was the only child remaining and the only person willing and able to assist the ill, widowed parent. One daughter stated, "I am involved because I am the only one in the family left." Both women had become experienced caregivers and described instances of rescuing their parents from disastrous situations:

> *It's up to me to check everything. Because the emergency room doctor gave her Septra when she was on Coumadin, she nearly died. She would have died if I hadn't been there.*

Summary

Daughters demonstrated considerable caregiving skill and involvement as they soothed and nurtured their parents and shielded them from the harsh realities of being a patient in hospital. Daughters rose to the occasion and inserted themselves into the chaotic and often unfriendly critical-care environment in order to advocate for their parents and ensure their peace of mind. Through tireless vigilance they seized every opportunity to access information, question personnel, and monitor treatments and procedures. When necessary, they challenged the decisions of professionals and offered alternative solutions. Over time, daughters became mindful of the culture and developed political savvy in order to engage professionals in partnerships. Thus, in order to care expertly for their parents these women were committed to a process of knowing: knowing their parent under new circumstances, knowing the illness and its treatment, knowing the personnel, and knowing the unspoken rules of the hospital culture.

Discussion and Implications for Practice

Most investigations of caregiving have focused on care that is provided in the home. The paucity of research on family caregiving during hospitalization seems to suggest that caregiving takes place only in the community. In the case of cardiac patients in particular, integrating family involvement into care is complicated by the perception that these patients are vulnerable and unstable and need to be protected from all possible sources of strain and anxiety. In fact, early studies concluded that the presence of family members at the bedside was detrimental to patients' well-being because it raised their anxiety levels (Frederickson, 1989). More recently, there has been a recognition that the presence of family members contributes to hospitalized patients' physical and emotional well-being (Simpson, 1991). The findings of the present study indicate that daughters are engaged in a non-linear process of caregiving that involves seeking knowledge, consolidating understanding, and acting to provide care that begins during hospitalization and continues in the early recovery period at home.

The theme of *knowledge seeking* is described by Jamerson et al. (1996) in a study of family members' experiences in the intensive-care unit. These authors found caregiving to be characterized by information seeking, tracking, and garnering resources. A number of other studies have also documented patients' and families' need for information, especially during hospitalization (Jacono, Hicks, Antonioni, O'Brien, & Rasi, 1990). Artinian (1991) found that 40% of wives of coronary artery bypass graft patients rated not knowing specific facts about their husband's treatment and prognosis as extremely stressful. Moser, Dracup, and Marsden (1993) found that spouses of myocardial infarction patients did not reduce their need for information on the patient's status and care during the early recovery period. In the present study, similarly, a large part of daughters' caregiving was focused on managing information, a process driven by self-evaluation. In the hospital setting in particular, daughters spent much time and energy seeking information about the patient's status and treatment.

With respect to the theme of *consolidating understanding,* the literature also suggests that knowing the patient and his or her needs and preferences is central to the caregiving role (Hasselkus, 1988; King, 1993; Pratt, Jones, Shin, & Walker, 1989). Brown and Stetz (1999) conclude that developing caregiving competency, knowledge, and skill is a central concern for caregivers. The present study highlights the importance of going beyond the acquisition of knowledge to developing competency in active caregiving. The daughters constantly evaluated their competency, as they strove to acquire more knowledge and to consolidate that knowledge.

In the process of *acting on the knowledge*, the daughters provided direct care, advised their parents on how best to care for themselves, protected their parents by withholding information, and actively negotiated the nature and quality of the professional care provided. Sometimes, *acting on the knowledge* caused them to risk confrontation in order to ensure proper care. Such incidents were characterized by power and control. Callery and Smith (1991) attribute this tension to the imbalance of power between formal and informal caregivers. Davis (1992) notes that tension may arise in triangular relationships involving caregivers, care recipients, and health-care professionals, because caregivers feel they have to compete for the role of caregiver and defend their credibility. Similar tensions are described by Hasselkus (1988), who found that caregivers rarely admit that the professional knows best.

The theoretical processes that emerged in this study are consistent with the findings of Shumacher, Stewart, Archbold, Dodd, and Dibble (2000). These authors describe processes by which female caregivers — primarily spouses of patients with cancer — monitor, interpret, make decisions, take action, make adjustments, provide hands-on care, access resources, work with the ill person, and navigate the health-care system. Similarly, in the present study daughters observed and then provided direct care to the parent with cardiac disease. They too monitored and posed questions, and then made their own assessment of what was occurring, what to expect, and what should be done. They asked questions about procedures and protocols and navigated the system. In other words, the daughters were active learners throughout the hospital stay and continued to be engaged in a learning and self-evaluation process while caring for the parent at home. Clearly, both studies indicate that caregiving is an evolving process common to a number of patient populations.

This emerging theory has implications for nurses working with family caregivers. It suggests that nurses should recognize that daughters and other family caregivers are engaged in a process of learning to care for the ill person and are likely to welcome the opportunity to acquire information as well as new skills. By describing the signs and symptoms being monitored, describing impending procedures, offering assistance with information gathering, and encouraging hands-on care, nurses can help build competence among family members and enhance their effectiveness as caregivers. Finally, nurses need to appreciate the fact that the caregiving process is not linear but is characterized by a back-and-forth movement across a number of dimensions and that the timing of nursing interventions is therefore critical. Caregivers may not always be ready to learn new skills or to act on the knowledge they have acquired. Reticence should be interpreted not as a refusal to participate but rather as a function of timing. Awareness of the process of seeking, consolidating, and acting will help nurses to know how and when to intervene in order to best facilitate the caregiving process.

Nurses should also take into account the family context in which caregiving takes place. Different caregiving styles affect the way in which caregiving evolves — that is, the degree to which the caregiver is involved and the distribution of caregiving responsibilities within the family. For example, in *the chosen one* a family member is designated as caregiver. A nursing approach that is supportive of this family style will ensure that all information, teaching, and resource planning are conveyed to that person and will help other family members to find ways to support their chosen caregiver.

This study did not address the caregiving contribution of sons in the family unit. Future research could explore the mix of siblings in the family and the implications for caregiving. Further testing of the theory in the home is indicated. Does the caregiving process differ when the patient's status is relatively stable? Finally, examining the process in different patient populations would contribute to the development of a robust theory of caregiving that clinicians can use in tailoring and timing interventions to the particular characteristics of family caregivers.

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Authors' Note

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Please address inquiries to Margaret A. Purden, School of Nursing, McGill University, 3506 University Street, Montreal, Quebec H3A 2A7 Canada. E-mail: margaret.purden@mcgill.ca

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Donna-Michelle Gage-Rancoeur, N, MSc(A), is Nurse Clinician, Geriatric Outreach, Toronto Rehabilitation Institute, Toronto, Ontario, Canada. Margaret A. Purden, N, PhD, is Assistant Professor, School of Nursing, McGill University, and Scientific Director, Centre for Nursing Research, Sir Mortimer B. Davis–Jewish General Hospital, Montreal, Quebec, Canada.

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Résumé

Le milieu de vie des mères adolescentes métis, autochtones et caucasiennes : une étude de sa qualité et des influences présentes

M. Loretta Secco et Michael E. K. Moffatt

Cette étude exploratoire longitudinale a comparé les caractéristiques psychosociales et circonstancielles, ainsi que les caractéristiques du milieu de vie, quatre semaines, ainsi que 12 à 18 mois après l'accouchement, auprès d'un échantillonnage de commodité composé de 71 mères adolescentes métis, autochtones et caucasiennes. Les groupes combinés de mères métis / autochtones ont révélé, quatre semaines après la naissance, des scores significativement plus importants, comparativement aux mères caucasiennes, en ce qui a trait au rapport émotionnel lors des soins prodigués à l'enfant. Les mères caucasiennes ont récolté des scores beaucoup plus élevés quant à la qualité du milieu de vie. Un modèle raffiné de régression multiple a expliqué 49 % de la variance relevée. Ce modèle a tenu compte du rapport émotionnel lors des soins prodigués à l'enfant, du niveau de scolarité de la grand-mère maternelle de l'enfant, de l'appartenance ethnique et du soutien social concret, les deux premiers facteurs exerçant une influence importante.

Mots clés : mères adolescentes, soins à l'enfant, appartenance ethnique et mère adolescente, compétence perçue et mise en pratique en rapport aux soins à l'enfant

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The Home Environment of Métis, First Nations, and Caucasian Adolescent Mothers: An Examination of Quality and Influences

M. Loretta Secco and Michael E. K. Moffatt

This longitudinal exploratory study compared maternal psychosocial, situational, and home-environment characteristics at 4 weeks and at 12–18 months postnatal for a convenience sample of 71 Métis, First Nations, and Caucasian adolescent mothers. The combined group of Métis/First Nations mothers had significantly higher infant-care emotionality scores than the Caucasian mothers at 4 weeks. The Caucasian mothers scored considerably higher on quality of the home environment; a refined multiple regression model containing infant-care emotionality, education level of the infant's maternal grandmother, ethnicity, and enacted social support explained 49% of the variance, with significant influences being infant-care emotionality and grandmother's education level.

Key words: adolescent mothers, infant care, ethnicity and adolescent mother, perceived and performed infant care competence

The high number of infants born to Canadian adolescent mothers and the negative consequences of this parenting situation for the child underscore the need to better understand influences on adolescent mothering. The promotion of infant mental, social, cognitive, and physical health requires adequate care and cognitive stimulation (Gaffney, Kodadek, Meuse, & Jones, 2001). Infants parented by adolescent mothers are at greater risk for negative parenting, health, and development outcomes than infants with mothers over 19 years of age (Dormire, Strauss, & Clarke, 1989; Garcia Coll, Vohr, Hoffman & Oh, 1986; McAnarney, Lawrence, Ricciuti, Polley, & Szilagyi, 1986; Panzarine, Slater, & Sharps, 1995; Ruch-Ross, Jones & Musick, 1992; Von Windeguth & Urbano, 1989).

In 1994 alone, 24,700 infants were born to mothers between 15 and 19 years of age in Canada (Wadhera & Millar, 1997). According to 1991 census data, the fertility rate for girls under 20 years of age was 20.3 per 1,000, ranging from a low of 16.5 for Quebec to a high of 100.9 for the Northwest Territories, with Manitoba having the second-highest rate at 40.9 (Statistics Canada, 1998).

The adverse social effects associated with adolescent parenting have been shown to endure even into adulthood (Jaffee, Avshalom, Moffitt, Belsky, & Silva, 1997). While research has demonstrated a link between negative child-development outcomes and the negative home environments of adolescent mothers (Hannon & Luster, 1991; Luster & Dubow, 1990), little is known about specific influences on the quality of the home environment. The greater the chances of adolescent mothers living in disadvantaged situations, the more negative the effects of poverty on child development (Aber, Bennett, Conley, & Li, 1997; Klebanov, Brooks-Gunn, McCarton, & McCormick, 1998). The role of home environment as a factor in child health outcomes underscores the need for more research with Canadian adolescent mothers. An examination of the home environmental influences for Aboriginal adolescent mothers is especially critical, as this group is particularly likely to live in poverty (Brownell et al., 2001; Statistics Canada, 1999). In fact, Canada's Aboriginal population scores well below the general population on the Human Development Index, at levels similar to those for developing countries. The development rating for Aboriginal people living off reserves is similar to that for residents of Trinidad and Tobago (ranked 35th globally), while those living on reserves are only marginally better off than Brazilians (ranked 63rd) (Statistics Canada, 1999). This evidence of greater disadvantage among Aboriginal people, combined with a higher adolescent fertility rate in this population, points to the need for research with Aboriginal Canadians.

The nursing care of adolescent mothers could be enhanced through a better understanding of the psychosocial, situational, and ethnic influences on the home environment of their children, by informing the planning of appropriate health and social interventions to improve the home environment of these mothers and children. Such awareness could also guide the development of health and social policies that promote positive child development and better long-term outcomes for both mothers and children. The purpose of this study was to compare maternal psychosocial, situational, and home-environment characteristics of Métis/First Nations[1] and Caucasian adolescent mothers and to explore the role of psychosocial and situational variables in shaping the home environment.

Literature Review

Experts in parenting (Belsky, 1984) and maternal competence (Mercer, 1981; Walker, Crain, & Thompson, 1986) have concluded that numerous

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[1] Although Métis and First Nations people form two distinct groups, in this study the two categories were collapsed for comparison purposes. The term Métis refers to persons of mixed Aboriginal and European descent, while First Nations refers to persons of Aboriginal descent only.

situational, psychosocial, and child characteristics influence parenting and the quality of the home environment, which, in turn, affect child health, development, and life outcomes (Letourneau et al., 2001). The psychosocial variable of self-esteem significantly influences maternal role attainment (McGrath, Boukydis, & Lester, 1993; Mercer & Ferketich, 1994). Studies with older mothers have found self-esteem to be a central variable associated with mothering quality (Marshall, Buckner, & Powell, 1991; Zongker, 1977) and maternal role competence — that is, the mother's self-evaluation of her ability to provide physical and emotional care for her infant. Low self-esteem may adversely affect an adolescent mother's parenting practices and the quality of the home environment she provides for her child (Oz, Tari, & Fine, 1992; Patten, 1981).

Social support is also associated with maternal psychosocial and home-environment characteristics, among both older mothers (McGrath et al., 1993; Patten, 1981; Shea & Tronick, 1988) and adolescent mothers (Hannon & Luster, 1991; Luster & Dubow, 1990). Older mothers rate higher on social support, in terms of both quality and levels, than adolescent mothers (Garcia Coll et al., 1986; Reis, 1988; Von Windeguth & Urbano, 1989). Social support has also been associated with maternal attitudes and behaviour. For older mothers, social support is significantly associated with both emotion displayed during interactions (Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983; Levitt, Weber, & Clark, 1986) and confidence with infant care (Cronenwett, 1985). For adolescent mothers, social support is closely related to perception of mothering competence (Colletta & Gregg, 1981; Dormire et al., 1989).

Several researchers report differences in quality and type of social support among adolescent mothers from different ethnic groups. One study found that social support, defined as assistance with infant care from the baby's maternal grandmother, strongly influenced the infant/child-care practices of Black adolescent mothers (Black & Nitz, 1996). In a large US study with an ethnically diverse sample of adolescent mothers, Luster and Dubow (1990) found that the strongest single predictor of home environment was the presence of a spouse or partner in the home; additionally, they found that Caucasian and Hispanic mothers were more likely than Black mothers to have a partner and less likely than Black mothers to live with their own mother rather than with a partner. These ethnic differences in social support point to the need for research into the role of ethnicity in the quality of the home environment in which infants of adolescent mothers grow and develop.

Unfortunately, the majority of social support studies with adolescent mothers have suffered from small sample size and inconsistent definitions and measures of social support (Secco & Moffatt, 1994).

There is growing evidence of ethnic influences on salient maternal variables such as mothering attitudes and practices and child health outcomes (Boyce, Chesterman, & Winkleby, 1991; Hannon & Luster, 1991; Ragozin, Basham, Crnic, Greenberg, & Robinson, 1982). As well, both qualitative (Flaherty, 1988; Gichia, 2000; Sawyer, 1999) and quantitative (Hannon & Luster; Luster & Dubow, 1990) studies have found that ethnicity has a significant influence on parenting practices. Some of the reported ethnic differences are quality of the home environment (Garcia Coll, Hoffman, & Oh, 1987; Luster & Dubow), breastfeeding decisions (Wiemann, DuBois, & Berensen, 1998), breastfeeding duration, and age at introduction of solid food (Black, Siegel, Abel, & Bentlry, 2001). Ethnicity also accounts for a considerable amount of variance, among Black and Caucasian mothers, in parenting attitudes, expectations of the infant, level of empathy, and attitudes towards physical punishment (Lutenbacher & Hall, 1998).

Most of the research on ethnicity as a determinant of mothering attitudes and practices has been based on US ethnic groups. One research team used multiple regression techniques to determine the unique influence of socio-economic, psychosocial, and other factors on the quality of the home environment (Hannon & Luster, 1991; Luster & Dubow, 1990). While these authors report significant differences for Black, Hispanic, and Caucasian ethnic groups, they did not include ethnicity in their multiple-determinants model. The inclusion of ethnicity in regression models, along with the other maternal psychosocial and situational factors, could yield useful data on ethnicity as a determinant of cognitive stimulation in the home and thus infant health.

Most researchers have treated ethnicity as a study confounder and have either restricted their investigation to one ethnic group or have run separate analyses for ethnic groups. One comparison study restricted the sample of adolescent mothers to Caucasians, to test whether age, without the confounding influence of ethnicity, significantly explained differences in infant-care practices (Garcia Coll et al., 1987). If ethnicity is excluded from multiple regression analyses, it cannot be quantified the extent to which ethnicity, versus other variables such as socio-economic status, explains or predicts outcomes. It is important to determine whether differences in maternal characteristics are due to ethnicity or other confounding variables such poverty, age, maturity, or social disadvantage.

Few researchers have examined the role of ethnicity as a factor in the quality of mothering among Canadian adolescent mothers. The present longitudinal exploratory study compared prenatal and early postnatal characteristics of Canadian adolescent mothers self-identified as Caucasian, Métis, or First Nations. The study also quantified the contribution of ethnicity and other maternal psychosocial and situational variables to the level of cognitive stimulation in the home for infants aged 12 to 18 months.

Conceptual Framework

The conceptual framework for the study acknowledges that maternal psychosocial and situational factors influence "performed mothering" (Belsky, 1984) and the quality of infant care and cognitive stimulation in the home. The quality of performed mothering and home environment, in turn, affect infant health outcomes for social, emotional, physical, and cognitive development. Maternal role attainment is an active process during the early postnatal period (Mercer, 1986; Rubin, 1967) that affects the context and quality of mothering and is thought to predict child-development outcomes (Walker & Montgomery, 1994). Maternal role attainment consists of both maternal *perceptions* about role competence and the quality of *performed* mothering (Walker et al., 1986; Walker & Montgomery). Competence in the infant-care provider role, as one component of maternal role attainment, consists of the skills necessary to care for and interact with the infant.

Psychosocial and developmental theories suggest that adolescent girls are less mature than adult women (Collins & Kuczaj, 1991; Erikson, 1968). This may partly explain why adolescent mothers are less capable parents than adult mothers and provide less cognitively stimulating home environments. The adolescent mother has the challenges of infant care superimposed over the usual developmental challenges of adolescence such as the formation of identity (Erikson) and empathy (Selman, 1971). The natural egocentricity of adolescence may interfere with the development of competent and empathetic mothering skills. Psychosocial and situational factors such as ethnicity, age, self-esteem, education, perceptions about caregiving competence, social support, and socio-economic status also influence the home environment and mothering practices.

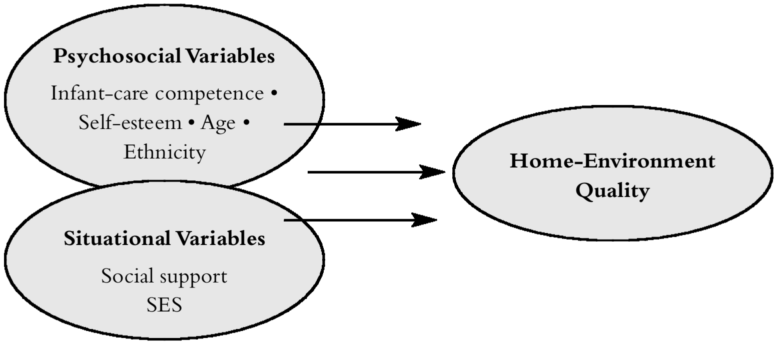
Hypotheses

The null hypotheses were: (1) *There are no significant differences in psychosocial, situational, and home environment quality for Caucasian and Métis/First Nations adolescent mothers.* (2) *Maternal psychosocial and situational characteristics are not significant predictors of the quality of the home environment for adolescent mothers.*

Design

A longitudinal, comparative design was used to examine ethnic differences in psychosocial (ethnicity, self-esteem, age, perceptions of mothering competence), situational (grandmother education level and social support),

Figure 1 ***Conceptual Framework: Influences on the Quality of the Home Environment of Adolescent Mothers***



and home-environment quality for a sample of Caucasian and Métis/First Nations adolescent mothers. Multiple regression modelling was used to determine the extent to which prenatal and early postnatal psychosocial and situational characteristics determine the quality of the home environment for infants 12 to 18 months old. A second goal was to determine the relative influence of psychosocial and situational variables on the home-environment quality. Ethical approval was received from the university's Medical Ethics Review Committee and each participant signed a consent form.

Sample

The final sample for this analysis, a subset from a larger study, consisted of 71 mothers under 20 years of age who had self-reported Caucasian, Métis, or First Nations ethnicity. Over a 2-year period, participants were recruited during their third trimester of pregnancy from the adolescent ambulatory care clinics of two large Canadian teaching hospitals. The average age was 16.82 years and average educational attainment was 9.55 years (Table 1). Self-declared ethnicity was recorded as Caucasian 48.7% (*n* = 38), First Nations 23.1% (*n* = 18), and Métis 19.2% (*n* = 15). The First Nations and Métis mothers (*n* = 33) were combined to form a group, hereafter named Métis/First Nations, to compare with the Caucasian (*n* = 38) group. Retention of participants was 68% at the 4th week postnatal and 57% during the 12–18-month measurement period. The participants were transient, with up to three telephone-number and address changes during the follow-up period.

Table 1 ***Differences in Mean Psychosocial, Situational, and Quality of the Home Environment, by Ethnicity***

	Caucasian Mean (*n*)	Métis/First Nations Mean (*n*)	*t*	*p* value
		Psychosocial		
Age	17.42 (38)	16.27 (33)	4.10	<.001
RSE	29.68 (38)	31.21 (33)	-1.47	.15
Prenatal				
Mom&Baby	4.27 (38)	4.17 (33)	.81	.42
Emotionality	3.83 (38)	3.69 (33)	1.16	.25
4th Week				
Mom&Baby	4.58 (32)	4.60 (25)	–.22	.83
Emotionality	4.35 (32)	4.61 (25)	-2.23	.03
		Situational		
Education	2.70 (36)	2.24 (29)	1.71	.09
Enacted support	104.28 (32)	105.96 (24)	–.27	.80
Family support	11.23 (38)	13.03 (33)	-1.32	.19
Friend support	13.23 (38)	11.94 (33)	1.22	.23
		Home-Environment Quality		
HOME total	34.72 (25)	30.4 (15)	2.67	.01

Instruments

The psychosocial variables that were measured included age, self-esteem, and self-perceived competence in infant care. The situational variables that were measured included social support from family and friends, enacted social support, and education level as a proxy for socio-economic status.

Perceived infant-care competence was measured using the Mom&Baby (14 items) and Emotionality (four items) dimensions of the Infant Care Expectation Questionnaire (ICEQ) and the Infant Care Questionnaire (ICQ) (Secco, 2002). The ICEQ is designed for the prenatal period and the ICQ is the postnatal version. The Mom&Baby and Emotionality domains consist of five-point Likert items (1 = strongly disagree; 5 = strongly agree). The Mom&Baby dimension assesses knowledge and ability as an infant-care provider; Emotionality reflects level of satisfaction and/or frustration with issues such as infant crying and fussiness. Validation evidence for the ICQ consists of internal-consistency Cronbach's alpha coefficients between .70 and .86 for both adult and adolescent mothers (Secco; Secco, Ateah, Woodgate, & Moffatt, 2002). Construct validity includes higher infant-care competence scores among mothers with more experience and documented maturation or learning curve in scores over the early postnatal period (Secco; Secco et al., 2002). The Cronbach's alpha coefficients of internal consistency for the present study were .86 (Mom&Baby) and .71 (Emotionality) for measures taken at 1 week postnatal.

Self-esteem was measured using the Rosenberg Self-Esteem (RSE) scale, a 10 item, four-point Likert-scaled instrument with satisfactory coefficients of reproducibility (92%) and scalability (72%) (Rosenberg, 1979). The respondent selects a response from *strongly agree* to *strongly disagree* on items such as "On the whole, I am satisfied with myself." The range of scores is 10 to 40. The RSE scale has been used in numerous mothering studies to examine the role of self-esteem as a mediator (Hall, 1996) and as a predictor of mothering competence (Mercer, 1986; Mercer & Ferketich, 1995). Reported reliability coefficients range from .82 to .89 (Mercer & Ferketich, 1995). For the present study, the Cronbach's alpha coefficient of internal consistency was .84.

Family and friend support was assessed using two similar scales, Perceived Social Support from Family (PSS-Fa) and Perceived Social Support from Friends (PSS-Fr). These 20-item scales are designed to measure perceived need for support, information, and feedback from family members and from friends (Procidano & Heller, 1983). The respondent selects *yes, no,* or *don't know* for statements such as "My friends give me the moral support that I need" and "My family enjoys hearing about what I think." The range of possible scores for each scale is 0 to 20. Internal consistency reliability coefficients for the scales have been high (.88–.90), and significant correlations have been reported between PSS-Fr and depression (r = .43) and between PSS-Fa and confidence (r = .43) (Procidano & Heller). For the present sample, the internal consistency alpha coefficient was .91 for the PSS-Fa and .82 for the PSS-Fr.

Enacted social support was measured using the Inventory of Socially Supportive Behaviours (ISSB), a 40-item self-report of frequency of receiving various forms of assistance (i.e., enacted or mobilized support) during the previous month. This scale was inductively developed through content analysis of interviews with pregnant adolescents (Gottlieb, 1978) and has been used with adolescent samples (Barrera, 1981). Frequency of specific helping behaviours is rated on a scale from 1 *(not at all)* to 5 *(almost every day).* The range of possible scores for this scale is 40 to 200. Internal consistency Cronbach's alpha coefficients for the ISSB have been above .90; test-retest correlations were .88 for a 2-day testing interval and from .63 to .80 for a 1-month testing period (Barrera, 1995).

Quality of the home environment was assessed using Caldwell and Bradley's Home Observation for Measurement of the Environment (HOME), a measure of cognitive stimulation in the home-environment or parenting context (Caldwell & Bradley, 1984). The HOME inventory (45 items) takes approximately 1 hour to administer and consists of six subscales: Variety in Daily Stimulation (five items), Maternal Responsiveness (11 items), Involvement (six items), Play (nine items), Acceptance of Child Behaviour (eight items), and Organization of the Environment (six items). The range of possible scores is 0 to 45. Reported internal consistency for Cronbach's coefficients ranges from .44 to .89 for the individual subscales and is .89 for the total scale (Boehm, 1989). Reported 6-, 12-, and 18-month test-retest temporal stability correlations for a sample of 91 families range from .62 to .77 for the total inventory (Boehm). For the present study, a research nurse was specially trained in administering the HOME, and satisfactory interrater reliability ($r = .85$) was established with another expert.

As with other studies, education of the infant's maternal grandmother was used as a proxy measure of socio-economic status (Hannon & Luster, 1991; Luster & Dubow, 1990). Each adolescent mother was asked to rate her mother's educational attainment level (1 = Grades 1–8; 2 = Grade 12; 3 = vocational or some university; 4 = university degree; 5 = graduate degree). This proxy measure was used because many of the adolescent mothers had not yet achieved their maximum education level (and were not employed). Most of the adolescents, or their family of origin, were living on social assistance, which meant that there was little variation in income as a socio-economic status index.

Procedure

Expectant mothers were recruited during their 3rd trimester and supplied demographic information and completed several instruments (i.e., self-esteem, social support from family and friends, and expectations regarding competence in infant care; Table 2). Social support scales were completed during the 4th week postnatal. A trained research nurse completed the HOME assessment when the infant was 12 to 18 months old.

Data Analysis

Analysis of variance and t tests were conducted to test the ethnic group differences on the study variables. Due to the small sample size, a staged multiple regression analysis was conducted, with variables entered simultaneously, as in previous research (Hannon & Luster, 1991), with a maximum of five variables per model. In stage I, separate psychosocial

Table 2 ***Time Points and Variables Measured***

3rd Trimester (n = 71)	4th Postnatal Week (n = 57)	12–18 Months (n = 37)
ICEQ	ICQ	HOME
PSS-Fr	ISSB	
PSS-Fa		
RSE		

ICEQ	Infant Care Expectation Questionnaire (Prenatal Mom&Baby and Emotionality)
ICQ	Infant Care Questionnaire (Postnatal Mom&Baby and Emotionality)
HOME	Home Observation for Measurement of the Environment
PSS-Fr	Perceived Social Support from Friends
ISSB	Inventory of Socially Supportive Behaviours
PSS-Fa	Perceived Social Support from Family
RSE	Rosenberg Self-Esteem

and situational models were run to determine significant explanatory variables. Those variables achieving a significance level of at least .1 were entered into the more refined, stage II, analysis. This method determined the significance of the larger psychosocial and situational models and also identified which unique variables within each model explained home-environment quality. A p level of .05 was used for all statistical and regression analyses. Due to the small sample size, no interaction variables were included in the analyses.

Results

Psychosocial, Situational, and Home-Environment Variables

Psychosocial variables. The Métis/First Nations mothers were significantly younger (M = 16.27 years, SD = 1.13) than the Caucasian mothers (M = 17.4 years, SD = 1.22), t = 4.10, p = .00 (see Table 1). Although the difference was not significant, the Métis/First Nations mothers had higher self-esteem (M = 31.21, SD = 3.91) than the Caucasian mothers (M = 29.68, SD = 4.74). No significant differences were noted in prenatal Emotionality and Mom&Baby scores or 4th-week postnatal Mom&Baby scores. However, the Métis/First Nations mothers had a significantly higher Emotionality score (M = 4.61, SD = .32) than the Caucasian mothers (M = 4.35, SD = .51) (t (57) = -2.23, p = .03) at 4 weeks postnatal. This finding suggests that the Métis/First

Nations mothers experienced greater satisfaction with infant-care provision and less frustration with negative infant responses, fussiness, and crying.

Situational variables. Grandmother education level was higher for Caucasian (*M* = 2.70, *SD* = 1.04) than Métis/First Nations (*M* = 2.24, *SD* = 1.09) mothers, although the difference was not significant: *t* (64) = 1.71, p = .09. The Métis/First Nations mothers reported greater family and enacted social support and lower friend social support, but these differences were not significant.

Quality of home environment. The quality of the home environment at 12 to 18 months was significantly higher for the Caucasian mothers (*M* = 34.7, *SD* = 4.51) than the Métis/First Nations mothers (*M* = 30.4, *SD* = 5.63): *t* (40) = 2.67, *p* = .01.

Maternal Psychosocial and Situational Predictors of Home-Environment Quality

Psychosocial variables. A stage I multiple regression model was run, with all psychosocial variables (age, self-esteem, Emotionality, Mom&Baby, and ethnicity) entered simultaneously to examine whether they explained the quality of the home environment when the infant was 12 to 18 months old (Table 3). The psychosocial model explained a significant amount of variance in home-environment quality: R^2 (40) = .28, *p* = .04; adjusted R^2 = .17. Within the stage I psychosocial model, maternal ethnicity (*beta coefficient* = .37, $p < .05$) and Emotionality (*beta coefficient* = -.47, $p < .04$) were significant explanatory variables. A lower Emotionality score and Caucasian ethnicity predicted a more favourable home environment.

Situational variables. A stage I situational variable model was also run, with the variables grandmother level of education, family and friend social support, and enacted social support entered simultaneously. This situational model explained a significant amount of variance in total home-environment quality: R^2 (37) = .30, *p* = .025; adjusted $R^{2\,=}$ .20. Grandmother education significantly explained total home-environment quality (*beta coefficient* = .42, *p* = .01). Enacted social support (ISSB score) was not significant as an explanatory variable for the total home-environment quality (*beta coefficient* = .26, *p* = .10).

Stage II regression of psychosocial and situational variables. A refined, stage II, multiple regression model was run containing all the stage I psychosocial and situational variables that achieved a *p* level less than or equal to .1. These variables included emotionality, maternal ethnicity, enacted social support, and grandmother education (see Table 3). The stage II model explained a significant amount of variance in total home-environment quality: R^2 (37) = .49, *p* = .001; adjusted R^2 = .41.

Although the direction of influence was negative for emotionality and positive for grandmother education, these two variables had almost equal explanatory strength for total home-environment quality (*beta coefficient* = –.43, p = .005 and .41, p < .01). Within this refined stage II model, maternal grandmother education, rather than ethnicity, was a significant explanatory variable.

Table 3 ***Staged Multiple Regression: Situational and Psychosocial Explanations for Home-Environment Quality***

	Stage I Standardized Betas (p value)	**Stage II** Standardized Betas (p value)
Maternal characteristics (N = 40)		
Age	.22 (.21)	
Self-esteem	.14 (.29)	
Emotionality	-.47 (.04)	–.43 (.005)
Mom&Baby	.26 (.24)	
Ethnicity	.37 (.05)	.23 (.12)
Model R^2	.28 (.04)	
Model Adjusted R^2	.17	
Situational Characteristics (N = 37)		
Maternal grandmother education	42 (.01)	.41 (.01)
PSS-Fa	-.05 (.76)	
PSS-Fr	-.14 (.41)	
ISSB	.26 (.10)	.15 (.35)
Model R^2	.30 (.025)	.49 (.001)
Model Adjusted R^2	.20	.41

Discussion

This study explored ethnicity differences for several situational and psychosocial variables in a convenience sample of Métis/First Nations and Caucasian adolescent mothers. The influence of these variables on the quality of the home environment at 12 to 18 months postnatal was determined using multiple regression techniques. The findings are consistent with Belsky's (1984) parenting model, as both psychosocial (emotionality) and situational (maternal grandmother education) variables significantly explained parenting competence, defined in this study as the total score for home-environment quality. The Métis/First Nations mothers were found to have less positive home environments than the Caucasian mothers. Multiple regression analysis revealed that emotionality and education level significantly explained 49% of the variance. The significance of ethnicity as an explanatory variable was lost in the stage II multiple regression analysis when a socio-economic variable (grandmother education) was added. Enacted social support was not significant in either the stage I or the stage II multiple regression analysis. This finding suggests that socio-economic factors may have a greater influence than ethnicity on the home-environment quality for the sample. In future modelling research, it would be interesting, and in keeping with Belsky's model of parenting competence, to include a measure of child characteristics or temperament.

These findings highlight several psychosocial, situational, and home-environment differences for Métis/First Nations and Caucasian adolescent mothers. Even though the Métis/First Nations mothers were younger than the Caucasian mothers, age was not a significant explanatory variable. A US study with older mothers reports a similar age difference between ethnic groups, with Black mothers being significantly younger than both Hispanic and Caucasian mothers (Luster & Dubow, 1990). Another ethnic difference found in the present study was significantly higher emotionality among the Métis/First Nations mothers at 4 weeks postnatal. This result may be due to stronger maternal identity or a response-set measurement bias for the Métis/First Nations compared with the Caucasian mothers. Métis/First Nations adolescent mothers may be more reluctant to report negative emotions, such as frustration, surrounding infant care. They may fear repercussions of openly expressing frustration with infant care: one maternal grandmother, in confidence, expressed the fear that her grandchild was at risk of apprehension, as had happened with one of her own newborns some 20 years earlier.

Emotionality and maternal grandmother education level significantly predicted scores for home-environment quality. Maternal grandmother education as a significant explanatory variable is consistent with previous findings (Garcia Coll et al., 1986; Klebanov et al., 1998). For example, Klebanov et al. found family poverty to be associated with lower scores on home-environment quality when the child was 3 years old. In a study with American mothers aged 14 to 27 (Hannon & Luster, 1991), education level failed to significantly predict scores for home-environment quality, but maternal intelligence quotient, a related variable, was significant. The present findings are aligned with a suggestion by Aber et al. (1997) that mothering differences attributed to ethnicity in comparison studies may, in fact, be due to the confounding influence of poverty or low income. Therefore, it is recommended that future research in this area include a measure of income or socio-economic status.

Previous studies compared influences on mothering practices or home environment for US ethnic groups. The present study compared Canadian Métis/First Nations and Caucasian ethnic groups and included ethnicity in a multiple regression analysis to determine whether it significantly explained variance in the outcome. This method highlighted the stronger influence of socio-economic status — as indicated by education level of the maternal grandmother — as compared with ethnicity, on the home environment. Socio-economic factors, as reflected in grandmother education, explained a greater amount of the variance in the adolescent mother's home environment, as compared with ethnicity.

In the present study, self-esteem did not differ between the ethnic groups and was not significant within either of the multiple regression models. This result is consistent with the findings of a large US study with older mothers (i.e., over 20 years old), in which self-esteem, while significantly and moderately correlated with home-environment quality, was not significant within a multiple regression model (Hannon & Luster, 1991). This suggests that the role of self-esteem may be better tested within a mediating model. The negative relationship between emotionality and home environment suggests that further validation of the ICEQ and ICQ infant-care competence scales may be necessary. Bell and Richard (2000) note that, in the caregiving context, responsibility and empathy are emotional intentions derived from "caring." Therefore, the infant-care emotionality questions may tap the responsibility and empathic perspectives of adolescent mothers. Due to family and ethnic influences, some adolescent mothers may be more empathetic towards and motivated to care for an infant and have greater maternal identity. However, these same adolescent mothers with high emotionality may be those living in the more disadvantaged home situations leading to the negative association between scores for emotionality and home-environment quality in the multiple regression equation.

Future research should concentrate on explaining ethnic differences in the meaning of, and responses to, infant crying and negative infant behaviour. The more favourable emotionality scores among Métis/First Nations mothers may be related to more infant-care experience and/or less concern with infant crying and fussy behaviour. A better understanding of the meaning of emotionality among adolescent mothers may also shed light on the relationship between maternal emotions and negative mothering outcomes such as child abuse (Lutenbacher & Hall, 1998). Infant temperament is also a factor: frequent crying and fussiness will likely erode maternal perceived competence or emotionality and Mom&Baby scores. Maternal depression is another psychosocial variable to consider, because it has been associated with negative mothering practices and child-development outcomes and is thought to mediate the effects of poverty on child development (Petterson & Albers, 2001).

While this exploratory study provides insight into differences between two Canadian ethnic groups, the finding of lower home-environment quality among the Métis/First Nations adolescent mothers should be confirmed with a larger sample. Future research with larger samples would allow for more rigorous causal and hierarchical modelling and consideration of interaction variables. The findings of this study are consistent with those of larger US investigations and with Belsky's (1984) parenting determinants model. They show that the home environment of adolescent mothers is influenced by both psychosocial and situational factors. Additionally, maternal grandmother education level has a greater influence than ethnicity on the home-environment quality of adolescent mothers. The findings suggest that improving the educational attainment and social and living conditions of adolescent mothers may be the most effective strategies for raising that quality.

Limitations

Data analysis and generalizability of the findings were limited by the small sample size and an attrition rate of 32% over the 12–18-month follow-up period. The small sample size allowed for the running of separate regression models with a maximum of five variables. A larger sample would have permitted more powerful analysis, stepwise multiple regression, and inclusion of interaction variables. Another limitation is that some of the variables identified as psychosocial or situational could have belonged to another category (e.g., age). Also, the grouping of adolescents into two broad ethnic groups (Caucasian and Métis/First Nations) may have resulted in failure to capture the diversity within each group.

Implications for Nursing

The findings from this study have implications for nurses caring for adolescent mothers and their infants in community, primary-care, and acute-care settings. They demonstrate that economic factors have a greater effect than maternal age or ethnicity on the quality of cognitive stimulation in the home. Nurses can assist adolescent mothers, especially those in low-income groups, to develop mothering practices that promote infant health. Nurses who are aware that poverty is associated with numerous physical, social, cognitive, and emotional problems can refer adolescent mothers to early-intervention programs that focus on health-promotion strategies and training in infant care. Métis/First Nations adolescent mothers may be considered at special risk due to socio-economic conditions and negative home environments. The nurse may also act as an advocate for health-care and child-care policies (Cohen & Misuraca, 2001) that acknowledge the realities and needs of adolescent mothers. According to Stainton (2001), an appropriate goal for contemporary maternal-infant/child nurses is to develop a model of nursing care that helps mothers of various cultures to promote their infant's health. Further research on mothering influences for different ethnic groups will help nurses to achieve this goal.

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Correspondence may be addressed to M. Loretta Secco, Faculty of Nursing, University of Manitoba, Winnipeg, Manitoba R3T 2N2 Canada.

M. Loretta Secco, RN, PhD, is Assistant Professor, Faculty of Nursing, University of Manitoba, Winnipeg, Canada. Michael E. K. Moffatt, MD, MSc, FRCPS, is Professor, Department of Community Health Sciences, and Head, Department of Pediatrics, University of Manitoba and Children's Hospital, Winnipeg.

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Designer's Corner

Translating and Adapting Measurement Instruments for Cross-Linguistic and Cross-Cultural Research: A Guide for Practitioners

Elizabeth A. Kristjansson, Alain Desrochers, and Bruno Zumbo

The psychometric instruments used in cross-linguistic or cross-cultural research are typically developed in one language and then translated into another. The authors address methodological problems that arise in the translation process and that compromise data interpretation, using concrete examples to illustrate these problems. They point out and describe the relevance of lexical semantics in item translation. The authors make recommendations for avoiding common pitfalls in the use of translated measurement instruments or in the translation or adaptation of such instruments. This paper is intended for researchers who are planning to develop or use translated instruments.

Measurement is integral to nursing practice. It is used to facilitate the diagnosis of physical and psychological health problems and in the assessment of pain as well as physical and cognitive functioning. It can also serve a useful purpose in the assessment of self-reported health status, knowledge or attitudes about illness, and health services or policies. Measurement instruments may take a variety of forms, including questionnaires, tests, rating scales, and self-reports. The choice depends largely on the purpose of the research that is undertaken. Psychometric measures typically hinge upon a focal theme or concept. For instance, a performance test may be designed to assess a cognitive ability such as attention or memory. An attitudinal scale may quantify individuals' disposition towards smoking or their impression of services dispensed by a health-care institution. A questionnaire may serve to assess older persons' quality of life. All themes or concepts generally involve various facets, which are measured using different questions or items. The potential range of applications of such measures is open-ended.

Researchers take a number of precautions to ensure that the conclusions they draw from their data are sound. For instance, instruments must include a sufficient number of items to represent the relevant facets of the concept being measured. The responses to the items that are conceptually related are expected to be correlated and form a consistent body of data. Over multiple measurement sessions, these responses must reflect accurately the stability of or a change in what is being measured (e.g., an ability, an attitude). Psychometric measures should also be correlated with other, conceptually related, measures, and be uncorrelated with conceptually unrelated measures. More importantly, they are expected to provide a fair and unbiased representation of the underlying concept. Meeting these conditions is essential to establish the reliability and validity of a measurement instrument.

Item and test bias is a potential threat to the validity of the inferences made from psychometric measures. The term "bias" is used here to refer to a systematic error in the measures taken from a group of individuals. When an item or an instrument is biased against one socio-economic, linguistic, or cultural group, the measures derived from it do not accurately reflect a person's true abilities or characteristics (Camilli & Shepard, 1994). Such a measurement error may be due to some characteristic of an item or situation that is not relevant to the purpose of the instrument. It may be introduced, perhaps unknowingly, when the instrument is being constructed, translated into another language, or adapted to a culture or context for which it was not designed.

Measurement problems that occur in the translation and adaptation process are particularly relevant to multilingual and multicultural countries like Canada. Some measures are routinely used to collect data on the health status, attitudes, level of satisfaction, and preferences of English-speaking and French-speaking Canadians. Whenever differences are detected in the data derived from an instrument and its translation into another language, one hopes they reflect differences between the groups of respondents rather than between the two versions of the instrument. Although translating a measurement instrument into another language may seem a straightforward exercise, it is in fact quite difficult and has historically been fraught with problems (Banville, Desrosiers, & Genet-Volet, 2000). For instance, translating a word by its dictionary equivalent does not necessarily ensure conceptual equivalence (Hambleton, 2002). A word and its dictionary equivalent may differ in their range of meaningful associations, number of possible meanings, emotional valence, familiarity, and so on. These problems make it difficult to ascertain whether observed differences among language groups are real or due to bias (Sirecci, 1997). In turn, such ambiguity makes the interpretation of the results a perilous exercise. Careful attention to issues of linguistic and cultural equivalence during the development, evaluation, and use of translated or adapted instruments will help to ensure that conclusions drawn from the data derived from the instruments are valid and fair for all linguistic and cultural groups.

This paper has two main objectives: to highlight difficulties in translation that may lead to errors in measurement at the item or scale level, and to provide recommendations on the translation or adaptation of measurement instruments. The considerations presented in this paper may be of interest or value to researchers who are (a) using an existing translation of a measurement instrument, (b) developing their own translation, or (c) developing a new instrument in the target language.[1] If you are planning to use an existing translated measurement instrument, this paper may help you to evaluate it critically and to determine whether it will provide valid, reliable, and unbiased measures. If you are translating or adapting an instrument, it may serve to make you aware of the appropriate steps to take. This paper also contributes to the measurement literature by highlighting the various and subtle ways in which translation can change the meaning of measurement items, even in the best of instruments.

Problems and Pitfalls in Translation

A number of hurdles may have to be overcome in the development of a meaningful and equivalent cross-linguistic or cross-cultural measure (see Behling & Law, 2000; van de Vijver & Poortinga, 1991). Problems leading to bias can be grouped into three types: lack of conceptual equivalence, differences in cultural norms, and lack of semantic equivalence (Behling & Law). We shall give a brief overview of each type, paying special attention to problems of semantic equivalence, as these are quite common and are often easy to identify and resolve.

Lack of Conceptual Equivalence

Most psychometric instruments are intended to assess one or more abilities (e.g., cognitive skills), self-perception (e.g., health-related conditions, depression), traits (e.g., personality), or attitudes (e.g., towards health-threatening behaviours). However, psychological concepts are not necessarily universal (Behling & Law, 2000; Hui & Triandis, 1985). A concept

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[1] Researchers may have the choice of using existing scales or developing their own scales. When suitable scales are available and well constructed, it is advisable to use them, as they have already been tested, and developing new scales involves an inordinate amount of work. This advice applies equally to translated measurement instruments. Translation and adaptation is an exacting, time-consuming, and expensive process.

that is meaningful in one culture may not be so in another, and even if it is meaningful, it may be more important or salient in one culture than in another. More commonly, the behavioural manifestations of some concepts will differ among cultures. For instance, culture shapes the way we conceive of health and illness and influences the relative value or importance of symptoms. Such differences have implications for the operational definition of a psychological concept and for the development of a psychometric instrument.

Let us consider some concrete examples. Cognitive functioning is operationalized differently in different cultures; its manifestations are largely influenced by the demands of the social environment in which one lives. In North America, for example, numeracy and literacy are practically indispensable skills in most daily activities, from balancing a cheque-book to reading a recipe or the newspaper. In addition, a great deal of emphasis is placed on efficiency, productivity, and speed of response (Hambleton, 2002). Tests of cognitive ability often reflect these skills and values. However, such tests would not provide meaningful measures for people whose lifestyles and experiences differ dramatically from those of North Americans. Teng (1996) aptly illustrates this point with the example of an illiterate grandmother in a developing country who has little or no experience with testing. This woman would likely do poorly on a North American cognitive test, not because she suffers from dementia but because the skills that are emphasized in these tests are not relevant to her life experience, which comprises cooking, gardening, taking care of animals, and raising children. A more appropriate test of her cognitive abilities would emphasize the skills that she needs in her everyday life.

Depression is also expressed quite differently in different cultures; depressive symptoms that are important in one culture may not be important in another (Edwards, 1995; Guarnaccia, Angel, & Worobey, 1989). For example, Bhtanagar and Frank (1997) observed that depressed elderly South Asian immigrants did not demonstrate guilt feelings or suicidal ideation, symptoms that are commonly shown by people who are depressed in North America. The authors attributed the absence of these symptoms to the fact that such feelings are perceived as socially disgraceful in South Asian societies. In another study, Marsella and White found that people in nine non-Western countries rarely reported classic symptoms of depression such as depressed mood, loss of interest, and sleeplessness (as cited in Curyto et al., 1998). The implication of these results is that the items on depression measures should be relevant to the way in which depression is manifested in that culture. We now turn to a related issue, namely how differences in cultural norms influence responses to an assessment.

Differences in Cultural Norms

Societal norms profoundly influence our attitudes and behaviour (Behling & Law, 2000). This influence can be shown in various ways. Let us briefly consider three examples.

Societies differ in their openness and willingness to discuss certain topics. In extreme cases, respondents to a questionnaire might refrain from answering some questions or fail to report instances of particular symptoms or behaviours. Such reluctance to divulge personal information may make the early detection of distress (e.g., resulting from a physical or mental illness) nearly impossible.

Individuals raised in different social or cultural environments may also differ in their inclination to provide socially desirable responses to please an interviewer. In extreme cases, individuals might consistently portray themselves in a way that makes them look good to others, even if this façade is dissonant with the way they are or feel. The consequence for the measures taken from such individuals is that the data will reflect their ideal self rather then their true self. It is precisely this source of bias that led researchers to develop social desirability scales and explore ways to adjust individual data for social desirability (Crowne & Marlow, 1960). Whether or not such social desirability scales apply equally well across cultures is still an open question.

Different cultures may enforce different norms for responding to particular situations (e.g., the death of a spouse) or internal states (e.g., grief or distress). In some cultures, people may feel free or even encouraged to display their pain or distress openly, while in others such behaviour may be perceived as irresponsible or as a form of weakness and be regarded unfavourably. Such variation makes it particularly difficult, in health research, to establish the symptomatology and, more importantly, to assess the true intensity of symptoms.

Behling and Law (2000) address the issue of differences in cultural norms. The solutions they propose are similar to those discussed in the context of conceptual equivalence. Most of them involve learning about the cultures of interest and exercising sensitivity and care in the development of items (e.g., in choice of words, formulation of questions).

Lack of Semantic Equivalence

In psychometric instruments, meanings are typically conveyed through words, phrases, or sentences. The issue of semantic equivalence thus relates to the mapping of meanings across languages: How can an idea expressed in one language be accurately conveyed in another? Languages may differ in subtle ways in their expressive resources. Words or phrases that are meaningful in one language may have no exact counterpart in another (Bracken, 1990; Retief, 1988). The grammatical strategies used for expressive purposes in one language may have no equivalent in another (Retief). Another hurdle in translation relates to differences in experience and learning, which in turn lead to differential understanding and interpretation of words and other stimulus materials (Retief; van de Vijver & Poortinga, 1991).

Let us consider each of these problems by examining a few examples from a variety of tests and measurement instruments. At the outset, we would like to underscore the fact that the problematic items we cite are drawn from very carefully developed and validated measurement instruments, and a problem with one or two items does not mean that the tests are invalid. Moreover, these problems with item translation would not have been identified but for the vigilance of the developers and other researchers in checking measurement equivalence. These examples, rather than indicating problems with particular tests or measurement instruments, highlight the need to carefully consider the meaning of translated items for the respondents they are intended for; they also highlight the need for thorough and systematic study of item equivalence.

Problems of lexical mapping occur whenever the meaning of a word or an idiomatic expression does not map exactly that of its dictionary equivalent. Strictly speaking, meanings can rarely be conveyed with precision in translation. However, acceptable approximation can ordinarily be achieved. Lack of exact mapping is easy to demonstrate. For example, consider the relationship between the English word *ball* and the French word *balle*. At first glance, these words may be taken as equivalent, but they are not. *Ball* designates a larger set of referents than *balle*, which represents only spherical objects that can be held in one hand (e.g., a baseball). In French, a large ball (e.g., a basketball or football) is a *ballon*. Now consider a test item in which the respondent must match a short sentence to a drawing of a scene such as a boy holding a basketball. If the English version used the sentence "A boy is holding a ball," respondents would likely give a *true* response. However, if the French version used the sentence "Un garcon tient une balle," respondents would likely give a *false* response.

The preceding case may be so obvious as to be dismissed as a poor example. However, consider this item from the Mini-mental State examination (Folstein, Folstein, & McHugh, 1975) and the Modified Mini-mental State examination (3MS; Teng & Chui, 1987). In an item designed to assess attention, the respondent is asked to repeat the phrase "no ifs, ands, or buts." This is a familiar idiomatic expression to most English-speaking individuals (as in "Do it right now, no ifs, ands, or buts"). However, it presents problems in test adaptation because it has no counterpart in other languages (Teng, 1996). Realizing that direct translation of this item would not work, the experts who adapted the 3MS for Spanish-speaking North Americans substituted "si no sube, baja" ("if it doesn't go up, it goes down") (Marshall, Mungas, Weldon, Reed, & Haan, 1997). However, in a later item analysis, Marshall and her colleagues found that this item functioned differently for English- and Spanish-speaking test takers and recommended that another expression be used. This highlights the difficulties inherent in searching for conceptually equivalent idiomatic expressions.

The implementation of semantic equivalence is required in most cross-language translations, but there are exceptions. For instance, on the Boston Diagnostic Aphasia Exam (BDAE), respondents are instructed to copy the sentence "The quick brown fox jumps over the lazy dog." This test is designed to assess one's ability to reproduce in writing the 26 letters of the alphabet. Its focus is therefore on the visual form of the item rather than its meaning. In a French translation of this item, the respondent received the sentence "Le petit renard brun s'échappe du chien paresseux." Although this item preserves the meaning of the original, it misses the purpose of the test entirely because it uses only 15 of the 26 letters of the alphabet (Garcia & Desrochers, 1997). This example directs us to stress the distinction between translating and adapting a psychometric instrument for another linguistic or cultural group. The ultimate goal of adapting a measure into another language is to preserve the meaning of the theoretical concept. This goal can often be achieved by translating an item from the source to the target language. In particular circumstances, however, researchers may have to generate a new item, as would be recommended in the "quick brown fox" example.

Another example that highlights difficulties in lexical mapping comes from a study comparing the item equivalence of the American version of the SF-36 health questionnaire (Ware & Sherbourne, 1992) and its Danish translation (Björner, Kreiner, Ware, Damsgaard, & Bech, 1998). In one item from the Physical Functioning subscale, respondents are asked how much their health limited them in walking a *mile*. The Danish translation asked how much their health limited them in walking a *kilometre* (a shorter distance). Although a kilometre is more meaningful to Danes than a mile, this translation resulted in a different benchmark for the question. The Danes reported fewer problems with this task than the Americans who had the same level of overall health (Björner et al.), but they were compared on different criteria. This difference compromised the interpretation of the observed difference between the two language groups on the question (Björner et al.). This is an example of the difficulties faced in trying to develop conceptually equivalent items while maintaining cultural relevance.

Problems of grammatical or syntactic equivalence. Languages differ in the way in which sentences are constructed. The typical word order of an item in one language may not be appropriate for its translation into another language. Consider the following similarity item taken from the Modified Mini-mental State exam (3MS; Teng & Chui, 1987), which was used in English and French in the Canadian Study of Health and Aging (McDowell, 1994). Respondents were asked to describe similarities between pairs of concepts. In the English version, they received "In what way are laughing and crying alike?" In the French translation, they received "En quoi se ressemblent rire et pleurer?" Although the translation satisfies the principle of semantic equivalence, it features the less common verb-subject order rather than the canonical form (i.e., En quoi "rire" et "pleurer" se ressemblent-ils?). Preliminary item analyses showed that the item was more difficult for French-speaking than English-speaking respondents with similar cognitive abilities. This example reminds us that the way in which ideas are expressed in translation does matter, as it can influence performance.

Experiential equivalence. Most psychometric instruments rely heavily on the use of language. Since the interpretation of language usually involves general knowledge, one must also consider experiential equivalence in the translation or adaptation of an instrument.

Ellis (1989) reports a relevant example of differential knowledge in the cross-linguistic equivalence of the Career Ability Placement Survey (CAPS). This questionnaire was developed in English and subsequently translated into German. On one item of the Verbal Reasoning subtest, respondents were given the information that "the dogs in the park are all retrievers" and that "Cindy owns a poodle" (Ellis, p. 921) and were then asked whether the statement "All of Cindy's dogs are in the park" was *true, false,* or *uncertain.* Most North Americans would answer *false,* because one of Cindy's dogs is a poodle and retrievers are the only dogs in the park. The answer was in fact keyed as *false.* However, the answer was not so obvious for people in the German sample, who were more likely to answer *uncertain* on this item. Ellis researched this issue and found that the poodle originated in Germany as a waterfowl retriever and many Germans still classify the poodle according to its original function. Thus the differences in item scores were probably due to differential knowledge.

Words and their dictionary equivalents in another language may differ in frequency of use and therefore in familiarity. Such discrepancies have a direct influence on the difficulty of the items. However, word frequency dictionaries and familiarity norms can serve a useful purpose in the verification or control of word familiarity in cross-linguistic research. Several sources of relevant data are available for English (see Bradshaw, 1984;

Brown, 1976; Proctor & Vu, 1999) and for French (see Desrochers & Saint-Aubin, 2003).

Problems with experiential equivalence can also occur when the test material involves pictures of objects rather than linguistic stimuli. Picture-naming tests are often used in the assessment of language or communicative disorders. Take the picture of the acorn in the Boston Naming Test, which was developed in the United States to assess confrontational naming of familiar objects (Kaplan, Goodglass, & Weintraub, 1983). How can a stimulus as innocuous as a picture of an acorn cause trouble? It can happen when oak trees are not indigenous to the respondents' environment. This observation was made in the second phase of the Canadian Study of Health and Aging when we found that the acorn item was missed by 90% of our Newfoundland respondents. In checking this problem, we learned that although a few oak trees grow in parks in Newfoundland they are not indigenous and thus may be unfamiliar to many Newfoundlanders. This item was therefore not valid for Newfoundland seniors, as it did not properly measure their ability to name objects. A straightforward strategy for equating picture familiarity is to gather data on naming accuracy across language groups (see Alario & Ferrand, 1999; Cyscowicz, Friedman, Rothstein, & Snodgrass, 1997; Snodgrass & Vanderwart, 1980).

Recommendations for Translating and Adapting Tests

We have reviewed some of the pitfalls that have plagued instrument translation in cross-linguistic research. We shall now address various strategies for enhancing the quality of instrument translation or adaptation across languages. Let us state at the outset that researchers are urged to go beyond literal translation and back translation. Until recently, experts assumed that back translation[2] could uncover any important differences in meaning between the original version of the instrument and its translation (Behling & Law, 2000). However, direct translation and back translation can deal with literal meaning only; they cannot guarantee the general equivalence of the original item and its translation. Even though the criterion of lexical mapping may be met, the focal theme or concept may be modified or lost in the translation process (Hambleton, 2002). Back translation cannot detect differences in conceptual understanding of the question, and so cannot ensure psychological equivalence of the items in a scale or questionnaire (Behling & Law; Hambleton & Patsula, 1998). For example, although the translation of the "poodle" item

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[2] In the back-translation design, a test is translated into the target language and then back translated into the source language.

from the CAPS was correct in its literal sense, the intent of the item was lost because people in two language groups had a different understanding of what the item meant. Most experts now prefer the term "adaptation" to "translation" when referring to the process of developing measurement instruments across languages (Geisinger, 1994). Translation is now taken as one of several steps in the process of ensuring that such instruments are meaningfully used in both languages. Detailed guidelines are provided by Geisinger, by Hambleton, and by Vallerand (1989). Banville and her colleagues (2000) summarize Vallerand's methodology and also provide an example from an application of his methods. We shall now summarize the main steps.

Step 1: Verification of Focal Concept Relevance

One must pay close attention to the focal theme or concept of the measurement instrument, determine whether or not it is relevant to both cultures of interest, and, if it is relevant, learn how it is manifested. Hambleton and Patsula (1998) and Behling and Law (2000) describe several relevant strategies, including ethnographic research through observation, interviews, and extended interaction with both cultures to ascertain the relevance of focal concepts.

If the psychological concept of interest is found to be irrelevant to a particular culture, then one should either abandon cross-cultural research on this concept or look for a similar concept that is relevant. Most likely, however, it will be relevant, and researchers then have the option of (a) simultaneously developing their instruments for each language group (Hunt, 1998) — for example, by using the Combined Etic-Emic approach (Hui & Triandis, 1985); (b) developing their instruments for the target language group only (Hambleton, 2002); or (c) adapting an existing source-language instrument for use in the target language (Banville et al., 2000; Bracken & Barona, 1991; Hambleton). Adapting a validated and well-tested instrument for the target language is often the preferred option, when applicable, because of its efficiency and reduced cost.

Step 2: Translation of the Instrument and Development of Preliminary Versions

Hambleton (2002) recommends that professional translators be brought onto the research team; these translators must have an intimate knowledge of the languages and cultures of interest (Geisinger, 1994; Hambleton). Sensitivity to nuances in meaning and expression and awareness of different cultural knowledge and experience can serve to prevent serious problems in item construction. Translators should also be familiar with the concept of interest, the objectives of the measurement instrument, and the purpose of each item (Geisinger). Therefore, it is important that they be integrated into the research team and collaborate with the researchers to ensure that the meaning is preserved in translation (Behling & Law, 2000).

Once the expertise is in place, double translation (Hambleton, 2002) or double translation/back translation (Vallerand, 1989) can be undertaken. In double translation, two translators each produce an independent version of the measurement instrument in the target language. The two translations are checked for differences, which in turn are resolved through discussions with a third expert (Hambleton) or with the team (Banville et al., 2000). One common version is then developed in the target language (Banville et al.). The double translation/back translation method involves an additional step: two new translators each use the common version to translate the instrument back into the source language (Banville et al.; Vallerand). The translated (or translated and back-translated instrument) is then evaluated by an expert committee (see below). Note that the purpose of these procedures is not to carry out a literal translation but to ensure that the meanings of the original items are retained in the translated instrument (Banville et al.). These procedures can serve to prevent many problems or biases associated with the exclusive use of simple direct translation and back-translation (Vallerand). At this stage of the process, potentially confounding factors such as word complexity, differential experience, and item familiarity in the two languages must be considered, as they can have a considerable effect on respondents' behaviour. These factors sometimes operate in subtle ways. Consider the following example. The Verbal Associative Fluency Scale (FAS; Benton, 1968) is a well-known English verbal fluency test in which respondents are given 1 minute to name all the words they can that begin with the letter *F*. The procedure is then repeated for the letters *A* and *S*. A direct translation of this test into French would be problematic because the number of words that begin with *F, A,* and *S* are different in English and French. All other factors being equal (e.g., word frequency), a smaller sample of suitable words for any of the stimuli would make the task more difficult. The neuropsychologist who adapted this test therefore chose letters with an approximately equivalent number of dictionary words as the original letters; these letters are *T, N,* and *P* (B. Ska, personal communication, April 24, 2003). Resolving this adaptation problem required not only an understanding of the focal concept, but also some knowledge of the determinants of verbal fluency. This example reminds us that expertise in translation and cultural issues, while necessary, is not sufficient to overcome all potential hurdles in cross-linguistic or cross-cultural research.

Step 3: Committee Review and Evaluation of the Preliminary Version

After the preliminary version(s) is/are developed, a committee of experts in the content area, the translators, and the researchers should review and evaluate the translated instrument. Their task is to determine whether the translation is meaningful for all groups and whether its meaning corresponds to the original intent of the items (Banville et al., 2000; Bracken & Barona, 1991; Geisinger, 1994; Hambleton, 2002; Vallerand, 1989). If the measure is to be taken by an interviewer, it may be useful to include bilingual interviewers in this process. Interviewers can provide invaluable insight, as they know about the language used by ordinary people in their area. After difficulties have been resolved, a pre-test version of the instrument is developed.

Step 4: Pre-testing the Instrument

The adapted instrument should be pre-tested on a small sample of people who are representative of the eventual sample. The purpose of the pre-test is not only to collect responses to the items, but also to obtain respondents' feedback on the acceptability and comprehensibility of the items (Vallerand, 1989). Respondents may be interviewed to learn about their interpretation of items; or they may be asked to comment on the clarity of item wording (Vallerand). It is our opinion that focus groups can also be useful at this stage in the development of an instrument. These procedures are all intended to identify problematic items, which should then be revised.

Step 5: Pilot Testing the Instrument

The draft adaptation should be pilot tested to establish its reliability, validity, and acceptability (Banville et al., 2000; Bracken & Barona, 1991; Hambleton, 2002). This pilot testing should probably be done in two phases.

In the first phase, the "test-retest by bilingual subject" procedure developed by Haccoun and recommended by Vallerand (1989) is particularly relevant, because it covers concurrent validity as well as reliability. A group of bilingual participants (Banville et al., 2000, used 20 people) are asked to complete both versions of the instrument and 1 month later are asked to complete them again. The correlation between the original and translated versions assesses concurrent validity, and the test-retest correlation with the same language version assesses reliability (Banville et al.).

We recommend that this pilot test be followed up with a larger pilot test of the type described by Bracken and Barona (1991) and Hambleton (2002). The sample for this stage of testing should be large enough (at least 100) to allow for formal factor and item analyses and thereby guide the next and, it will be hoped, final revision of the instrument. Procedures for testing the conceptual and item equivalence of the instrument for both language groups are described by Behling and Law (2000), Ellis (1989), Hambleton, and Zumbo (in press). Once the test has been refined, it will be necessary for the researchers to validate the assessment in the new language, establish norms with representative samples of respondents, and develop procedures for comparing scores across the two language groups.

Conclusion

Cross-cultural studies may be designed to address theoretical or practical issues. For instance, researchers may want to test a hypothesis regarding how a particular psychological state (e.g., depression) is manifested in different cultures. Alternatively, they may simply want to compare two language groups' satisfaction with the accessibility of medical services. No matter what the focal concepts are, the process of translating measurement items from one language into another always involves potential threats to the validity of the instruments. In this paper, we have considered some of the problems researchers are likely to encounter in adapting a measurement instrument from one language to another. The solutions to these problems are sometimes easy to implement. We have presented a set of guidelines for the development of measurement instruments and their adaptation for cross-linguistic or cross-cultural research. The implementation of these guidelines may be labour-intensive and costly, but it generally is necessary for the construction of reliable and valid measurement instruments.

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Authors' Note

Correspondence regarding this paper may be sent to Elizabeth A. Kristjansson, School of Psychology, University of Ottawa, 125 University, Room 415A, Ottawa, Ontario K1N 6N5 Canada.

Elizabeth A. Kristjansson, PhD, is Assistant Professor, School of Psychology, University of Ottawa, Ontario, Canada, and Affiliate Scientist, Centre for Global Health, Institute of Population Health, University of Ottawa. Alain Desrochers, PhD, is Associate Professor, School of Psychology, University of Ottawa. Bruno Zumbo, PhD, is Professor, Faculty of Education, University of British Columbia, Vancouver, Canada.

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Happenings

Maternal-Child Health Care in Aboriginal Communities

Dawn Smith

This paper outlines the imperatives of and growing opportunities for nursing involvement in multidisciplinary and multi-partner research and action to improve maternal-child health care in Aboriginal communities. On ethical grounds (Canadian Nurses Association, 1997; Community Health Nurses Association of Canada, 2003), inequities in access to evidence-based, culturally safe, and family-centred maternal-child health services for rural and remote reserves are of concern for nurses. From a nursing-practice perspective, issues faced by nurses practising in Aboriginal communities have received inadequate attention from nurse scholars. From a population-health perspective, improving perinatal health outcomes could significantly reduce the disparities in health status between Aboriginal and non-Aboriginal people. While the imperatives for action are not new, recent funding opportunities for Aboriginal health research, improvements to leadership and support for nurses working in Aboriginal communities, and the increasing ability of Aboriginal people to lead and facilitate action have created more favourable conditions for research in this area.

The Imperatives for Action

I propose a greater investment of nursing's research expertise in efforts to improve the delivery and outcomes of maternal-child health care in Aboriginal communities, for three reasons: to reduce health-status inequities through "early years" interventions; to address inequities in access to culturally safe, evidence-based maternity care; and to improve support and professional guidance for health-care providers working in Aboriginal communities.

Health-Status Inequities

"Early years" research strengthens the case for nurse-researcher involvement in upstream efforts, showing that improving the quality of prenatal care, for example, can positively influence the life course of Aboriginal people. A growing body of evidence suggests that the quality of a child's environment during the early years shapes neurobiological, social, and emotional outcomes over a lifetime (Guralnick, 1997; Hertzman, 2000; McCain & Mustard, 1999). Table 1 compares health-status indicators from infancy to adulthood for Aboriginal Canadians with the whole Canadian population. Life-course theory and evidence (Graham, 2002) suggest that weak preventive and health-promoting care in the pre- and postnatal periods may be a significant contributor to an accumulation of poor health outcomes over a lifetime.

Inequities in Access to Culturally Safe, Evidence-Based Maternity Care

Maternal-child health care in First Nations and Inuit communities in Canada falls short of the standards set for the country as a whole. The current practice is to transfer women in late pregnancy for "medically safe births" to a designated tertiary-care medical centre in southern Canada. Aboriginal women must therefore leave their children and the support of their families and communities, sometimes for as long as 2 months, to experience this important life event alone in an unfamiliar environment. As it is currently carried out, evacuation is a "downstream" approach that separates women and birthing from the cultural, personal, family, and community contexts that are so critical to successful pregnancy and a positive birth experience. Lack of protocols for care of women throughout pregnancy, birth, and postpartum, and for co-ordination between the health systems involved, further compromises attempts to provide culturally safe (Polashek, 1998; Ramsden, 1993; Smye & Browne, 2002), health-promoting, person- and family-centred nursing

Table 1 ***Selected Health Indicators for Aboriginal and Non-aboriginal Canadians***

Selected Health-Status Indicators	**Aboriginal Canadians**	**Canadian Population**
Infant mortality rate*	1,200	580
Preschool mortality from injury rate*	83	15
Youth suicide rate*	37	7
Percentage never completing high school	64	31
Average annual employment income	$14,055	$26,474

*Rates are per 100,000.

Sources: Assembly of First Nations, 1999; Federal/Territorial/Provincial Advisory Committee on Population Health, 1999.

care (Lindsey & Hartrick, 1996). The disruption in care imposed by relocation to a southern centre compromises the effectiveness of relevant community services such as nutrition programs and programs for the prevention of fetal alcohol syndrome. Medical evacuation, as the major thrust of maternity care, fails to address the root causes of poor health experienced by Aboriginal women and families, and seriously compromises the efforts of Aboriginal people to achieve vitality in their families and communities.

Lack of Support for Health-Care Providers

The First Nations and Inuit Health Branch (FNIHB) (previously known as the Medical Services Branch) of Health Canada is one of the largest providers of health care in Canada — indeed it is the fifth largest "jurisdiction" among provinces and territories. Its annual budget exceeds $1.4 billion. Health services are provided to about 700,000 Canadians of First Nations ancestry on reserves south of the 60th parallel and to Inuit as part of the Territorial health systems north of 60. For First Nations, this includes about 600 communities varying in size and in extent of geographic isolation. Health services are focused on primary care and delivered in community health centres and northern nursing stations, mostly by registered nurses who function in an expanded role in more remote communities. Approximately 1,200 Full Time Equivalents of registered nurses are employed by FNIHB and/or directly by the bands that manage their own health services with funds provided by Health Canada through contribution agreements with FNIHB.

Nursing care in Aboriginal communities has not developed in tandem with mainstream nursing, for a number of reasons. Infrastructure and support for nursing in FNIHB was eroded when the federal government began transferring health services to band control. In anticipation of a different future for the Branch, leadership and support staff in federal headquarters decreased and their relationship to nurses employed by the bands became unclear. Thus organizational support for nurses, who were often working in relative isolation and under difficult conditions, was reduced. For example, opportunities for professional development and access to professional information systems were limited. Given the difficult conditions and perceived lack of professional support, rapid staff turnover and shortages became the norm, particularly in more remote communities. This problem has been exacerbated by the nursing shortage. In some communities more than 50% of nursing positions remain vacant. The nursing staff turnover rate is estimated to be 40% over an 18-month period (K. MacMillan, personal communication, February 2003). As a result, crisis-oriented, primary medical care occupies the lion's share of nursing time. Little nursing time is available for the health promotion and preventive care that is so critical during the pre- and postnatal periods.

Favourable Conditions for Research

There is a strong imperative for nurses to collaborate in multidisciplinary research focused on improving maternal-child health care in Aboriginal communities. Moreover, recent organizational changes in FNIHB, growing funding opportunities for Aboriginal health research, and recognition of the ability of Aboriginal people to lead and support research and action directed at improved health have created favourable conditions for the conduct of research that can make a difference.

FNIHB Leadership and Support for Nursing

In 2002 FNIHB created an Office of Nursing Services as part of its internal reorganization. An Executive Director – Nursing, engaged to provide executive leadership for nurses employed by the Branch, is leading a "transformation strategy" to improve retention and recruitment of qualified nurses in First Nations communities. Initiatives include a bundle of strategies aimed at development in each of the following areas: leadership capacity, information technology, competency and professional practice, human resource planning and management, and communication and influence (Office of Nursing Services, 2002). One of the projects undertaken as part of the transformation strategy focuses on improving maternal-child health services provided by nurses. Priorities include reviewing and applying current research evidence, examining provincial/territorial public health programming and facilitating improved integration of services, and learning from communities that have been able to implement best practices. To help lay the groundwork for this activity, a review and policy synthesis was completed in 2002 (Smith, 2002).

Funding Opportunities for Aboriginal Health Research

The last few years have seen substantial growth in funding structures and resources to build capacity for Aboriginal health research. For example, the mandate of the Institute of Aboriginal People's Health (IAPH) of the Canadian Institutes for Health Research is to support research addressing the special health needs of Canada's Aboriginal people. Research areas identified by the IAPH relevant to improving maternal-child health care include: "culturally relevant health promotion strategies," interactions among health determinants, determination of the "most effective interventions with Aboriginal populations," "health services research to address the unique accessibility and provider issues such as funding and continuity of care," and "ethics issues related to research, care strategies, and access to care (e.g., community consent, sensitivity to culture)" (Institute of Aboriginal People's Health, 2003, p. 1). Four regional centres for Aboriginal Capacity and Developmental Research Environments (ACADRE), funded in 2002 and located in Alberta (http://www.acadre.ualberta.ca), Saskatchewan, Manitoba (http://www.umanitoba.ca/centres/cahr/), and Ontario, form the core of IAPH strategic initiatives to build capacity for Aboriginal health research. Further ACADRE grants have recently been announced for Nova Scotia (Canadian Institutes for Health Research, 2003), Ontario, and Northern British Columbia. Current requests for proposals for IAPH funding focus on community-based research and new researchers in Aboriginal health.

In November 2002 the National Aboriginal Health Organization (NAHO) became a decision-making partner of the Canadian Health Services Research Foundation, enabling the application of its funding and priorities to nursing and health services research issues in Aboriginal communities. The Social Sciences and Humanities Research Council has facilitated dialogue and a series of consultations on research and Aboriginal peoples. A summary paper on this process has been drafted (Social Sciences and Humanities Research Council [SSHRC], 2003a). Follow-up with the wider Aboriginal, academic, and government stakeholder communities, to ensure that everyone has had an opportunity to review and respond to the evolving policy and program proposals, is planned for 2003 (SSHRC, 2003b).

Strengths and Desires of Aboriginal Peoples

Significant growth in organizational infrastructure and capacity has been achieved by organizations focused on supporting and developing capacity to take action on the health of Aboriginal peoples. Among these organizations are the NAHO and the Aboriginal Nurses Association of Canada (ANAC).[1] Aboriginal people will continue to advocate, lead, and sustain change towards a health-care delivery system that respects and supports their cultural values and beliefs, responds to the historical, geographical, and intercultural issues that impact on their health, and ultimately facilitate greater self-determination.

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[1] The NAHO is "an Aboriginal designed and controlled body [that aims to] influence and advance the health and well being of Aboriginal Peoples through carrying out knowledge-based strategies" (National Aboriginal Health Organization, 2001, p.1). The ANAC "is a non-governmental, non-profit organization that was established out of the recognition that Aboriginal people's health needs can best be met and understood by health professionals of a similar cultural background" (Aboriginal Nurses Association of Canada, 2003, p. 1).

Aboriginal women play a critical role in the development of appropriate, culturally relevant maternal-child health-care services. In a recent review of the published and grey literatures, organization and support of local Aboriginal women emerged as key to the success of sustainable, culturally secure maternal-child health services (Smith, 2002). In Canada, several small, community-based programs that blend traditional values and practices with Western biomedicine have demonstrated positive outcomes, support and acceptance by local women, and sustainability. Notable examples are the Iewirokwas Program and Innulitsivik Maternity.

The Iewirokwas Program operates on the Akwasasne Reserve located in southeastern Ontario, southwestern Quebec, and northern New York State. "The program aims to restore to Mohawk women their power, dignity and self-efficacy in the childbearing years and at birth in all settings." It is developing a community- and culture-based midwifery education program and a practical woman-centred family birth program. It offers information and support to empower women and their families during the prenatal period, inform them of their rights, promote traditional Mohawk birthing rites, and help them make good birthing decisions. It educates local maternity nurses, obstetricians, and hospital staff in traditional Mohawk birthing practices to enable them to better support Mohawk women (Iewirokwas, 2002).

Innulitsivik Maternity, located in Povungnituk in northern Quebec, came about through collaboration between local health-care professionals and the Native Women's Association. It aims to "put the responsibility for organization and provision of women's health care services into the hands of the Inuit women" (Stonier, 1990, cited in Blythe, 1995, p. 15). Inuit women are recruited from local communities and trained to work in collaboration with professional midwives. The Inuit midwives provide most of the basic care, under the supervision of the professional midwives. Traditional practices are interwoven with conventional midwifery care.

Partnerships between researchers and local initiatives are needed to facilitate identification and synthesis of best practices such as those demonstrated by Innulitsivik Maternity and the Iewirokwas Program. Concomitant with the evolution of these and other small, locally developed initiatives are a growing crisis in rural maternity care (Society of Obstetricians and Gynecologists of Canada, 2000), increasing support for a multidisciplinary approach to care, and recognition of an important role for Aboriginal midwifery (K. McGovern, Society of Obstetricians and Gynecologists of Canada, personal communication, February 2003). Collectively, these movements and changes signal an unprecedented readiness for research and action to improve maternal-child health care in Aboriginal communities.

Matching Imperatives with Opportunities

In the past, research with Aboriginal populations tended to focus on describing health disparities. Aboriginal people have said they are well aware of the health-status disparities and have called for research focusing on action and change regarding priority health issues (Reading & Nowgesic, 2002). Research aimed at improving maternal-child health care directly or indirectly addresses five of the seven priorities identified by national Aboriginal organizations (access to health services including culturally appropriate services; youth issues, particularly mental health and suicide; children's health issues such as fetal alcohol syndrome/fetal alcohol effects; violence against Aboriginal women; and traditional healing). In particular, research is needed to determine the effectiveness, efficiency, feasibility, and community acceptance of targeted interventions to improve maternal-child health outcomes. Examples include service delivery by lay health-care providers and/or traditional midwives; cross-cultural validation of perinatal assessment/screening tools; development of culturally relevant perinatal health indicators in First Nations, Inuit, and Métis communities; strategies to support management of high-risk pregnancies in geographically isolated communities; and identification of best practices for maternal-child health care in Aboriginal communities. A second priority area for nurse researchers is rural and remote nursing.

For example, little research done been done on the impact of nursing educational preparation, vacancies, turnover, and health human resource management practices on key indicators of First Nations and Inuit client and community outcomes. As well as directly benefiting Aboriginal people and nurses working in Aboriginal communities, lessons learned from nursing practice and research with rural and remote Aboriginal communities may be relevant to innovations required in the broader Canadian health-care system. The knowledge needed to implement the primary health-care reforms identified by the Kirby (2002) and Romanow (2002) commissions, and the subsequent commitments set out in the First Ministers' Accord (Government of Canada, 2003), may be informed by an examination of health-services delivery in rural and remote Aboriginal communities.

Conclusion

To summarize, the issues and opportunities involved in improving maternal-child health care in Aboriginal communities is a compelling example of the intersection of gender, culture, and nursing research. Opportunities to apply nursing research expertise to questions arising from practice in Aboriginal communities are opening up. Funding, leadership, and support for partnership research between Aboriginal people and researchers to address health inequities, access to health services, and professional practice issues are being developed.

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Correspondence may be sent to Dawn Smith, Community Health Research Unit, Room 1118, University of Ottawa, 451 Smyth Road, Ottawa, Ontario K1H 8M5 Canada.

Dawn Smith, RN, MN, is a doctoral candidate in the Population Health program, Faculty of Graduate and Postdoctoral Studies, University of Ottawa, Ontario, Canada.

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Book Reviews

Handbook of Gender, Culture and Health

Edited by Richard M. Eisler and Michel Hersen
Mahwah, NJ: Lawrence Erlbaum, 2000. 531 pp.
ISBN 0-8058-2638-6

Reviewed by Nancy Beauregard

The *Handbook of Gender, Culture and Health* covers the biological, psychological, and social pathways associated with the development and maintenance of social variations in the production of health. Anchored in an interdisciplinary approach, this book is innovative in bringing together several disciplines such as psychology, anthropology, epidemiology, and health education in the study of the interconnectedness of gender, culture, and health.

The first of the book's four sections addresses the biopsychosocial model of health and illness from a stress perspective. Chapter 1 discusses the neuroendocrine influences on the health of subpopulations as defined by ethnicity, gender, and ageing (Schooler and Baum). Chapter 2 explains how gendered inscription in the occupational structure contributes to distinctions between men's and women's negative health consequences attributable to the stress process (Lunberg and Parr). Chapter 3 extends this discussion by exploring the social and cultural foundations of gender-role stressors and coping strategies in relation to women's health (Watkins and Whaley). In Chapter 4 this exercise is replicated for men's health (Good, Sherrod, and Dillon).

The second section deals with the issue of gender-related risk factors and practices, in terms of health, in relation to socio-economic and cultural background. Chapter 5 (Sue) introduces the section by outlining individual, cultural, and environmental risk factors encountered by four specific ethnic groups (African Americans, Hispanic Americans, Asian Americans/Pacific Islanders, and American Indians/Alaskan Natives), while Chapter 6 describes some of the experiences of these groups regarding the health-care system (Penn, Kramer, Skinner, Velasquez, Yee, Arellano, and Williams). Chapter 7 broadens the discussion to the differential patterning of the ageing process across genders and cultures (Kelty, Hoffman, Ory, and Harden).

The third section centres on specific problems and health issues, distinguishing between men and women of various ethnic origins. In Chapters 8 to 15 a vast range of health-related problems are explored.

Social variations in health derived from gender and culture are demonstrated for cardiovascular diseases (Theorell and Härenstam), common types of cancer among men (Gordon and Cerami) and among women (Meyerowitz, Bull, and Perez), eating disorders (Striegel-Moore and Smolak), substance abuse (Lex), prevention of HIV infection (Sikkema, Wagner, and Bogart), autoimmune disorders (Chrisler and O'Hea), and exercise-related behaviours (Witheley and Winett).

The concluding section covers health within special populations. The dynamics patterning the health of these explored subpopulations is the subject of Chapters 16 to 20. Included are lesbian health (O'Hanlan), psychological adjustment within the ageing process (Kamilar, Segal, and Qualls), widowhood (Wisocki and Skowron), marital dysfunction (Brooks), and marital violence (Koss and Hoffman). Each chapter of the book incorporates insightful directions for public-health interventions aimed at reducing gender-related and ethnic-related health inequalities.

This volume makes a significant contribution to current theoretical and empirical work on gender, culture, and health. It offers a concise, practical, and well-written overview of state-of-the-art research in the field. Most of the views expressed in the book reflect an American perspective, with only a few chapters drawing parallels with similar emerging phenomena in Canada. However, the quality and depth of the work presented, coupled with the vast array of issues covered, make the *Handbook of Gender, Culture and Health* a valuable tool for teachers, researchers, and practitioners interested in exploring cross-cultural and gender-related foundations of public-health promotion and intervention.

Nancy Beauregard is a PhD student at the Institute of Population Health, University of Ottawa, Ontario, Canada.

Caring for Women Cross-Culturally

Edited by Patricia St. Hill, Juliene G. Lipson,
and Afaf Ibrahim Meleis
Philadelphia: F. A. Davis, 2003, 353 pp.
ISBN 0-8036-1004-1

Reviewed by Sheila Edwards

The editors of this book describe it as a "comprehensive source of culturally relevant information for those who provide services to immigrant and minority women" (p. xvii). Each of 19 chapters describes a separate ethnocultural or regional immigrant population, mostly women who came to North America from Asia, Europe, Africa, or South America in the second half of the 20th century. It is difficult to do justice to some of the more diverse populations in this format, but if the goal of the editors was to cover as broad a range of populations as possible in a single volume, then they have succeeded.

In the book's introduction, Afaf Meleis reviews the strengths and limitations of three theoretical models: biomedical, reproductive and maternal, and cultural. She concludes that the cultural model has the most to offer but has the potential of "neglecting to recognize women's individuality in how they conform to traditional values and norms" (p. 3). Meleis proposes a new, integrative, gender-sensitive model featuring the dimensions of diversity, previous models of care, and developmental stage, while stressing the need to consider the diversity of a population. She explores the process of care using the concepts of the "transition experience" and the nature of caring work, noting that multiple transitions can occur simultaneously. This model could be useful for clinicians, educators, and researchers as they consider various health-care options for immigrant and minority women.

The credentials of the various contributors are impressive. They all have expertise in the ethnic group they cover, either having been born or lived in the country of origin or having acquired research or clinical experience with the population. With the exception of one medical anthropologist, the contributors are all nurses, which makes this book particularly relevant for nurses. And although all but one are American, each makes reference to the Canadian context, including figures for various ethnic populations and their location in Canada (primarily based on the 1996 Census).

All chapters use the same organizational framework, from birth, through childhood and youth, adulthood, middle age, old age, and death and dying, so the reader will have no difficulty locating any specific type of information. In addition, boxes titled Notes to the Health Care Provider offer quick reference throughout the book.

An in-depth review of several chapters reveals accurate information portrayed in a sensitive manner. I will focus on those devoted to South Asian and Chinese women.

There is a very large South Asian population in my home community. I have considered the issues of this population through both my own perspective as a health-care provider and the perspective of the Indo-Canadian nursing students I teach. Throughout the chapter on South Asian immigrants, the author emphasizes the need to consider the ethnic and religious diversity of this population. Some of the issues she discusses are the favouring of sons, the indulging of preschool children, arranged marriages, beliefs and practices related to pregnancy, and attitudes towards socially unacceptable behaviour. These are certainly some of the issues that confront Canadian health-care professionals as they attempt to provide culturally sensitive care to women from the Indian subcontinent.

A recent tour of nursing schools and hospitals in China has given me some insight into Chinese ethnicity and health-care practices. The authors of the chapter on Chinese women balance their description between traditional Chinese beliefs and practices and the modified versions more common in North America. They cover such issues as the implications of China's one-child policy, the practice of traditional Chinese medicine, postpartum rituals, female modesty, and patterns of communication. Something that stood out for me on my visit was the potential impact of the one-child policy on the child's social and mental well-being. The authors identify its consequences as pressure on an only child to excel in school, difficult interpersonal relationships, and obesity. I frequently witnessed these only children being indulged by the six adults in their lives — their parents and two sets of grandparents. The importance of education and style of education in China, as described in the book, became apparent to me as I toured nursing schools in that country.

There is very limited literature on the topic of caring for women cross-culturally. This book will be helpful to both students and professionals who seek baseline information on the beliefs, values, attitudes, and practices of a broad range of ethnic and cultural groups. Although the perspective is definitely American, most of the chapters will have relevance for the Canadian reader as well.

Sheila Edwards, BSN, MSN, is a member of the faculty of the University College of the Fraser Valley, Chilliwack, British Columbia, Canada.

Gender Mainstreaming in HIV/AIDS: Taking a Multisectoral Approach

London and Halifax:
Commonwealth Secretariat and Atlantic Centre of Excellence for Women's Health, 2002, 164 pp.
ISBN 0-85092-655-6

Reviewed by Susan Roelofs

Just as the global HIV/AIDS pandemic is not neatly contained within certain sectors of the population, cultures, or countries, the global response must become much broader contextually than has often been the case. HIV/AIDS is not simply a health problem: the risk, spread, and impact are enmeshed in such issues as gender, age, socio-economic status, and power relations, and have implications well beyond the health sector — for agriculture, education, industry, law, and beyond.

Gender Mainstreaming in HIV/AIDS, one in a series of manuals published by the Commonwealth Secretariat, provides an overview of the need for a multisectoral approach that builds on gender analysis and gender-based responses to the HIV/AIDS crisis. It speaks to governments, policy-makers, planners, health workers, and community leaders, and presents not only a framework for mainstreaming gender but also tools, case studies, and resources. It is relevant for those both in the north and in the south.

The book begins by identifying the staggering proportions of the crisis. Worldwide, 40 million people are living with HIV and 24.8 million have died from HIV/AIDS, including almost 5 million children (all figures are from December 2001). In Sub-Saharan Africa, the adult prevalence rate is 8.4% and over 23 million adults are living with the disease, 55% of them women. In the Caribbean, AIDS affects 7% of the population and is a leading cause of death for those aged 15–45. Across Asia, the rate of infection is rising quickly; UNAIDS describes China as on the verge of a "titanic peril" (UN Theme Group on HIV/AIDS in China, 2002). In North America, Aboriginal women in Canada and young women across the continent are contracting AIDS in growing numbers.

What is gender mainstreaming, and why a gendered response to HIV/AIDS? As defined by the UN Economic and Social Council, gender mainstreaming is "the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels... so that women and men benefit equally and inequality is not perpetuated" (as quoted in *Gender Mainstreaming in HIV/AIDS,* p. 14). It requires policy-makers to consider the different causes of transmission and the different consequences of infection for women and men. The Commonwealth Secretariat's proposed Gender Management System (GMS) outlines a holistic approach to mainstreaming gender. Integrating a gender perspective into all aspects of HIV/AIDS work would support more effective use of the scarce resources available in many of the countries dealing with the epidemic and allow for the different needs of women and men, young and old, to be recognized and addressed. The nature of the epidemic continues to shift, with more women than men now infected, and with adolescents, particularly girls, facing a growing risk of dying from AIDS. The burden of risk is also shifting onto those most marginalized socially and economically.

However, *Gender Mainstreaming in HIV/AIDS* does not narrow the discussion to the situation for women, nor does it target men as the problem. Rather, it uses a gender analysis to demonstrate the profound effects of socio-cultural and economic factors such as poverty, war, and inequalities in power relationships and social responsibilities on patterns of risk for men, women, and children and the difficulties facing those who become infected themselves or whose partners or family members fall ill.

The multidimensional scope of the HIV/AIDS crisis moves it beyond a health issue into a development issue requiring a multisectoral approach. Chapter 3 outlines a framework for this response, one that can be adapted to the needs of each country. Tables are used to detail the broad range of actors, sectors, and resources that could form a multisectoral response nationally and at the community level. In order to be effective, governments, businesses, and civil organizations need to play a leadership role at every level. In both prevention and care, societal as well as individual changes are needed, such as the recognition that those affected by and vulnerable to HIV/AIDS have a contribution to make in terms of identifying needs, resources, and solutions.

The imperative of mainstreaming gender into this multisectoral framework is discussed separately — indicative perhaps of the challenge of thoroughly integrating a gender perspective into the HIV/AIDS response. Three components are identified as critical: training in gender analysis and gender sensitization; sector-by-sector, system-wide monitoring; and sex-disaggregated data collection, analysis, and application. GMS could be used in sectors such as agriculture, education, health, labour, and law.

The theoretical framework is a useful tool for agencies and governments at all levels. Chapter 3 describes how a multisectoral GMS approach is reflected in policies, interventions, and actions, with examples from international agencies and countries such as Vanuatu, Zambia, Uganda, and Tanzania. Unfortunately, this chapter does not clearly demonstrate the advantage of GMS over broad-based approaches that do not integrate a gender perspective or gender-based approaches that are not multisectoral. Although there are references to this issue throughout the book, this chapter would have been an ideal place to delve more deeply into multisectoral approaches and into the contribution of gender mainstreaming to the success or failure of particular initiatives.

Uganda, which had the world's highest HIV/AIDS prevalence rate in the early 1990s, brought its 1993 rate of over 30% down to under 8% in 2000 and reduced the infection rate among 13–19-year-old girls from 4.4% in 1989–90 to 1.4% in 1996–97. The book cites the Ugandan case as an example of an effective multisectoral response but fails to address the key question of the role played by gender-based strategies in this achievement. More thorough analysis might have supported the argument for a multisectoral gender mainstreaming approach and served to illustrate the role of GMS.

Chapter 4 presents eight case studies of a gender-based response to HIV/AIDS: participatory research with marginalized communities; HIV prevention and female prostitutes; marketing the female condom; HIV counselling and testing among pregnant women; involving men in preventing HIV transmission and gender violence; south-south sharing of knowledge and skills; integrating sexual and reproductive health programs; and gender differences among adolescents in sexual health promotion. The level of detail is useful, as is the geographic range of the studies — Zimbabwe, Southern Africa, Bangladesh, and Canada. Each indicates that a gender perspective is necessary for a proper response to HIV/AIDS. School Without Walls, a Southern African example of south-south knowledge transfer and capacity-building among community groups, perhaps best illustrates the effectiveness of working locally and regionally in a way that involves actors from various spheres.

Included in the book are a gender-sensitivity checklist for HIV/AIDS policy-makers and educators, an extensive list of online resources, a lengthy bibliography, and two appendices: the UN Guidelines on HIV-Related Human Rights, and Global and Commonwealth Mandates on Gender and HIV/AIDS.

This book is highly recommended as a discussion and planning tool for those involved in the HIV/AIDS crisis or those seeking to understand its gendered dimensions. It illustrates well how a gendered perspective and a multisectoral approach are critical for policies and programs addressing the HIV/AIDS pandemic.

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Susan Roelofs, MA, NMO, is Assistant Director of Operations, China Maternal and Child Health Phase 2 Project, University of Ottawa, Ontario, Canada.