Canadian Nurse Practitioners' Therapeutic Commitment to Persons With Mental Illness

Anne Marie Creamer, Judy Mill, Wendy Austin, Beverley O'Brien

The purpose of this study was to determine how Canadian nurse practitioners (NPs) rate their levels of therapeutic commitment, role competency, and role support when working with persons with mental health problems. A cross-sectional descriptive, co-relational design was used. The Therapeutic Commitment Model was the theoretical framework for the study. A sample of 680 Canadian NPs accessed through 2 territorial and 9 provincial nursing jurisdictions completed a postal survey. NPs scored highest on the therapeutic commitment subscale and lowest on the role support subscale. The 3 subscales were correlated: role competency and therapeutic commitment were the most strongly associated (r = .754, p < .001). To have a positive impact on the care of persons with mental health problems, educators, policy-makers, and NPs need to assess and support therapeutic commitment, role support, and role competency development.

Keywords: therapeutic commitment, competency, role support, mental illness, nurse practitioner

L'engagement thérapeutique des infirmières praticiennes canadiennes envers les personnes atteintes de maladies mentales

Anne Marie Creamer, Judy Mill, Wendy Austin, Beverley O'Brien

Cette étude a pour objectif de déterminer la façon dont les infirmières praticiennes canadiennes (IP) déterminent leur degré d'engagement thérapeutique, leur compétence de rôle et leur soutien de rôle dans des contextes de travail avec des personnes atteintes de troubles de santé mentale. Un cadre descriptif transversal corelationnel a été utilisé. Le modèle d'engagement thérapeutique a servi de cadre théorique. Un échantillon de 680 IP canadiennes recrutées dans deux juridictions territoriales et neuf juridictions provinciales infirmières ont rempli un sondage envoyé par la poste. Les IP ont obtenu le score le plus élevé quant à la sous-échelle de l'engagement thérapeutique et le score le plus faible quant à la sous-échelle du soutien de rôle. Les trois sous-échelles ont été corrélées : la compétence de rôle et l'engagement thérapeutique affichaient l'association la plus élevée (r=0,754, p<0,001). Pour assurer un impact positif sur les soins aux personnes atteintes de troubles de santé mentale, les éducateurs, les décideurs et les IP doivent évaluer et soutenir l'engagement thérapeutique, le soutien de rôle et le développement de compétences de rôle.

Mots clés: engagement thérapeutique, compétence, soutien de rôle, maladie mentale, infirmière praticienne

In 2012 approximately one tenth of Canadians 15 years of age or older reported symptoms consistent with at least one of six mental or substance use disorders during the previous 12 months (Statistics Canada, 2013). Mental disorders are interwoven with and further complicate the care of many illnesses, including cancer, diabetes, and cardiovascular disease (World Health Organization & World Organization of Family Doctors [Wonca], 2008, p. 22). Situating mental health (MH) care in primary care settings increases access to care, promotes respect for human rights, is affordable and cost-effective, and generates good health outcomes. Canada's national strategy to improve the health of individuals with mental illness and MH problems includes expanding the role of primary health care to meet the needs of this population and ensuring that providers possess core MH competencies (Mental Health Commission of Canada, 2012).

The rate of premature death from both natural and unnatural causes is higher among those with mental illness than in the general population (Capasso, Lineberry, Bostwick, Decker, & St. Sauver, 2008). For a variety of reasons, persons with mental illness do not receive the same level of health care as those without (Vahia et al., 2008; Xiong, Bermudes, Torres, & Hales, 2008). Multiple factors contribute to this phenomenon, including under-recognition of mental illnesses by health-care providers (Jackson, Passamonti, & Kroenke, 2005); inconsistent treatment regimes (Vahia et al., 2008); the dynamics of the patient–provider relationship; infrastructure issues, such as insurance; and levels of communication among care providers (Levinson–Miller, Druss, Dombrowski, & Rosenheck, 2003). Not all health-care workers have the knowledge and skills needed to address many of the challenges that negatively impact the health of these individuals.

The Role of Nurse Practitioners in Mental Health Care

Nurse practitioners (NPs) have expertise in the management of stable chronic illness, health promotion, and disease prevention, so they are ideally suited to play a significant role in the provision of care for individuals with mental illness and MH problems. In 2009 there were 2,048 licensed NPs in Canada (Canadian Nurses Association, 2011), and their numbers are climbing. In a survey of primary health care NPs (n = 371) in Ontario, 39% worked with people with addiction or MH problems, and the second most commonly reported health problem was mental illness/substance abuse (Sloan, Pong, Rukholm, & Caty, 2006). However, there appears to be no research examining Canadian NPs' perceived competency, support in their role, and commitment to working with this population.

The Therapeutic Commitment Model

It has been hypothesized that positive relationships between persons with mental illness and their health-care professionals lead to positive health outcomes (Kim, Kim, & Boren, 2008; Zeber et al., 2008) and are linked to the concept of therapeutic commitment (Lauder, Reynolds, Reilly, & Angus, 2000). The core concepts of a proposed theoretical model of therapeutic commitment are role support, role competency, and therapeutic commitment (Lauder et al., 2000). These concepts influence the effectiveness of generalist nurses' work with persons with MH problems; higher levels of therapeutic commitment lead to increased effectiveness and improved patient outcomes.

The theoretical framework for therapeutic commitment was developed to explain factors that affect the commitment of those in the nonspecialist community who work with individuals with alcohol problems (Shaw, Cartwright, Spratley, & Harwin, 1978). Shaw and colleagues found that many non-specialist agents, including general practitioners, social workers, and parole officers, who had no available addiction specialist support and were faced with the care of an individual with a drinking problem, felt anxious in their role. As a consequence of this discomfort, therapeutic commitment was low. The individuals were referred to specialists in order to remove the person from the non-specialist's responsibility, or questions about alcohol consumption were avoided in order to evade the need to act on the problem. Conversely, those with adequate role support and appropriate competency, developed through education and experience, had a higher degree of therapeutic commitment and consequently increased effectiveness in their role. The Alcohol and Alcohol Problems Perceptions Questionnaire (AAPPQ) (Shaw et al., 1978) was developed to test the model.

Lauder, Reynolds, Reilly, and Angus (2001) describe the care that district nurses in Scotland (n=15) provide to individuals with MH problems, their perceptions of the support they receive from specialists, and their feelings of competency. The nurses believed they played a key role in patient care but felt unsupported by specialist services. If there was communication, the nurses felt it was inadequate and unsupportive. Additionally, they did not feel competent to deal with MH problems.

Role competency, role support, and therapeutic commitment are the core concepts in the Therapeutic Commitment Model. Therapeutic commitment is defined as "a predisposition to working therapeutically with people who have mental health problems and as a prerequisite for effective therapeutic interventions" (Lauder, Reynolds, Smith, & Sharkey, 2002, p. 484). Role support is "a self-perception that one has a source of specialist support from which advice can be easily obtained" (p. 484). Role

competency is the self-perception "that working with mental health problems is a legitimate part of one's role and that one has the skills and knowledge to discharge this responsibility well" (p. 484). Positive correlations between therapeutic commitment and role support (r = 0.27; p < .001), between therapeutic commitment and role competency (r = 0.61; p < .001), and between role support and role competency (r = 0.30; p < .001) have been found in a study that tested the model with registered nurses (n = 152) working in acute general hospitals (Angus, Lauder, & Reynolds, 2001). Similarly, positive correlations have been found between therapeutic commitment and role support (r = 0.27; p < .05), between therapeutic commitment and role competency (r = 0.53; p < .01), and between role support and role competency (r = 0.49; p < .01) in a study that tested the model with community nurses (n = 82) working in rural settings (Lauder et al., 2000).

In a study of environmental factors that impacted the therapeutic commitment of nurses working in inpatient MH settings (N=76), experience in MH, role support, and participation in hospital affairs positively influenced role competency (Roche, Duffield, & White, 2011). A variety of factors that support quality nursing care, including support for continuing education, the availability of preceptors for new staff, and the expectation of a high standard of care, were positively linked with role support, while skill mix (i.e., proportion of RNs) was negatively linked — something the authors could not explain. Role competency and role support were associated with therapeutic commitment, with these factors explaining 45.2% and 9.3%, respectively, of the variance. Research using this model to examine the correlation between any health outcomes and therapeutic commitment has not been found.

The Study

Purpose

The purpose of this study was to answer the following research question: How do NPs registered in Canada describe their therapeutic commitment, role competence, and role support when working with persons with MH problems and/or mental illness? Additionally, NP characteristics that affect therapeutic commitment, role competence, and role support, such as work and educational experience, were examined. Three specific hypotheses were tested: (1) self-ratings by NPs of role support and therapeutic commitment will be positively correlated, (2) self-ratings by NPs of therapeutic commitment and role competency will be positively correlated, and (3) self-ratings by NPs of role support and role competency will be positively correlated.

Design

A cross-sectional survey design based on Dillman's (2007) Tailored Design Method was used to guide the development and distribution of the survey.

Participants

The target population was all NPs living in Canada who were licensed to practise in a province or territory and had indicated on their association registration form that they were interested in participating in research. Inclusion criteria were as follows: (1) fluency in English or self-identification of English as the language of contact, and (2) having practised as an NP in the previous 6 months. Since health policy, NP education, work settings, and conditions vary across the country, it was felt that the survey would be more representative of Canadian NPs if the target population was all NPs across Canada who met the inclusion criteria.

Possible participants were accessed through nine provincial or territorial nursing associations. The investigators adhered to provincial and territorial processes for distribution of the notification letter, survey, and reminders. NPs in Quebec were not included in the study because funds were not available for translation. At the time of the study, Yukon Territory did not have a legislated NP or equivalent role. For logistical reasons, the distribution process for Saskatchewan NPs could not be completed through the Saskatchewan Registered Nurses Association.

Data Collection

Data were collected using a mail survey. The survey included the Mental Health Problems Perception Questionnaire (MHPPQ) (Lauder et al., 2000), which was adapted to fit an NP sample, demographic information, and three open-ended questions. NPs were also asked to rate their knowledge of community resources for people with MH issues, their confidence in managing selected mental illnesses and conditions, and their theoretical and clinical MH/mental illness education. Details about the findings of this research can be found elsewhere (Creamer, 2011). The survey was reviewed for clarity by seven NP students and adjustments were made based on their recommendations. The students completed the survey in less than 15 minutes.

Four mailings were sent to potential participants over a 1-month period: a notification letter, a survey, a reminder letter, and a repeat survey. All the surveys were distributed in June and July 2009 except for those destined for the Northwest Territories (NWT) and Nunavut, which were distributed in August and September 2009 following an additional ethical review process. Surveys were mailed to 1,272 NPs and

765 (60.1%) were returned. Of the NPs who returned the survey, 85 did not meet the inclusion criteria, the primary reason being that they had not been in the NP role during the previous 6 months. A total of 680 eligible surveys were included in the study, for a useable response rate of 57.2%.

Measures

Lauder and colleagues (2000) adapted the Alcohol and Alcohol Problems Perceptions Questionnaire to test a model of therapeutic commitment among district nurses in Scotland (n = 82) who worked in rural settings with individuals with MH problems. This revised 27-item tool, the Mental Health Problems Perception Questionnaire (MHPPQ), consists of three subscales evaluating perceived levels of therapeutic commitment, role competency, and role support. The response options for each item range from *strongly disagree* to *strongly agree* on a seven-point Likert scale. Cumulative scores are obtained by summing the scores on individual items, with scores ranging from 13 to 91 for therapeutic commitment, 9 to 63 for role competency, and 5 to 35 for role support (after Cronbach's alpha testing on one item; see below). Higher scores represent higher levels of therapeutic commitment, role competency, and role support.

While Shaw and colleagues (1978) describe their theoretical framework for non-specialists working with individuals with alcohol problems as having individual dimensions, each measured on a subscale, Lauder and colleagues (2000) view therapeutic commitment as a unidimensional concept with the subscale totals being summed to yield an overall score. However, Gorman and Cartwright (1991) conducted a study comparing the total and individual subscale results for the AAPPQ after an alcohol educational intervention with members of a multidisciplinary team (n =33). They found that generalizing changes in the total score to the therapeutic commitment subscale resulted in inaccuracies; individual subscale scores were impacted in relatively independent ways. Gorman and Cartwright recommend that the individual subscales be used unless the qualities of the data set are understood and the reason for using a total score is clear. No other study was found examining the impact of an intervention with nurses caring for individuals with MH problems on individual subscales and then analyzing which subscale had the greatest impact on the total MHPPQ score. Studies reporting the use of the model with nurses caring for individuals with MH problems discuss individual subscale scores rather than one total score (Angus, Lauder, & Reynolds, 2001; Lauder et al., 2000). For the reasons stated above, this study reports on the individual subscale totals.

In order to use this scale with an NP population, *Nurse Practitioner* was substituted for *District Nurse*. Construct validity, internal consistency, and

test-retest reliability of the MHPPQ subscales are supported in the literature (Angus et al., 2001; Lauder et al., 2000).

Question 26 of the MHPPQ, a role support item, reads, "When working with patients with [MH] problems I receive adequate supervision from a more experienced person." A footnote was added to explain that "supervision" meant access to support and education from an experienced colleague. Also, a footnote was added to item 15 to explain that the phrase "nursing problems" applied to the NP role. It was believed that these changes would have minimal impact on the psychometric properties of the scales.

Of note, one item (27), "When working with patients with [MH] problems I receive adequate ongoing support from colleagues," was scored on the therapeutic commitment scale. However, at face value it appears to fit into the role support scale. Using the results of this study, Cronbach's alpha was calculated for both the therapeutic commitment scale and the role support scale while including and then excluding item 27. For the therapeutic commitment subscale, Cronbach's alpha was 0.91 with item 27 and 0.92 without. Conversely, for the role support subscale it was 0.92 with item 27 and 0.91 without. Since the Cronbach's alphas were almost identical, item 27 was placed in the role support subscale. Cronbach's alpha for the role competency subscale was 0.90.

Ethical Considerations

Data collection commenced after ethical approval was granted by the university where the authors were based and by the participating provincial/territorial nurses' associations. The NWT's Aurora Research Institute required that the investigators obtain a licence to conduct research before approaching the territorial nurses' association. This called for a separate online application, ethical review, and a letter to the CEO of each NWT health district describing the proposed research. Once approval was granted, the Registered Nurses Association of Northwest Territories and Nunavut was approached.

Data Analyses

Prior to final analyses, the data were scrutinized; no pattern of unusable responses was noted. Strategies were developed to manage the few different types of ambiguous response. The mean of the relevant MHPPQ subscale was inputted where possible when data were missing (Penny & Atkinson, 2011). The results were analyzed in aggregate because some jurisdictions had a large number of participants while others had a very small number. This strategy addressed concerns about privacy and overrepresentation of certain groups in statistical analyses. Measures of central tendency (mean, median, mode) and dispersion (SD, range) appropriate

for levels of measurement are reported. Simple correlations and analyses of variance (ANOVA) were computed to examine relationships among variables. When a significant F value was revealed, post hoc comparisons based on Bonferroni split of the alpha between different categories of the demographic variable were carried out. Analyses were conducted using SPSS 17.0.

Results

Participants

The majority of participants were women (n = 634; 93%) and worked full time (n = 551; 80.9%). Their mean age was 45.8 years (SD = 8.2). They had an average of 15.8 (SD = 8.2) years of experience as an RN prior to becoming an NP and 6.1 (SD = 4.6) years of experience as an NP (n = 657). More than half of the NPs identified primary care as their main work setting (n = 454; 57%); many had more than one setting. See Table 1 for additional demographic information. While 13 NPs (1.9%) reported MH/psychiatry as their current primary work setting, 126 (19.3%) had previous NP experience in an MH setting and 157 (23.1%) had other psychiatric/MH work experience, of whom 145 (21.3%) provided details. Settings where NPs cared for those with psychiatric/MH issues included prisons, emergency rooms, outposts (isolated northern communities), and inner-city street settings; these NPs also reported having consultancy and teaching roles.

NPs' Mental Health Work and Education

On Likert scales ranging from 1 (not prepared) to 5 (very well prepared), the mean rating was 2.6 (SD = .95) for how the NPs felt that their theoretical (n = 678) and clinical (n = 674) MH education had prepared them for MH work. NPs rated their knowledge about services offered by local public MH agencies as 3.4 and knowledge about other MH services, such as private counsellors and agencies, as 3.2. Over one third of the NPs spent more than 25% of their time working with persons with mental illness or their families. Many NPs indicated that they worked in more than one area; however, these NPs were too few in number to allow for meaningful analysis. The majority of participants (n = 387; 61.8%) reported consulting or collaborating with others regarding psychiatric issues at least once a month (see Table 1). Some (n = 21) reported not having access to psychiatric consultation or collaboration, while others (n = 28) reported that psychiatric consultation was available but not necessary. Almost two thirds (n = 441; 65.4%) had taken part in MH/psychiatric education sessions during the previous year (see Table 1).

The Therapeutic Commitment of Canadian Nurse Practitioners

Anne Marie Creamer, Judy Mill, Wendy Austin, Beverley O'Brien

Table 1 Demographics of Sample (N = 680)					
Variable	n	(%)	Variable	n	(%)
Province/territory	680		Gender	676	
Alberta	121	(17.8)	Female	634	(93.8)
British Columbia	47	(6.9)	Male	42	(6.2)
Manitoba	33	(4.9)	Work setting ^c	797	
New Brunswick	36	(5.3)	Primary care		(57.0)
Newfoundland			Geriatrics	52	(6.5)
and Labrador	23	(3.4)	Medical/surgical	42	(5.3)
Northwest Territories	4.7	(0.5)	Emergency	30	(3.8)
and Nunavut	17	(2.5)	Ambulatory	28	(3.5)
Nova Scotia	39	(5.7)	MH/psychiatry	13	(1.6)
Ontario		(51.9)	Chemical dependency	4	(0.5)
Prince Edward Island Other ^a	1 10	(0.1)	, ,		(0.0)
Otner	10	(1.5)	Nursing education	676	(4.6)
Employment	673		Diploma	31	(4.6)
Full time		(81.9)	Baccalaureate	273	(40.4)
Part time	108	(16.0)	Master's degree	364	(53.8)
Other	14	(2.1)	Doctorate	8	(1.2)
% of time ^b	675		Previous RN work		
0–10	215	(31.8)	in MH	665	
11–25	226	(33.5)	None		(78.2)
26–49	141	(20.9)	< 2 years	63	(9.5)
50–75	51	(7.6)	2–5 years	28	(4.2)
> 75	42	(6.2)	5–10 years	28	(4.2)
Last MH education	674		≥ 10 years	26	(3.9)
< 6 months		(51.0)	Size of practice community	662	
7–12 months		(14.4)	< 10,000	156	(23.6)
1–3 years		(19.1)	10,000–29,999	85	(12.8)
≥ 3 years	72	(10.7)	30,000–99,999	94	(14.2)
None	32	(4.2)	100,000-499,999	138	(20.8)
Previous NP work			500,000+	189	(28.5)
in MH	653		Frequency of consultation	626	
None		(80.7)	At least once a month		(61.8)
< 2 years	50	(7.7)	g 2–3 months		(21.4)
2–5 years	39	(6.0)	q 4–6 months	65	` /
≥ 5 years or more	37	(5.7)	q 7–12 months	40	(6.4)
- ,		(,)	1		(/

^a Responses from outside Canada (not identified), responses from Canadian jurisdictions that were not included in the study, or more than one response recorded.

^b Percentage of time working with persons with mental illness or their family members.

^c Participants identified more than one work setting. Specific settings identified by more than 4% of participants and MH and chemical dependency settings are reported.

The Therapeutic Commitment of Canadian Nurse Practitioners

Anne Marie Creamer, Judy Mill, Wendy Austin, Beverley O'Brien

Therapeutic Commitment, Role Support, and Role Competency Scores and Correlations

For therapeutic commitment the mean score was 5.05 (SD = 0.83), for role competency 5.02 (SD = 0.88), and for role support 4.86 (SD = 1.27). Self-ratings by NPs revealed positive correlations between subscales of the MHPPQ: role support and therapeutic commitment (r = .357; p < .001), therapeutic commitment and role competency (r = .754; p < .001), role support and role competency (r = .418, p < .001). Thus all hypotheses were supported.

Analysis of MHPPQ Subscales and Other Variables

The three subscale measures were correlated with NPs' ratings of knowledge of local public services and other MH services, theoretical and clinical MH education, and years of experience as an NP (see Table 2). Having other psychiatric and MH work experience and age were correlated with therapeutic commitment and role competency but not with role support (r = .07). No correlations were found between the MHPPQ subscales and years of experience as a registered nurse.

Using ANOVA, differences in mean scores were not found between any of the MHPPQ subscales with respect to whether the NP worked part time or full time. Mean scores for therapeutic commitment (F [1, 629] = 11.91; p < .01) and role competency (F [1, 632] = 10.34; p < .01) for those with a baccalaureate degree were higher than for those with a master's degree as their highest level of nursing education. The mean ther-

Table 2	able 2 Correlations Between Knowledge, Experience, and MHPPQ Subscales (n = 649–667) Using Pearson's r						
		Therapeutic	Role	R			

Variable	Therapeutic Commitment	Role Competency	Role Support
Knowledge of local public MH services	.37**	.44**	.18**
Knowledge of other community MH services	.32**	.37**	.17**
Theoretical education	.33**	.41**	.14**
Clinical education	.34**	.42**	.17**
Years of NP experience	.18**	.18**	.09*
Other psychiatric/ MH work experience	.28**	.24**	.07
* p < .05 ** p < 0.001			

apeutic commitment (F [1, 657] = 20.13; p < .001) and role competency (F [1, 660] = 22.34; p < .001) scores of those NPs who had prior experience working as an RN in an MH setting were higher than the scores of those with no experience. No difference was found in role support mean scores by RN work experience (F [1, 656] = 2.25; p = .134). Similarly, mean scores for therapeutic commitment (F [1, 646] = 56.02; p < .001), role competency (F [1, 648] = 49.10; p < .001), and role support (F [1, 645] = 11.81; p < .01) were higher for those with experience working as an NP in an MH setting, compared to those without.

Percentage of Time Working With This Population

Using one-way ANOVA, mean scores of therapeutic commitment (F [3, 667] = 52.74; p < .001), role competency (F [3, 671] = 38.08; p < .001), and role support (F [3, 667] = 4.58; p < .01) differed by amount of time spent working with this population. Generally, the more time NPs worked with persons with mental illness and/or their families, the higher their scores for therapeutic commitment, role support, and role competency. See Table 3 for significant differences among these and other categories of variable.

Frequency of Accessing Consultation or Collaboration

Mean therapeutic commitment (F [2, 618] = 32.62; p < .001), role competency (F [2, 621] = 25.72; p < .001), and role support (F [2, 618] = 15.18; p < .001) scores differed by frequency of accessing consultation or collaboration. NPs who accessed consultation or collaboration more frequently had higher scores for therapeutic commitment, role competency, and role support (see Table 3).

Size of NPs' Practice Communities

Mean scores for therapeutic commitment (F [6, 649] = 2.34; p < .05) and role competency (F [6, 652] = 2.59; p < .05) also differed by population size; no differences were found in mean scores for role support. Post hoc analyses revealed that mean scores for therapeutic commitment and role competency were higher for NPs who practised in communities with a population of 10,000 to 29,999 compared to those who practised in communities of 500,000 or more people.

Length of Time Since Last MH Education Session

Mean scores for the rapeutic commitment (F [4, 664] = 25.33; p < .001), role competency (F [4, 667] = 32.25; p < .001), and role support (F [4, 663] = 6.55; p < .001) differed by length of time since last MH education session. Generally, NPs who had accessed MH education during the previous 12 months had higher mean scores (see Table 3).

Table 3 Mean Scores for MHPPQ Subscales

	Therapeutic Commitment		Role Competency		Role Support		
Variable	n	M (SD)	n	M (SD)	n	M (SD)	
% of time ^a							
0-10	211	4.58 (.73)*	214	4.56 (.88)*	211	4.64 (1.27)*	
11–25	225	5.11 (.74)*	226	5.08 (.80)*	226	4.88 (1.25)	
26–49	141	5.28 (.73)*	141	5.28 (.68)*	141	4.91 (1.12)	
> 50	91	5.66 (.81)*	91	5.21 (.87)*	90	5.21 (1.48)*	
Total	668	5.06 (.83)	672	5.01 (.88)	668	4.85 (1.27)	
Frequency of consultation							
At least once a month	384	5.26 (.78)*	385	5.21 (.83)*	384	5.09 (1.26)*	
q 2–3 months	130	4.93 (.75)*	131	4.96 (.77)*	129	4.77 (1.19)*	
q 4–12 months	105	4.60 (.79)*	106	4.57 (.85)*	106	4.37 (1.17)*	
Total	619	5.08 (.81)	622	5.05 (.85)	619		
Last MH education							
6 months	342	5.28 (.77)*	343	5.26 (.80)*	342	5.08 (1.27)*	
7–12 months	95	5.22 (.70)*	96	5.23 (.69)*	97	4.83 (1.26)	
1–3 years	128	4.75 (.79)*	129	4.81 (.80)*	128	4.68 (1.17)*	
≥ 3 years	72	4.65 (.82)*	71	4.35 (.95)*	70	4.33 (1.21)*	
None	32	4.32 (.80)*	32	4.17 (.84)*	32	4.68 (1.36)	
Total	669	5.06 (.83)	672	5.02 (.88)	668	4.87 (1.27)	

^a Percentage of time working with persons with mental illness or their family members.

^{*} p < .05 for differences in responses to above variables based on multiple comparisons of significant F values (i.e., Bonferroni split).

Discussion

NPs in this study identified acceptable levels of therapeutic commitment, role support, and role competency when caring for individuals with MH problems. If the Therapeutic Commitment Model holds true, this suggests that Canadian NPs are making a positive difference in health outcomes. The findings also demonstrate that role competency, role support, and therapeutic commitment are correlated, providing further support for the relationships between the elements of the model.

Role competency and therapeutic commitment correlated strongly. However, NPs did not feel well prepared, from a theoretical or clinical perspective, to care for this population. This may have impacted how they perceived their role competency. With more than one third of participants spending at least a quarter of their time working with this population, it suggests that NP practice requires more MH preparation than is currently being provided. Similarly, 90% of NPs (n = 562) at two national NP conferences in the United States believed that the management of mental illness was important, yet only 22% felt they were well prepared, upon completion of their basic NP program, to manage mental illness (Hart & Macnee, 2007).

The incidence of mental illness and MH problems across the lifespan and in all areas of health care requires that NPs develop MH competency. This is in keeping with the call by the Canadian Association of Schools of Nursing ([CASN], 2012) for broad-based education that incorporates the requirements of the selected NP stream. However, a scan of 30 Canadian schools of nursing in 2006 found that 80% offered stand-alone undergraduate psychiatric nursing courses, the hours dedicated to theory ranged from 1.5 to 7.5 hours a week for 12 weeks, and the number of clinical hours ranged from 25 to 330 hours over 12 weeks (Tognazzini, Davis, Kean, Osborne, & Wong, 2009). This inconsistent approach to MH education suggests that many NPs are entering their NP education streams with significant deficits in MH knowledge and skills.

The practice of integrating psychosocial concepts, rather than specific MH or psychiatric concepts, into nursing education programs has been identified as an ineffective means of providing MH education (Wynaden, Orb, McGowan, & Downie, 2000). Additionally, time constraints and student NP clinical placements in general clinical settings may not permit adequate exposure to psychiatric conditions. To compound the problem, psychiatric concepts may be taught by non-psychiatric clinicians.

Of the three concepts, role support was rated the lowest by NPs, with the widest range of responses. This may have been due to a number of factors, including the tool itself. Role support items mentioned both personal and professional support, which may have introduced some confu-

sion into the survey. While an NP may be comfortable discussing patient-related issues with a colleague, such a relationship may not support discussion of personal challenges when working with this population. This concept requires more exploration. However, the wide range of responses indicates that some NPs did not feel supported in their roles when caring for this population, which could in turn impact the care provided. Several collaborative models of care are described in the literature, including approaches that address communication, co-location, and collaborative strategies and integrated teams (Flexhaug, Noyes, & Phillips, 2012). Linking NPs and students via supportive networks and encouraging employers and policy-makers to support the development of MH expertise are potential strategies for enhancing role support.

This study contributes to our understanding of factors linked to the elements of the model. Theoretical and clinical preparation, knowledge of MH community resources, ongoing MH education, and work experience predicted perceived levels of competency, support, and commitment to working with this population. These findings are similar to those of Clark, Parker, and Gould (2005), who found that previous psychiatric nursing experience predicted higher levels of role support and therapeutic commitment among a sample of registered nurses in Australia. Similarly, general practitioners in Quebec reported that continuing medical education related to mental illness, interprofessional relationships with other providers, and years since graduation influenced GPs' ability to take on the care of this population (Fleury, Bamvita, Farand, & Tremblay, 2008; Fleury, Bamvita, & Tremblay, 2009).

The reasons for higher levels of therapeutic commitment and role competency among those with a baccalaureate compared with a master's degree and those from smaller communities compared with much larger communities are not clear. It can be hypothesized that those with a higher level of education are more aware of what they do not know. However, this may be a naïve explanation. In terms of the influence of community size on the model, it may be that those working in smaller communities develop more MH competency and commitment because there are fewer resources to refer the person to. These are new areas for investigation and many questions were generated from the findings.

In terms of MH competencies, the CASN (2012) has identified the need for clinical competencies that integrate advanced clinical experience in collaboration with the client and the health-care team but has not provided specific clinical guidelines. NP curricula are expected to meet the competencies and standards of practice for each jurisdiction. Similarly, the Canadian Nurses Association (2010) has provided guidelines for the development of core competencies but these do not address recommendations for specific clinical areas. Among NPs in the United

States, the introduction of a core course addressing MH issues across the lifespan within an NP curriculum has been found to increase comfort levels with assessing common MH issues (Weber & Snow, 2006). Other options for promoting competency include developing and circulating lists of relevant learning opportunities for NP students and postgraduates (Cavanaugh, 2014). NP educators need to demonstrate competencies in core MH areas, and the Canadian NP examination must include questions that reveal the candidate's understanding of the issues and provide feedback to NP curriculum developers. Identification of champion leaders for nurses and NPs will raise the profile of this issue.

The Therapeutic Commitment Model described by Lauder and colleagues (2000) is seen as a "unidimensional concept," while in the Therapeutic Commitment Cycle (Shaw et al., 1978), a forerunner of the model, the concepts are seen as separate. In the present study the three components of the model — therapeutic commitment, role competency, and role support — are treated as individual components of a therapeutic capacity to care for persons with mental illness and MH problems. Use of the phrase "therapeutic commitment" for both the model and one of its subscales is confusing. In the interests of clarity, we suggest that the model be renamed the Therapeutic Capacity Model. Further studies could test the model to more clearly explicate the relationships among its concepts.

Limitations

This model has not been tested previously with NPs. However, the concepts of therapeutic commitment, role support, and role competency are highly relevant to NPs' practice. The small numbers of participants working with specific age groups did not allow for meaningful betweengroup analysis. The concept of role support must be studied further to explore the differences in levels of support available for personal and direct patient-related issues. The response rate may have been impacted by the timing of the survey distribution; most surveys were mailed at the end of the academic year, which coincided with the beginning of summer holiday season. However, the large number of respondents indicates NP interest in the topic and generalizability to the target jurisdictions. Surveys mailed to addresses in northern Canada arrived during a national immunization campaign, in which NPs in that area were likely to be fully engaged. The exclusion of NPs in Quebec, Yukon Territory, and Saskatchewan precludes generalizability of the results to NPs in these jurisdictions. The results may have been skewed by treating the responses in aggregate because of the unequal numbers of respondents in particular jurisdictions. It is not possible to identify geographical areas where NPs are achieving positive outcomes versus those where NPs require more education and support.

Conclusion

Intuitively, the concepts of therapeutic commitment, role support, and role competency are fundamental elements of a strong NP practice. In this study, NPs identified adequate levels of these concepts, and all three were found to be correlated, thereby supporting the Therapeutic Commitment Model. In particular, role competency was found to be strongly associated with therapeutic commitment. The Therapeutic Commitment Model theorizes that those whose practice includes higher levels of therapeutic commitment, role support, and role competency will achieve more positive patient outcomes; however, the strength of this relationship requires further study. The findings highlight the need to ensure that graduate NPs have achieved a clearly defined level of expertise through their education programs and have access to ongoing MH education and support in their role in order to promote commitment to providing health care for this population. It is incumbent on the nursing profession and individual NPs to ensure that NPs are practising at the highest possible level.

References

- Angus, N., Lauder, W., & Reynolds, W. (2001). Further testing of the Mental Health Problems Perception Questionnaire. *Journal of Advanced Nursing*, 33(5), 638–643.
- Canadian Association of Schools of Nursing. (2012). Nurse practitioner education in Canada: National framework of guiding principles and essential components. Ottawa: Author. Retrieved December 4, 2014, from http://www.casn.ca/vm/newvisual/attachments/856/Media/FINALNPFrameworkEN2013 0131.pdf.
- Canadian Nurses Association. (2010). Canadian nurse practitioner core competency framework. Ottawa: Author. Retrieved December 4, 2014, from https://www.cna-aiic.ca/~/media/cna/files/en/competency_framework_2010_e.pdf.
- Canadian Nurses Association. (2011). 2009 Workforce profile of nurse practitioners in Canada. Ottawa: Author. Retrieved December 4, 2014, from http://www.cna-aiic.ca/~/media/cna/page-content/pdf-en/2009_np_profiles_e.pdf? la=en.
- Capasso, R., Lineberry, T., Bostwick, J. M., Decker, P., & St. Sauver, J. (2008). Mortality in schizophrenia and schizoaffective disorder: An Olmsted County, Minnesota cohort: 1950–2005. *Schizophrenia Research*, 98(1–3), 287–294.
- Cavanaugh, S. (2014). Emphasizing mental health in nursing education. *Canadian Nurse*, 110(4), 26–28.
- Clark, C., Parker, E., & Gould, T. (2005). Rural generalist nurses' perceptions of the effectiveness of their therapeutic interventions for patients with mental illness. *Australian Journal of Rural Health*, *13*, 205–213.

- Creamer, A. M. (2011). Therapeutic commitment and care of persons with mental illness: A survey of nurse practitioners' role perceptions. Unpublished doctoral dissertation, University of Alberta.
- Dillman, D. (2007). Mail and Internet surveys: The tailored design method (2nd ed.). New York: John Wiley.
- Fleury, M.-J., Bamvita, J.-M., Farand, L., & Tremblay, J. (2008). Variables associated with general practitioners taking on patients with common mental disorders. *Mental Health in Family Medicine*, *5*(3), 149–160.
- Fleury, M.-J., Bamvita, J.-M., & Tremblay, J. (2009). Variables associated with general practitioners taking on serious mental disorder patients. *BMC Family Practice*, 10, 41. Retrieved December 4, 2014, from http://www.biomedcentral.com/1471-2296/10/41.
- Flexhaug, M., Noyes, S., & Phillips, R. (2012). Integrated models of primary care and mental health and substance use in the community: Literature review and guiding document. Victoria: Ministry of Health, British Columbia.
- Gorman, D. M., & Cartwright, A. K. (1991). Implications of using the composite and short versions of the Alcohol and Alcohol Problems Perception Questionnaire (AAPPQ). *British Journal of Addiction*, 86(3), 327–334.
- Hart, A. M., & Macnee, C. L. (2007). How well are nurse practitioners prepared for practice? Results of a 2004 questionnaire study. *Journal of the American Academy of Nurse Practitioners*, 19(1), 35–42.
- Jackson, J., Passamonti, M., & Kroenke, K. (2005). Outcome and impact of mental disorders in primary care at 5 years. *Psychosomatic Medicine*, 69(3), 270–276.
- Kim, S. C., Kim, S., & Boren, D. (2008). The quality of therapeutic alliance between patient and provider predicts general satisfaction. *Military Medicine*, 173(1), 85–90.
- Lauder, W., Reynolds, W., Reilly, V., & Angus, N. (2000). The development and testing of the Mental Health Problems Perception Questionnaire. *Journal of Psychiatric and Mental Health Nursing*, 7(3), 221–226.
- Lauder, W., Reynolds, W., Reilly, V., & Angus, N. (2001). The role of district nurses in caring for people with mental health problems who live in rural settings. *Journal of Clinical Nursing*, 10(3), 337–344.
- Lauder, W., Reynolds, W., Smith, A., & Sharkey, S. (2002). A comparison of therapeutic commitment, role support and empathy in three cohorts of nursing students. *Journal of Psychiatric and Mental Health Nursing*, *9*(4), 483–391.
- Levinson-Miller, C., Druss, B., Dombrowski, E., & Rosenheck, R. (2003). Barriers to primary medical care among patients at a community mental health center. *Psychiatric Services*, *54*(8), 1158–1160.
- Mental Health Commission of Canada. (2012). Changing directions, changing lives: The mental health strategy for Canada. Calgary: Author. Retrieved December 4, 2014, from http://www.mentalhealthcommission.ca/English/system/files/private/MHStrategy_Strategy_ENG_0.pdf.

- Penny, K., & Atkinson, I. (2011). Generation of robust data sets: Approaches for dealing with missing data in health care studies. *Journal of Clinical Nursing*, 21(19), 2722–2729. doi: 10.1111/j.1365-2702.2011.03854.x.
- Roche, M., Duffield, C., & White, E. (2011). Factors in the practice environment of nurses working in inpatient mental health: A partial least squares path modeling approach. *International Journal of Nursing Studies*, 48(12), 1475—1486. doi: 10.1016/j.ijnurstu.2011.07.001.
- Shaw, S., Cartwright, A., Spratley, T., & Harwin, J. (1978). *Responding to drinking problems*. London: Croom Helm.
- Sloan, C., Pong, R., Rukholm, E., & Caty, S. (2006). Nurse practitioner workforce survey and NPAO Electronic Registry Project report. Sudbury, ON: Centre for Rural and Northern Health Research, Laurentian University. Retrieved December 4, 2014, from http://www.cranhr.ca/pdf/NP_Registry_fin2006.pdf.
- Statistics Canada. (2013). Canadian community health survey: Mental health, 2012. *The Daily*, September 18. Retrieved from http://www.statcan.gc.ca/daily-quotidien/130918/dq130918a-eng.htm.
- Tognazzini, P., Davis, C., Kean, A. M., Osborne, M., & Wong, K. (2009). Core competencies in psychiatric mental health nursing for undergraduate nursing education: Position paper 2009. Toronto: Canadian Federation of Mental Health Nurses. Retrieved December 4, 2014, fromhttp://cfmhn.ca/sites/cfmhn.ca/files/Position_paper_Sept21_2010.pdf.
- Vahia, I., Diwan, S., Bankole, A., Kehn, M., Nurhussein, M., Ramirez, P., & Cohen, C. (2008). Adequacy of medical treatment among older persons with schizophrenia. *Psychiatric Services*, *59*(8), 853–859.
- Weber, M., & Snow, D. (2006). An introductory clinical course in psychiatric management: An innovative lifespan course blending all nurse practitioner majors. *Perspectives in Psychiatric Care*, 42(4), 245–251.
- World Health Organization & World Organization of Family Doctors (Wonca). (2008). *Integrating mental health into primary care: A global perspective*. Geneva and Singapore: Authors. Retrieved December 4, 2014, from http://www.who.int/mental_health/resources/mentalhealth_PHC_2008.pdf.
- Wynaden, D., Orb, A., McGowan, S., & Downie, J. (2000). Are universities preparing nurses to meet the challenges posed by the Australian mental health care system? *Australian and New Zealand Journal of Mental Health Nursing*, 9(3), 138–146.
- Xiong, G., Bermudes, R., Torres, S., & Hales, R. (2008). Use of cancer-screening services among persons with serious mental illness in Sacramento County. *Psychiatric Services*, *59*(8), 929–932.
- Zeber, J., Copeland, L., Good, C., Fine, M., Bauer, M., & Kilbourne, A. (2008). Therapeutic alliance perceptions and medication adherence in patients with bipolar disorder. *Journal of Affective Disorders*, 107(1–3), 53–62.

The Therapeutic Commitment of Canadian Nurse Practitioners

Anne Marie Creamer, Judy Mill, Wendy Austin, Beverley O'Brien

Acknowledgements

This research was funded through a grant provided by MindCare New Brunswick.

The authors would like to thank Dr. Herb Northcott, University of Alberta; Dr. E. Di Tommaso, University of New Brunswick; Joanne Lewis, BN, MN; MindCare NB; Horizon Health Network; and Dr. W. Lauder and Dr. N. Angus, University of Stirling.

Conflict of interest: No conflict of interest has been declared by the authors.

Anne Marie Creamer, RN, NP, PhD, is Nurse Practitioner, Horizon Health Network, Saint John, New Brunswick, Canada. Judy Mill, RN, PhD, is Professor Emeritus, Faculty of Nursing, University of Alberta, Edmonton, Canada. Wendy Austin, RN, PhD, is Professor Emeritus and Canada Research Chair, Relational Ethics in Health Care, Faculty of Nursing and John Dossetor Health Ethics Centre, University of Alberta. Beverley O'Brien, RN, DNSc, is Professor Emeritus, Faculty of Nursing, University of Alberta.