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Training social work master's students for integrated health care settings: The importance of specialized education

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Abstract

Integrated health care poses a unique opportunity for social workers to deliver person-centered, empowering, and collaborative care addressing all aspects of patient health. This study analyzed four years of data from a project designed to train social work master's students to be effective members on integrated teams. Students that participated in the project achieved statistically significant levels of improvement from pre- to post-tests with large effect sizes on the Behavioral Health Consultant Core Competency Tool skills (n = 93, Cohen's d = -1.752, t(92) = -16.894, p < .001) and the Team Skills Scale (n = 94, Cohen's d = -1.558, t(93) = -15.101, p < .001). Wilcoxon signed-rank rests confirmed improvements. No existing evaluations of integrated training for social work students capture behavioral health competencies data. Offering specialized training in integrated behavioral health work to students has immense potential benefit for outgoing social workers seeking to support patients.

Keywords: Integrated behavioral health, integrated health, behavioral health, social work training

Training social work students for integrated health care settings: The importance of specialized education for master's students

The Patient Protection and Affordable Care Act (PPACA) of 2010 brought about the goal of health care reform aimed at three targets: reducing costs, enhancing the experience of care, and improving population health (PPACA, 2010; Berwick et al., 2008). Patients requiring acute and chronic mental health care generate high system costs, and the prevalence of patients with comorbidity of medical and psychiatric needs requires the integration of behavioral and physical health to meet this triple aim (Katon & Unützer, 2013). The PPACA expanded Medicaid and required public insurance options to provide mental health and substance abuse services, creating the opportunity for an increasingly integrated health care (Health Resources & Services Administration, 2021); this study will discuss integrated behavioral health care in the broad context of a team of providers including physical and mental health practitioners collaborating to address patient needs, both curatively and preventatively, to improve management and delivery of services.

Integrated behavioral health in primary care settings has been shown to improve patient outcomes and experience of care (Balasubramanian et al., 2017), while also reducing costs (Collins et al., 2010). Chronic mental and physical health conditions co-occur, and the prevalence of these comorbidities is increasing (Sartorious, 2013). Social work's integrative approach to human life leaves social workers uniquely situated to act on integrated health care teams and address comorbid and co-occurring disorders. Social work students graduating into communities with increasingly-integrated health care systems will benefit from increased

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integrated behavioral health training, developing into practitioners better positioned to improve patient wellbeing.

To meet this need, a large public university in the Pacific Northwest designed a project to provide master's of social work students with the opportunity to receive a specialized training education in integrated behavioral health work through a combination of specialized curriculum, seminar, and field placement experience. This Project was funded by a Health Resources and Services Administration (HRSA) Behavioral Health Workforce Education and Training grant. Other evaluations of projects funded by this grant have collected some data on team skills (Zanskas et al., 2022; Delavega et al., 2019), student attitudes towards interprofessional practice (Acquavita et al., 2020), student attitudes towards health care teams (Delavega et al., 2019), and functions performed by students in integrated settings (Fraher et al., 2018). Training project structures have varied across settings, as different institutions have different existing infrastructure and capacities. Some projects have had an exclusive focus on integrated field placements with an emphasis on the relationship between students and their field supervisors (Fraher et al., 2018). Other projects have sought to influence students across multiple educational dimensions (Zanskas et al., 2022; Delavega et al., 2019); field placements were still a core component of these projects, but a series of one-day "experiential-didactic seminars" were designed and implemented to supplement student learning. In addition to the seminar series, these projects included a capstone project component, which was a two-day exercise designed to provide students with a chance to practice skills and receive feedback from relevant agencies. A different approach to the capstone experience was taken by universities in the midwest (Acquavita et al., 2020), where projects also utilized training workshops to supplement student learning around particular topics relevant to integrated care, such as family violence or youth

mental health. Our project provided a recurring seminar for students, integrated health field placements, and specialized curriculum via formal courses, as opposed to workshops.

Despite the existing body of research around HRSA-funded behavioral workforce projects, no other evaluation has examined behavioral health core competencies. Institutions interested in increasing integrated behavioral health training opportunities for master's students may have infrastructure that allows or prohibits elements of existing project approaches. Accordingly, this study will present findings from our evaluation, demonstrating the efficacy of the Project and providing information for other institutions regarding the structure of our specialized training project.

Present Study

The Project ran four years with one cohort every nine-month academic year, and students were required to attend two courses designed to increase specialized behavioral health practice capabilities, attend a monthly field seminar specific to the Project, and were assigned to field placements in integrated health care settings.

Specialized Curriculum

Every student in all four cohorts took a course on Advanced Clinical Practice in Integrated Health Care, and cohorts two, three, and four also took a Brief Behavioral Interventions and Treatments course. While the latter course was in development, cohort one took either a course on substance abuse, motivational interviewing, or social work perspectives on mental health.

The Advanced Clinical Practice in Integrated Health Care course was designed to introduce social work students to the direct practice of integrated health in primary care. Students became knowledgeable of the roles of health providers working in primary care settings, theories and models of care, and cross-cultural issues. The course focused on the co-occurrence and comorbidity of chronic mental and physical health conditions. Students developed knowledge and skills in medical terminology, disease prevention, practice evaluation, and social determinants of health. They also developed knowledge of complementary and alternative modalities and their use within an integrated health setting. Students gain practice skills in commonly used behavioral health screening tools such as PHQ-9, GAD-7, DAST, AUDIT, and CRAFFT. Because populations served span the spectrum of severity in both physical and mental health dimensions, students developed competencies in engaging and supporting patients and their families across a range of health conditions, developing fluency in the language and culture of health and a working knowledge of a wide variety of chronic health conditions. Students were also coached in interdisciplinary team skills and introduced to dynamics and norms involved in working with practitioners across different fields.

The Brief Behavioral Interventions and Treatments course built on foundational knowledge of general practice skills, including engagement, screening, assessment, treatment planning, and documentation from a lens of brief and crisis-oriented frameworks to support work in integrated care settings, including solution-focused, cognitive-behavioral, motivational interviewing, and stages of change approaches. Students developed differential understandings and competencies in the use of brief psychosocial assessment, mental health assessment, and risk assessment to support a determination of medical necessity within integrated settings. Additionally, they were introduced to core concepts and interventions related to narrative, solution-focused, cognitive-behavioral, and mindfulness practices in a behavioral health context. Students were encouraged to examine the challenges and benefits of multidisciplinary team practice and current best practices for effective interventions across the helping professions within integrated settings, and their practice skills were enhanced with approaches designed to integrate intersectionality, client identity, and culturally responsive interventions in a behavioral health context.

Field Seminar

Students attended a quarterly field seminar to support integration of their academic program and field placement learning. These seminars were a space for students to bring cases, questions, and thoughts about their field placements to a group with and integrated care lens. Seminars deepened professional skills in utilizing supervision, interprofessional collaboration, community-level interventions, culturally responsive practice, and professional development. The seminar space also served to build community among cohort peers, increasing connectivity of future behavioral health professionals across the state.

Field Placements

All students were assigned health care based field placements in integrated settings specifically developed to educate advanced students in integrated primary care serving rural and/or medically underserved populations. All placements contained at least two members of non-mental health disciplines on the team (i.e., physician, nurse practitioner, physician assistant, etc.).

This evaluation study proposed two major questions:

1. How did the specialized behavioral health training students completed through the Project impact student scores on the Behavioral Health Consultant Core Competency (BHCCC) tool and Team Skills Scale?

2. Do student BHCCC tool and Team Skills Scale pre scores differ significantly from post scores after moving through the Project?

Method

Students in four cohorts completed the BHCCC tool and the Team Skills Scale before and after their participation in the Project. In total, 93 student participants filled the BHCCC tool (79% response rate) and 94 filled the Team Skills Scale (80% response rate). Paired t-tests and Wilcoxon signed-rank tests were run to analyze survey scores.

Participants

The Project ran four years with one cohort a year, with a total of 118 student participants. For the second, third, and fourth years students were asked to report if they were from a rural, residential background or a disadvantaged background, following the Health Resources and Services Administration (HRSA) definition. HRSA defines students from disadvantaged background as (a) Comes from an environment that has inhibited them from obtaining the knowledge, skills, and abilities required to enroll in and graduate from a health professions or nursing school (Environmentally Disadvantaged); and/or (b) Comes from a family with an annual income below a level based on low-income thresholds established by the U.S. Census Bureau, adjusted annually for changes in the Consumer Price Index (Economically Disadvantaged). In Cohort 2, 15 (52%) students reported rural and 26 (90%) disadvantaged backgrounds; in Cohort 3, 10 (33%) students reported rural and 12 (40%) disadvantaged backgrounds; in Cohort 4, 13 (43%) students reported rural and 10 (33%) disadvantaged backgrounds. Additional demographics can be found in Table 1.

[Table 1]

Student participants filled two scales before and after they participated in the Project; the first captured behavioral health skills and the second captured team skills. In total, after three extreme outliers were removed, 93 student participants filled the BHCCC tool and 94 filled the

Team Skills Scale. This research was approved by the institutional review board at the home institution. The authors report there are no competing interests to declare.

Measures and Data Collection

Behavioral Health Consultant Core Competency Tool

The BHCCC tool is a self-report 53 item scale developed by Robinson and Reiter (2015) with ratings that range from 1 (low skill level) to 5 (high skill level). The BHCCC tool is designed to measure the skills and knowledge of a behavioral health consultant on an integrated team, and is organized into six domains of competence: clinical practice skills, practice management skills, consultation skills, documentation skills, team performance skills, and administrative skills. Analyses were run on total scale mean scores and domain means in order to assess participant self-reported level of skills and competencies.

Team Skills Scale

The Team Skills Scale is a 17 item scale with ratings from 1 (poor) to 5 (excellent) developed by Hephburn, Tsukuda, and Fasser (1996) designed to measure interprofessional team skills. The Project used a slightly modified version that removed the emphasis on geriatric work. The Team Skills Scale was organized into four domains: team and group dynamics and functioning, interdisciplinary functioning, personal contributions, and prioritizing patient goals. Analyses were run on total scale mean scores and domain means to assess participant selfreported team skills.

Statistical Analysis

Pre and Post Score Mean Comparisons

Paired t-tests were run on the combined pre scores and post scores for each domain of competence in the BHCCC tool. Reliability analyses were run for each construct; all met the

threshold for reliability. The assumption of normality was violated for the post scores and three of the pre scores, but the skew was not extreme, the one extreme outlier was removed, and the groups sizes were relatively large (n=93). Due to the robustness of the t-test in violating the assumption of normality, a paired t-test was still appropriate. The statistical significance threshold was set to 0.01 to account for the risk of type II error.

Similarly, paired t-tests were run on the domains of the Team Skills Scale. Reliability thresholds were met, and two extreme outliers were removed (n=94). The statistical significance threshold was also set to 0.01.

T-tests were also run on cumulative pre and post score averages for both the BHCCC tool and the Team Skills Scale.

Wilcoxon Signed-Rank Test

Due to the smaller sample sizes for each cohort year (see Table 1), nonparametric paired Wilcoxon signed-rank tests were run to analyze program effectiveness by year. Statistical significance thresholds for these tests were set to 0.05.

Results

Behavioral Health Consultant Core Competency Tool

Paired t-tests showed statistically significant differences between the cumulative pre scores and post scores for each BHCCC tool domain and total averages. The results from the average pre test (M = 2.66, SD = 0.85) and post test (M = 4.15, SD = 0.48) indicate that over the course of the Project students experienced an improvement in BHCCC tool competencies, t(92) = -16.89, p < .001. In terms of specific BHCCC tool domains, as Table 2 indicates, students experienced significant improvement in clinical practice, practice management, consultation, documentation, team performance, and administrative skills (p < .001).

[Table 2]

The Wilcoxon signed-rank tests run on each individual cohort year for overall skill scores and domains also returned significant results. As shown in Table 3, there was a statistically significant median increase in scores after students participated in the Project. The results from the cumulative averages for Cohort 1, for instance, determined that there was a statistically significant median increase in scores from the pre test (2.59) to the post test (3.29), z(27) = 4.32, p < .001.

[Table 3]

Team Skills Scale

As with the BHCCC tool, paired t-tests showed statistically significant differences between the cumulative pre scores and post scores for each Team Skills Scale domain and total average. The results from average pre test (M = 2.60, SD = 0.54) and post test (M = 3.41, SD =0.40) indicate that over the course of the Project students experienced an improvement in team skills, t(93) = -15.10, p < .001. As Table 4 indicates, students experienced significant improvement in the domains of team and group dynamics and functioning, interdisciplinary functioning, personal contributions, and prioritizing patient goals (p < .001).

[Table 4]

Results for Wilcoxon signed-rank tests for each cohort year are shown in Table 5, and indicate statistically significant improvements per year. In terms of cumulative averages, Cohort 1 experienced a statistically significant median increase in scores from the pre test (2.64) to the post test (3.81), z(27) = 4.43, p < .001.

[Table 5]

Limitations

This study had some important limitations. First, our data were self-report scales filled out by the student participants themselves, and triangulation through additional pre and post tests for student field supervisors or instructors may have contributed to a more complete or nuanced picture of the Project, and combated potential reporting bias. As Tajima and colleagues (2022) have shown, additional data sources for competency assessments, particularly those with confidential ratings, can provide useful triangulation and highlight important differences in student learning. That said, student participants did not experience any penalty or benefit for reporting any particular rating. Second, the student participants in this project were all advanced year master's students; as they moved through the Project's specialized training, they were also moving through their final year of their master's program. This study did not attempt to control for the potential impact of these variables. Third, the Project only collected data on Project students; there was no comparison group of students in the MSW program that did not participate in the Project.

Discussion

This study sought to evaluate whether or not the specialized behavioral health training students went through in the Project impacted their behavioral health competencies and team skills. Findings show that students experienced statistically significant improvements in each domain of the BHCCC tool and the Team Skills Scale after education via the two specialized courses, the Project-specific seminar, and an integrated health care field placement.

T-tests confirm student improvement in BHCCC tool competencies and team skills from pre to post scores, and Wilcoxon tests provide insight into each cohort's growth, confirming overall trends of improvement were also consistent within each year. These findings show significant improvement of student self-rated competence in each domain of the BHCCC tool and the Team Skills Scale. Within clinical practice, student scores demonstrated improvements in preventative care skills, promoting patient choice, and the administration and use of appropriate assessment tools. The Brief Behavioral Interventions and Treatments course supported these learnings, providing foundational knowledge for application in field placements and in workplaces beyond the Project. Student practice management skill improvement directly assisted with high-utilizers of medical care, a core target of the integrated care model. Field experience coupled with Advanced Clinical Practice in Integrated Health Care class curricula contributed to student increases in continuity visit utilization, aptitude with flexible contact strategies, and coordination with ACOs, CCOs, and other institutions not directly involved in the integrated care team.

Students also reported improved use and awareness of time, conducting short visits effectively and completing documentation without sacrificing value or time. These skills supported student roles in interdisciplinary settings, increasing their own strength on teams. Student improvements in team communication skills fed directly into other reported improvements, such as ability to increase cooperation among disciplines in interdisciplinary settings. Team communication skills also benefited students as they embodied social work values, advocating for resources for patients beyond direct medical treatment and ensuring patient goals were considered when team care plans were developed. Service management and delivery improvements followed improved team functioning and care coordination.

It is worth mentioning that our recruitment practices targeted disadvantaged and diverse student populations specifically based on grant requirements, with our informational sessions running during evenings and weekends, a very low burden for project application, and intentional consideration to the diversity of each cohort during student selection. We believe these practices are reflected in our demographics, with higher numbers of students from rural and disadvantaged backgrounds, as well as higher proportions of non-white students than the larger master's program student body.

It is worth mentioning that our recruitment practices targeted disadvantaged and diverse student populations specifically based on grant requirements, with our informational sessions running during evenings and weekends, a very low burden for project application, and intentional consideration to the diversity of each cohort during student selection. We believe these practices are reflected in our demographics, with higher numbers of students from rural and disadvantaged backgrounds, as well as higher proportions of non-white students than the larger master's program student body. The state our project operates out of has a very high white population, even when compared to other majority-white states. The population becomes more white as it becomes more rural, so there are differences in our cohort demographics based on years we more heavily recruited rural students versus racially diverse students.

Findings suggest support of Project logic. Through the two required courses, students obtained the knowledge and skills necessary to practice in interdisciplinary integrated health settings. The integration of these learnings in seminars and field placements expanded their capacity to practice as valuable members of teams supporting patients and to bring social work to health care settings. The cohort model and the implementation of a seminar space where didactic teachings and practical application could be examined may have enabled students to move from their own thinking and acting towards praxis. Though not all social work students will graduate to work in health care settings, the increasing demand for social workers able to act as effective members of integrated care teams requires master's programs to examine how they are preparing students interested in filling this workforce gap.

Conclusion

Following the implementation of the PPACA there has been considerable upsurge in the demand for health care practitioners capable of providing care effectively in integrated settings (PPACA, 2010). This study evaluated the efficacy of a project designed to provide a specialized curriculum for social work students to supply such care once they join the workforce. Significant improvements were observed in student ability to work in integrated behavioral health care settings using appropriate methodologies. Study findings can serve to inform the design of program structures at other schools of social work interested in preparing students for a health care system with an increasingly integrated approach to behavioral and physical health.

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Table 1 Project Participant Demographics

	Cohort 1		Cohort 2		Cohort 3		Cohort 4	
	п	%	п	%	п	%	п	%
Total students	29	100	29	100	30	100	30	100
Rural background	N/A	N/A	15	52	10	33	13	43
Disadvantaged background	N/A	N/A	26	90	12	40	10	33
Race / ethnicity								
White or caucasian	24	83	18	62	25	83	18	60
Hispanic	1	3	5	17	4	13	5	17
Black or African-American	3	10	4	14	1	3	4	13
Mixed-Race	2	7	0	0	0	0	0	0
Mexican	0	0	2	7	0	0	0	0
Mexican-American	0	0	1	3	0	0	0	0
Native Hawaiian or Other Pacific Islander	0	0	1	3	0	0	0	0
American Indian or Alaska Native	0	0	2	7	3	10	1	3
Asian	0	0	2	7	0	0	0	0
Indigenous	0	0	0	0	1	3	1	3
Latinx	0	0	1	3	1	3	0	0

Table 2

T-test results for Behavioral Health Consultant Core Competency Tool

	Pre s	Pre scores Post scores		(00)			
	М	SD	М	SD	t(92)	р	Cohen's d
Cumulative Averages	2.66	0.85	4.15	0.48	-16.89	<.001	-1.75
Clinical Practice Skills Domain	2.64	0.84	4.14	0.48	-17.04	<.001	-1.77
Practice Management Skills Domain	2.8	0.87	4.22	0.51	-15.34	<.001	-1.59
Consultation Skills Domain	2.53	0.88	4.05	0.6	-15.64	<.001	-1.62
Documentation Skills Domain	2.61	1.09	4.17	0.71	-12.18	<.001	-1.62
Team Performance Skills Domain	2.93	1.11	4.41	0.6	-12.71	<.001	-1.32
Administrative Skills Domain	2.5	1	4.03	0.64	-15.22	<.001	-1.58

Table 3

Wilcoxon signed-rank test results for Behavioral Health Consultant Core Competency Tool

	Pre Score Median	Post Score Median	N	z value	р
Cohort 1					
Cumulative Averages	2.64	3.81	27	4.43	<.001
Clinical Practice Skills Domain	2.59	3.82	27	4.54	<.001
Practice Management Skills Domain	2.63	4.00	27	4.35	<.001
Consultation Skills Domain	2.50	3.63	27	4.35	<.001
Documentation Skills Domain	2.67	4.00	27	3.92	<.001
Team Performance Skills Domain	3.00	4.33	27	4.12	<.001
Administrative Skills Domain	2.67	4.00	27	4.26	<.001
Cohort 2					
Cumulative Averages	2.49	4.36	26	4.46	<.001
Clinical Practice Skills Domain	2.41	4.38	26	4.46	<.001
Practice Management Skills Domain	2.50	4.38	26	4.38	<.001
Consultation Skills Domain	2.38	4.13	26	4.46	<.001
Documentation Skills Domain	2.33	4.33	26	4.18	<.001
Team Performance Skills Domain	2.83	4.67	26	4.12	<.001
Administrative Skills Domain	2.67	4.00	26	4.47	<.001
Cohort 3					
Cumulative Averages	2.29	4.36	22	4.11	<.001
Clinical Practice Skills Domain	2.26	4.35	22	4.11	<.001
Practice Management Skills Domain	2.69	4.50	22	4.11	<.001
Consultation Skills Domain	2.25	4.19	22	4.11	<.001
Documentation Skills Domain	2.00	4.62	22	4.08	<.001
Team Performance Skills Domain	2.83	5.00	22	4.11	<.001
Administrative Skills Domain	2.17	4.17	22	4.09	<.001
Cohort 4					

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Cumulative Averages	3.44	4.21	18	3.64	<.001
Clinical Practice Skills Domain	3.38	4.21	18	3.62	<.001
Practice Management Skills Domain	3.56	4.13	18	3.03	=.002
Consultation Skills Domain	3.44	4.13	18	3.37	<.001
Documentation Skills Domain	3.67	4.00	18	3.31	<.001
Team Performance Skills Domain	3.50	4.50	18	3.31	<.001
Administrative Skills Domain	3.33	4.00	18	3.33	<.001

Table 4

T-test results for Team Skills Scale

	Pre scores		Post scores		(02)		
	М	SD	М	SD	<i>l</i> (93)	р	Collell's a
Cumulative Averages	2.6	0.54	3.41	0.4	-15.1	<.001	-1.56
Team/Group Dynamics and Functioning Domain	2.6	0.56	3.29	0.47	-13.75	<.001	-1.42
Interdisciplinary Functioning Domain	2.54	0.57	3.42	0.43	-13.94	<.001	-1.44
Personal Contributions Domain	2.65	0.62	3.44	0.48	-12.21	<.001	-1.26
Prioritizing Patient Goals Domain	2.73	0.65	3.64	0.42	-12.06	<.001	-1.24

Table 5

Wilcoxon signed-rank test results for Team Skills Scale

	Pre Score Median	Post Score Median	N	<i>z</i> value	р
Cohort 1					
Cumulative Averages	2.59	3.29	27	4.32	<.001
Team/Group Dynamics and Functioning Domain	2.40	3.20	27	3.85	<.001
Interdisciplinary Functioning Domain	2.76	3.17	27	4.10	<.001
Personal Contributions Domain	2.75	3.25	27	4.01	<.001
Prioritizing Patient Goals Domain	3.00	3.50	27	3.43	<.001
Cohort 2					
Cumulative Averages	2.53	3.53	27	4.44	<.001
Team/Group Dynamics and Functioning Domain	2.60	3.40	27	4.31	<.001
Interdisciplinary Functioning Domain	2.50	3.33	27	4.34	<.001
Personal Contributions Domain	2.75	3.50	27	4.41	<.001
Prioritizing Patient Goals Domain	2.50	4.00	27	4.12	<.001
Cohort 3					
Cumulative Averages	2.53	3.65	23	4.00	<.001
Team/Group Dynamics and Functioning Domain	2.40	3.40	23	4.01	<.001
Interdisciplinary Functioning Domain	2.33	3.67	23	3.88	<.001
Personal Contributions Domain	2.50	3.75	23	4.11	<.001
Prioritizing Patient Goals Domain	2.50	4.00	23	4.14	<.001
Cohort 4					
Cumulative Averages	2.82	3.53	19	3.73	<.001
Team/Group Dynamics and Functioning Domain	3.00	3.40	19	3.75	<.001
Interdisciplinary Functioning Domain	2.83	3.67	19	3.75	<.001
Personal Contributions Domain	2.75	3.50	19	3.12	=.002
Prioritizing Patient Goals Domain	3.00	3.50	19	3.57	<.001