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Enhancing Practice Skills: The Value of Care Management Training

Jeannine M. Rowe, Kayla Dunning, and Yiyoon Chung

The geriatric social work literature identifies the importance of practice skills. Older adults served by well-skilled and well-prepared practitioners have better physical, mental, and social health outcomes (Damron-Rodriguez, 2008; IOM, 2009). Informal caregivers share similar benefits. Practitioners who receive geriatric training are more effective in assisting family caregivers of older adults in meeting a myriad of complex biological and psychosocial needs (Damron-Rodriguez, 2008; Rowe & Rizzo, 2013).

Social workers and nurses provide the majority of support for older adults and their family members who dwell in the community (Park, Huber, & Tahan, 2009). Many of the practice skills and knowledge sets important to these populations are learned through educational training programs. Numerous schools of social work around the country offer courses in aging and geriatric internships (Dorfman, Murty, Ingram, & Li, 2007). Professional nursing programs also offer courses in geriatrics and practicum placements in aging (Damron-Rodriguez, 2008). While many of the important geriatric practice skills and knowledge sets are learned through traditional educational programs, they are also developed through participation in professional development and continuing education training opportunities.

The need for ongoing knowledge and skill enhancement is reinforced through professional standards set forth by licensing boards in all 50 states (ASWB, 2013; NCSBN, 2013). Social work and nursing professional organizations also emphasize the need for ongoing training and professional development throughout practitioners' professional careers. The National Association of Social Workers (NASW) code of ethics states that social workers "…should routinely review the professional literature and participate in continuing education relevant to social work practice…" (NASW, 2008). The American Nurses Association states "…professional growth, particularly in knowledge and skill, requires a commitment to lifelong learning…includes, continuing education, networking with professional colleagues, self-study, professional readings, certification…" (American Nurses Association, 2010).

Despite these state level and professional requirements, there is little examination on the benefits of professional development trainings aimed at enhancing practice skills with older adults and family caregivers (Geron, Andrews, & Kuhn, 2005). Further research that compares the impact of professional training across different professional groups that serve older adults and their family caregivers is rare (Mezey, Mitty, Burger, & McCallion, 2008). Because training is linked to client outcomes (Mirabito, 2012), it is important to document the value of training beyond traditional educational programs. With the considerable funds spent by organizations to train staff and costs absorbed by individual professionals to maintain professional licensing, documenting the impact of continuing education/ professional development training is essential. Additionally, given the possible differential impacts of training (Park et al., 2009) it is important to compare learning outcomes across professional groups.

The goal of this study is to examine the impact of family caregiver care management training, offered as part of a professional development

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opportunity, on the use of care managers' practice skills. An additional goal of this study is to examine differences in effectiveness of the training for different groups of care managers (i.e. social workers, nurses, and others) before and after training. In this research, care managers participated in the Tailored Caregiver Assessment and Referral Protocol® (TCARE®) training. The TCARE® protocol is designed to assist practitioners, including social workers, nurses, and other human service workers who provide care management services to family caregivers of older adults (Montgomery & Kwak, 2008; Montgomery, Kwak, Kosloski, & O'Connell Valuch, 2011). Three practice skills identified as important to the care management process for family caregivers were examined in this study.

The TCARE® protocol is an evidence-based care management protocol that integrates the empirically grounded case management model (Montgomery & Kwak, 2008; Montgomery, Kwak, & Rowe, 2011). Briefly, the case management model is a process that involves a series of activities undertaken by the case manager to address a client's lack of resources and needed services, and link the client with needed services (Naleppa, 2006; Naleppa & Reid, 2003). Core to the case management model is the task-centered system - an action-oriented model in which problem solving activities occur within a given period of time (Hepworth, Rooney, Dewberry Rooney, & Strom-Gottfried, 2013, p. 386). A benefit of the task-centered system is an opportunity to engage with clients multiple times over the course of a period of time to address their problems, which also allows practitioners to simultaneously enhance their practice skills (Damron-Rodriguez, 2008).

Description of TCARE® Protocol and Training

TCARE® is designed to assist care managers, including community based social workers, nurses, and other human service workers, with carrying out the activities of care management for family caregivers of older adults. The protocol is a six-step manualized caregiver and assessment referral process that includes tools and resources for accessing caregiver needs, targeting appropriate support services, and creating individually tailored caregiver care plans (Montgomery, Kwak, Kosloski, & O'Connell Valuch, 2011). The TCARE® process includes activities core to case management, including: (a) conducting a multidimensional assessment to determine individual caregiver needs; (b) interpreting the assessment information to identify strengths and assess needs; (c) identifying goals, strategies, and services based on individual strengths and needs; (d) consulting with the caregiver to develop a mutually agreed upon tailored care plan; (e) implementing the care plan, including performing tasks such as coordinating and linking the caregiver with needed services or supports; and (f) conducting follow-up to monitor progress (Rowe & Rizzo, 2013).

The TCARE® training involves an 8-week training program, which includes a two-day intensive training, a follow-up one-day application training conducted one month later, an in-person or web-based application training conducted two to four weeks after the follow-up training, and successful completion of a short exam (Montgomery, Kwak, Kosloski, & O'Connell Valuch, 2011). The two-day training involves instruction on the caregiver identity guiding theory (Montgomery, Rowe, & Kosloski, 2007), background on family caregivers, instruction on how to utilize the TCARE® tools and resources, and completing case studies using the TCARE® protocol and role-playing care management meetings. Upon conclusion of the two day training, care manager trainees are assigned the task of using the TCARE® process with one of their caregiver clients. This experience is brought to follow-up training, where care managers share their experiences using the process and complete additional role-plays using the TCARE® process. The goal of the follow-up training is to assist care managers with employing the process and enhancing their care management practice skills. The web-based application involves using the TCARE® protocol to a complete a complex caregiver case study. The final component of the TCARE® training program involves successful completion of exam, which entails applying the TCARE®

process to a caregiver case study (Montgomery, Kwak, & Rowe, 2011).

Although the goal of the TCARE® training is to teach practitioners to utilize a care management process, the performance of the care management activities as part of the 8-week training program provides practitioners with an opportunity to enhance their practice skills. Practice skills are competencies that are at a higher level and require drawing on diverse sets of knowledge. These higher order level skills are enhanced through trainings and practice (Damron-Rodriguez, 2008). Three practice skills important to the care management context of family caregivers of older adults are: (a) communication skills or the ability to exchange information, thoughts, and ideas; (b) supportive skills or the ability to demonstrate interest in helping the client, and (c) linking skills or the ability to identify and coordinate services, and navigate complex systems (Rowe & Rizzo, 2013). These three practice skills are applied throughout the TCARE® training program, and consequently provide an additional opportunity to hone the skills.

Evaluation of Professional Development Trainings

The seminal work of Rooney (1985) identifies that training evaluation goals are assessed on a continuum. At the lower end of the continuum is cognitive learning in which training content is learned and practice skills are acquired. The middle phase is implementation or use of acquired skills in practice. The end phase involves assessing the impacts on clients of trained and untrained workers.

The majority of training evaluation occurs at the lower end of the continuum. Fewer studies exist at the higher order levels due to lack of valid and reliable measures to assess desired training outcomes and pragmatic issues related to collecting longitudinal data and establishing an appropriate control/comparison group (Dietz, 1998). This study contributes to the small body of the literature on the "middle phase" that examines the implementation or use of acquired skills through professional training. It will also contributes to the literature on the "end phase" by linking the other two strands of the literature that together explore effective options for training for human service agency workers.

The study is guided by Rooney's evaluation framework (1985), which suggests that training goals can be evaluated by assessing the use or implementation of acquired skills. We used a pretest-posttest design to test whether TCARE® training enhanced practitioners' use of practice skills in their work with family caregivers. We hypothesized that practitioners' use of communication skills, supportive skills, and linking skills would increase after the TCARE® training. Because the TCARE® training program is grounded in the social work task-centered and case management models, we expected social workers may demonstrate less skill growth compared to their counterparts. Thus, we hypothesized that care managers without a social work degree, specifically nurses and other professionals, would demonstrate greater skill use after the TCARE® training.

Methods

Participants

The study sample involved 103 care managers including social workers, nurses, and other human service professionals who participated in TCARE® training that was offered as part of a professional development opportunity. The 103 care managers were trained and utilized the TCARE® protocol. Care managers worked in 56 social service organizations or Area Agencies on Aging (AAA) that provided services to older adults and their family caregivers located in eight states. Individual care managers were deemed eligible for the study if they participated in the full TCARE® training program and completed pretest-posttest measures that included questions pertaining to their use of practice skills.

Procedures

Referrals for this study came from care managers who registered for the TCARE® trainings that were conducted from March 1, 2009 to July 31, 2012. The trainings were offered by human service agencies that collaborated with the

TCARE® training team to offer the protocol as a professional development opportunity. At the initial two-day intensive TCARE® training, care managers were informed about the skills study and invited to participate. A total of 260 care managers agreed to participate in the study. Care managers completed a self-administered pretest skills measure before the TCARE® training commenced. Six months after the TCARE® training care managers were mailed and self-completed the post-test skills measure. Of the 260 care managers who agreed to participate, 103 (40%) completed the pretest and posttest measures and were eligible for inclusion in the study. This response rate is within the typical range of mail survey methods (Fowler, 1995). The Institutional Review Board at the University of Wisconsin-Milwaukee approved the study (Protocol # 08.064).

Outcome Measures

Practice skills were measured using a multidimensional skills inventory (Rowe & Rizzo, 2013). The practice skills inventory includes three measures that assess the use of communication skills, supportive skills, and linking skills. For all inventory items, care managers were asked to use a 6-point response set ranging from 0 (never) to 5 (almost always) to indicate how often they demonstrated a specific skill in the previous three months during their visits with family caregivers. A description of the variables and measurement, which are also described in detail elsewhere (Rowe & Rizzo, 2013) follows:

Communication skills included interpersonal skills and active empathetic listening skills (AEL). Interpersonal skills were defined as intentional actions by the care manager that demonstrated genuineness and respect. AEL skills were defined as actions that conveyed compassion and understanding. Eight items were used to measure this domain. Scores on the communication skills measure ranged from 0-40.

Supportive skills were defined behaviors by the care manager that offered emotional support and helped the caregiver feel supported and increase self-confidence. This measure included three items. Scores for the supportive skills measure ranged from 0-15.

Linking skills were defined as intentional actions by the care manager that connected the caregiver with supports or services, and addressed barriers related to accessing supports or services. Four question items were used to assess this domain. Scores for the linking skills measure ranged from 0-20.

The measures are internally consistent. The Cronbach alphas for the measures reported in a previous study are: .81 for the communication skills measure, .74 for the supportive skills measure, and .71 for the linking skills measures (Rowe & Rizzo, 2013).

Data Analysis Plan

Descriptive statistics were used to present participant characteristics (see Table 1). Two sets of analyses were conducted to address the two research questions using IBM SPSS (IBM Corporation, 2010). First, to assess whether the TCARE® training enhanced communication skills, supportive skills, and linking skills for all care managers, paired samples *t*-tests were conducted (see Table 2). In order to test the robustness of the *t*-test results to the inclusion of control variables that include demographic and socioeconomic variables, additional analyses were implemented using the multivariate OLS regression (see Table 3). Effect sizes were calculated using Cohen's d to assess the effect of the training for all care manager skills.

Second, multivariate OLS regression analyses were conducted to examine differences in training outcomes for social workers, nurses, and other human service workers. Three sets of analyses were conducted to assess differences on each of the practice skills (see Table 4). These multivariate OLS regression models included interaction variables in which time passage and professional groups were examined (see Table 5).

Results

Participant Profiles

Demographic characteristics are shown in Table 1. Care managers ranged in age from 29 to 70 years, with a sample mean age of 46 (SD = 10). Almost all were female (93.2%), three-quarters were white (77.7%), and most were married

Table 1. *Demographic Characteristics of Care Manager Sample (n = 103)*

Characteristics	*Mean (SD)*	*Number (%)*
Age		
Average	46 (10.22)	
Gender		
Female		96 (93.2)
Male		7 (6.8)
Ethnicity		
White		80 (77.7)
Black or African American		15 (14.6)
Hispanic or Latino		0
Asian		2 (1.9)
American Indian or Alaskan Native		2 (1.9)
Native Hawaiian or Other Pacific Islander		0
Biracial		3 (2.9)
Multi-Racial		1 (1)
Marital Status		
Married		66 (64)
Single		31 (30.1)
Widowed		4 (3.9)
Other		1 (1)
Missing		1 (1)
Education All Groups (n = 103)		
Associates degree or less		14 (13.6)
Bachelor's degree		65 (63.1)
Graduate degree		24 (23.3)
Social Work (n = 30)		
Bachelor's degree		19 (63.3)
Master's degree		10 (33.3)
Doctorate		1 (3.4)
Nursing Education (n = 11)		
Bachelor's degree		11 (100)
Other Education (n = 62)		
Associates degree or less		19 (30.6)
Bachelor's degree		31 (50.0)
Master's degree		8 (12.9)
Missing		4 (6.5)
	Pre-Training Number (%)	*Post-Training Number (%)*
Caregiver Served in Previous 3 Months		
0-6	15 (14.6)	48 (46.6)
7-20	39 (37.9)	26 (25.2)
21 or more	31 (30.1)	21 (20.4)
Missing	18 (17.5)	8 (7.8)
Visits with Caregivers in Previous 3		
0-6	19 (18.4)	40 (38.8)
7-20	38 (36.9)	28 (27.2)
21 or more	28 (27.2)	24 (23.3)
Missing	18 (17.5)	11 (10.7)

(64%). Thirty social workers were included in the sample (29.1%), with the majority holding a bachelor's degree (n = 19) and a smaller portion holder a master's or doctorate in social work (n = 11). There were fewer nurses, eleven in total (10.7%), with all holding bachelor's degrees. The majority of case managers were trained in disciplines other than social work or nursing (60.2%). Care managers in the "other" group included individuals with training in sociology, education, psychology, women's studies, and health sciences. Educational achievement for those in the "other" group included achievement of associate, bachelor's, and master's level degrees. In terms of numbers of caregivers the served in the three months prior to completing the pretest-post-test measures, the majority of care managers had served 20 or less caregivers. The number of visits with caregivers in the months prior to completing the pretest-posttest measures was about the same, with 20 or less visits as the majority.

Results for the paired samples *t*-tests are included in Table 2. The results provide partial support for the first hypothesis that care managers' use of practice skills in their work with family caregivers would increase after completing the TCARE® training. Statistically significant differences were found between the pretest and posttest scores for communication skills ($p = .001$) and supportive skills ($p < .001$). The changes in scores from pretest to posttest suggest that participation in TCARE® training enhances communication skills and supportive skills. There was no support for the relationship between TCARE® training and linking skills ($p > .05$). The effect sizes, however, suggest relatively small relationships.

Table 3 shows the results of the paired samples *t*-tests by three professional groups. The results suggest that the "other" group showed statistically significant increases in communication and supportive skills following the training. The increase in the "other" group's use of linking skills, however, was not statistically significant. In contrast, social workers and nurses did not show any statistically significant increase in the use of any of the three skills.

Table 4 shows the results from multivariate OLS regressions that examined the changes in the levels of care managers' practice skills following the TCARE® training, while controlling for demographic and socio-economic variables for

Table 2. *Paired-Samples T-Tests: Differences in Scores from Pretest to Posttest (n = 103)*

		Pretest		Posttest				
	n	***M***	*SD*	***M***	*SD*	*t*	Sig. (Two-Tailed)	Effect Size
Communication Skills	103	**33.22**	6.13	**34.83**	4.63	-3.56	.001***	.30
Supportive Skills	103	**12.88**	2.33	**13.66**	1.53	-4.08	.000***	.40
Linking Skills	103	**17.38**	3.38	**17.55**	2.86	-.66	.510	.05

Source: self-completed surveys as part of a TCARE® training program. 103 case managers observations used.
***Significant at $p < .01$ level; **Significant at $p < .05$ level; *Significant at $p < .10$

Table 3. *Paired-Samples T-Tests: Differences in Scores from Pretest to Posttest (n = 103)*

	Social Workers (n = 30)							Nurses (n = 11)							Other (n = 62)						
	Pretest		Posttest		t	Sig.	Effect Size	Pretest		Posttest		t	Sig.	Effect Size	Pretest		Posttest		t	Sig.	Effect Size
	M	SD	M	SD				M	SD	M	SD				M	SD	M	SD			
Communication Skills	34.5	6.2	35.2	4.8	-1.2	0.2	0.13	34.5	4.4	35.5	2.8	-0.7	0.5	0.28	32.4	6.3	34.5	4.8	-3.4	0.00***	0.38
Supportive Skills	13.2	2.4	13.3	1.9	-0.5	0.6	0.05	13.1	1.7	13.7	1.2	-1.4	0.2	0.41	12.7	2.4	13.8	1.4	-4.1	0.00***	0.58
Linking Skills	17.7	3.0	17.8	2.8	-0.2	0.8	0.03	17.7	2.8	17.9	1.5	-0.2	0.8	0.09	17.2	3.7	17.4	3.1	-0.6	0.6	0.06

Source: self-completed surveys as part of a TCARE® training program. 103 case managers observations used.
***Significant at p < .01 level; **Significant at p < .05 level; *Significant at p < .10

Table 4. *OLS Models of Changes of Practice Skills Before and After Training without Interactions*

	Communication Skills			Supportive Skills			Linking Skills		
	Coeff.		S.E.	Coeff.		S.E.	Coeff.		S.E.
Intercept	27.465	***	6.676	15.022	***	2.448	14.145	***	3.927
Time 2 (after training)	1.439	*	0.785	0.65	**	0.288	0.227		0.462
Professional Groups (Reference Category: "Other")									
Social Workers	0.451		0.944	-0.319		0.346	0.187		0.555
Nurses	1.359		1.308	0.232		0.48	0.495		0.77
Number of caregivers manager served over 3 previous months (Reference Category: "0 to 6")									
Missing	2.34		2.293	0.536		0.841	3.444	**	1.349
7 to 20	-2.051	*	1.211	-1.068	**	0.444	-0.503		0.712
21 or more	-0.353		1.358	-0.212		0.498	0.362		0.799
Number of caregivers who visited in previous 3 months (Reference Category: "0 to 6")									
Missing	-3.306		2.168	-1.267		0.795	-4.102	***	1.275
7 to20	0.281		1.154	0.34		0.423	-0.043		0.679
21 or more	0.395		1.381	0.42		0.506	-0.086		0.812
Race of Care Manager (Reference Category: Other)									
White	0.021		1.415	-0.439		0.519	-0.29		0.832
Black	-2.81	*	1.667	-0.235		0.611	-0.888		0.981
Care Manager Age	0.297		0.273	-0.085		0.1	0.14		0.161
Care Manager Age squared	-0.004		0.003	0.001		0.001	-0.001		0.002
Education (Reference Category: less than Bachelor's Degree)									
Bachelor's Degree	1.172		1.216	0.248		0.446	-0.031		0.715
Graduate Degree or More	3.453	**	1.404	1.341	***	0.515	1.261		0.826
R^2	**0.163**			**0.159**			**0.111**		

Source: self-completed surveys as part of a TCARE® training program. 103 case managers & 206 case manager-time observations used.
***Significant at p < .01 level; **Significant at p < .05 level; *Significant at p < .10

Table 5. *OLS Models of Changes of Practice Skills Before and After Training with Interactions*

	Communication Skills			Supportive Skills			Linking Skills		
	Coeff.		S.E.	Coeff.		S.E.	Coeff.		S.E.
Intercept	27.194	***	6.712	14.818	***	2.450	14.151	***	3.954
Time 2 (after training)	1.886	*	1.000	0.970	***	0.365	0.215		0.589
Interactions between Professional Groups and Time [Reference Category: "Other" and Time1 (before training)]									
Interaction: Social Workers*Time	-1.211		1.668	-0.924		0.609	0.027		0.983
Interaction: Nurses*Time	-0.77		2.464	-0.387		0.899	0.041		1.452
Professional Groups (Reference Category: "Other")									
Social Workers	1.052		1.259	0.140		0.460	0.173		0.742
Nurses	1.737		1.799	0.420		0.657	0.474		1.06
Number of caregivers manager served over 3 previous months (Reference Category: "0 to 6")									
Missing	2.28		2.307	0.481		0.842	3.444	**	1.359
7 to20	-1.983		1.22	-1.021	**	0.445	-0.505		0.718
21 or more	-0.309		1.365	-0.177		0.498	0.361		0.804
Number of caregivers who visited in previous 3 months (Reference Category: "0 to 6")									
Missing	-3.244		2.182	-1.21		0.796	-4.103	***	1.285
7 to20	0.248		1.169	0.328		0.427	-0.04		-0.04
21 or more	0.416		1.388	0.44		0.506	-0.086		0.817
Race of Care Manager (Reference Category: Other)									
White	0.014		1.421	-0.446		0.519	-0.289		0.837
Black	-2.811	*	1.674	-0.239		0.611	-0.889		0.986
Care Manager Age	0.298		0.274	-0.084		0.1	0.14		0.161
Care Manager Age squared	-0.004		0.003	0.001		0.001	-0.001		0.002
Education (Reference Category: less than Bachelor's Degree)									
Bachelor's Degree	1.175		1.22	0.249		0.445	-0.031		0.719
Graduate Degree or More	3.449	**	1.409	1.339	***	0.514	1.261		0.83
R^2	**0.165**			**0.169**			**0.111**		

Source: self-completed surveys as part of a TCARE® training program. 103 case managers & 206 case manager-time observations used.
***Significant at p < .01 level; **Significant at p < .05 level; *Significant at p < .10

managers that may be correlated with their skill levels. These results remain largely consistent with the results from the *t*-tests that communication skills and supportive skills following the training increased, and the linking skills did not.

Table 5 includes the results from the OLS multivariate regression with interactions between time passage and professional group dummy variables. This analysis was conducted to examine different skill changes following the TCARE® training, while holding all other variables constant. The results from this analysis are largely consistent with the results from Table 3, in which a *t*-test was performed to examine the changes in skills before and after training without including control variables in the analysis.

The results show that the "other" group demonstrated the greatest increase in the use of communication skills following training, while social workers demonstrated the smallest increase in the use of communication skills. One might argue that a smaller increase in skills for social workers compared to the "other" group could result if social workers began with higher levels of communication skills, and thus have less room for improvement by training compared to the "other" group. Our results are qualitatively consistent with the story that social workers began with higher levels of communication skills compared to the other group; although the difference in our results was not statistically significant, in part because of imprecise estimation. Nurses began with the highest levels of communication skills among the three groups; however, their increase in the use of communication skills was greater than for social workers. The results suggest that a relatively small increase in communication skills by social workers is not necessarily because they had higher skill levels to begin with compared to other professional groups.

This observation holds with the results from the analysis of supportive skills. Social workers did not begin with higher level of supportive skills compared to the "other" group, yet still showed the least increase in these skills following the training among the three professional groups. The results of the linking skills model did not find any evidence for the effectiveness of the training

for any professional group.

Other variables show results that are consistent with prior literature; higher education is associated with higher skill levels across models (Bonifas, Gammonley, & Simons, 2012). Racial groups did not show different skill levels in part because our sample included a small number of non-white racial groups, which led to imprecise estimates.

Discussion

Findings from this study suggest that overall TCARE® training enhances the use of practice skills. Unique to this study was the examination of three discrete skills sets important to care management with family caregivers of older adults. The TCARE® professional development training was particularly helpful in enhancing all care managers' communication skills and supportive skills. These findings are consistent with the small number studies that have examined application of skills (Forsetlund et al., 2009). Given the importance of these two skills within a care management context (Rowe & Rizzo, 2013), TCARE® may be a valuable training for care managers who work in organizations that provide services for family caregivers of older adults.

While all participants demonstrated greater use of practice skills after the TCARE® training, the greatest benefit was found for the group of "other" care managers. Professionals included in the "other" group showed greater use of communication skills and supportive skills after training. This finding may relate to the educational backgrounds of professionals in the "other" group, which includes individuals with a range of degrees in sociology, education, psychology, women's studies, and health studies. Educational programs in these areas focus on theory and fail to include training on practice skills. Accredited social work programs include curricula to ensure communication skills and supportive skills are taught to all social work students. The importance of communication skills are reinforced by the Educational Policy and Accreditation Standards (EPAS) established by the Council on Social Work Education, the social work educational programs accrediting body (Council on Social Work Education, 2008; e.g., EPAS 2.1.3). Nursing programs also include curricula designed to ensure communication skills are taught (NCSBN, 2013). However, nurses' training on communication may focus less on the development of effective communication skills compared to social work programs. This could account for the greater increase in the use of communication skills post-training that was observed compared to social workers. Less is known about whether supportive skills are taught in nursing programs. It may be that nurses develop these supportive skills as they engage in community care management practices (Park et al., 2009). Given the importance of communication skills and supportive skills (Rowe & Rizzo, 2013), and the absence of training in these skills in "other" educational training programs, the TCARE® training may be most beneficial for those without a social work or nursing degree.

Although not a specific focus of this study, the unanticipated finding that social workers showed a lower level of supportive skills before the TCARE® training and the least amount of growth in the use of this skills post-training warrants discussion. The former finding contradicts the social work research literature. Social workers tend to possess strong levels of supportive skills, which are linked with the educational training they receive (O'Hare & Sherrer, 2006). It is possible a lower level of supportive skills use is attributed to the variation in social work training. Master's level social workers possess greater skills levels compared to bachelor's level social workers (Dorfman, Ingram, Murty, & Li, 2008). The finding regarding least amount of growth in the use of supportive skills may be attributed to training levels as well. While plausible, future research that examines within-group differences is needed.

A major contribution of this study is its design. Building on the seminal work of Rooney (1985) we were able to design a study that evaluated the usage of practice skills that results after professionals' involvement in training. This fills a gap that has been recognized in the professional development literature, especially as it relates to social work (Dietz, 1998). Most professional development evaluation studies have assessed

participants' cognitive learning or whether material presented was learned (Dietz, 1998; Elman, Illfelder-Kaye, & Robiner, 2005).

A second contribution of this study is its focus on a discrete set of practice skills specific to a particular practice context. We examined three skills identified as important to a care management context for family caregivers of older adults (Rowe & Rizzo, 2013). Examination of these specific skills makes an important contribution to the geriatric social work literature. Further, examination of the specific skills aligns with the initiatives undertaken by other social work practitioners and researchers (Damron-Rodriguez, 2006, 2008; Dorfman et al., 2008; Weisenfluh & Csikai, 2013). A final contribution of this study is the examination of differences in practice skill usage by professional groups. This study addresses the call by social work research and adds to a small body of literature that examines differential impacts among different professional groups (Perry, 2006; Rowe & Rizzo, 2013; Rubin & Parrish, 2012).

Findings from this study may be of particular interest to care management organizations that assist family caregivers of older adults. Organizations that offer care managers opportunities to enhance their knowledge and skills are likely to employ well-qualified practitioners who can effectively serve the growing number of family caregivers. A pool of well-qualified workers has the potential to positively impact family caregivers (Forsetlund et al., 2009; Mirabito, 2012).

Limitations and Future Research

Although findings from this study document the value of a professional development training program, several methodological issues temper the findings. First, the pretest-posttest design limits the generalizability of our findings. We are unable to say that participation in TCARE® training was a causal factor in the use of care managers' practice skills because a time-varying factor that affected changes in skills over time may be an alternative explanation of the skill changes. However, such a time-varying factor would not bias our estimates of the analysis that compared skill changes by different professional groups if the time effect will be the same across professional groups. Although this is a less strict assumption than the assumption of no time influence, to make more confident casual inference regarding the impact and differential effects of training, a more rigorous design would be needed. Future research that includes a randomized control trial design would strengthen the causal inference.

A second limitation to our study relates to our second hypothesis. It is possible that there is variation in the use among professionals included in the "other" groups. For example, it is possible practice skills used by individuals in sociology differ from those trained in health studies programs. Additionally, it is also plausible that there are differences in the impacts of training by educational level. Prior research documents different impacts for bachelor's level trained social workers and master's level trained social workers (Dorfman et al., 2008), and this may be true for all other professional groups but to different degrees. Given these possible different impacts, future research that examines within-group differences is needed. However, to examine such difference a study with larger numbers of participants, much greater than this study (n = 103) is needed.

The social work research documents the value of trained social workers. Clients served by well-prepared practitioners show better outcomes (Mirabito, 2012; Park et al., 2009). Because the goal of professional development training is to enhance skills and knowledge, future research that examines the impact of training on client outcomes is critical. Such studies would satisfy what Rooney (1985) identifies as the highest order of training evaluation.

Despite the limitations of this study, the findings highlight the value of the TCARE® professional development training program. The greatest benefit of the training program was found for care managers with non-social work degrees. These findings are particularly valuable for care management organizations that provide services to family caregivers of older adults. Findings from this study also address the recent call for comparison studies that examine differences between professional groups. Moreover, this study

contributes to a small body of literature that examines social work differential impacts.

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