INTRODUCING TRAUMA-INFORMED CARE IN AN URGENT CARE CENTER: A QUALITY IMPROVEMENT PROJECT

by

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Abstract

The provider-patient relationship can be influenced by stigma, particularly when it is based on the clinician’s perspective toward people with any psychiatric illnesses, with great impact on clinical outcomes. This project aimed to identify changes in providers’ attitudes toward people diagnosed with psychiatric illnesses after providing trauma-informed care training in a setting where integrated care is practiced. The project utilized a questionnaire to assess the topic knowledge and the Opening Minds Scale for Health Care Providers to evaluate staff’s attitude and stigma. Staff received a modified training based on the Risking Connection ® model. Both questionnaires were administered pre-, post-, and 30 days post-training. Trends in the post-training data indicated that there was an improvement in providers’ attitudes toward people with psychiatric illnesses though differences were not statistically significant. While improvements in providers’ attitudes cannot be linked to this training, changes may have been related to education on the topic.

Keywords: trauma-informed care, integrated care, mental illness, substance abuse.
Introducing Trauma-Informed Care in an Integrated Care Urgent Care Center: A Quality Improvement Project

The provider-patient relationship can be influenced by stigma, particularly when it is based on the clinician’s perspective toward people with a psychiatric illness, with great impact on clinical outcomes. Several studies have been conducted to highlight health care provider’s perception of and attitudes and behaviors toward individuals diagnosed with a psychiatric illness. As stated by van Boekel, Brouwers, van Weeghel, and Garretsen (2013), many healthcare professionals regard people with mental illnesses as having low esteem and feel less motivated and dissatisfied when working with this population.

The presence of stigmatizing behaviors on the part of the healthcare provider is not a newly identified problem, but rather a challenge, which stems from years of exposure to stigmatizing beliefs about people diagnosed with psychiatric illness including substance abuse disorders. Until the mid-1990s, the clinical culture of the U.S. healthcare system lived with the contradictions posed by the standard of *do no harm* while approaching people diagnosed with psychiatric illnesses with negative judgment and minimal expectations for positive treatment outcomes (Jones, 2013). In essence, treatment failure in light of psychiatric illness was ascribed to the patient, and the concomitant frustration on both sides often fueled ineffective relationships, an essential element to all healing. With the new millennium, new trauma-informed approaches have been emerging as valuable tools to improve mental health nursing practices (Muskett, 2014).

People living with psychiatric illnesses are no different than any other human, when
responding to other people’s judgment. Opinions from others often powerfully shape the perception of self, even more impressively so when the person (or institution) ascribing the attribute is in a position of power. Such is the case with the healthcare industry in the United States where the clinicians are the ambassadors and standard-bearers of the industry. Negative attitudes towards patients with mental illnesses may result in patient’s disempowerment with a negative effect on their self-esteem and ultimately on the treatment outcomes. Ignorance and fear related to this population may be the source of these stigmatizing behaviors (van Boekel et al., 2013). Some of the behaviors exhibited by healthcare providers are related to the fact that many of them lack the basic training necessary to establish a therapeutic relationship with patients (Levinson, Lesser & Epstein, 2010).

Although several evidence-based practices to improve delivery of care for this population have been identified, Brown, Baker, and Wilcox (2012) reported that curriculum in behavioral health and healthcare graduate programs lack a basic education on how to care for these patients, which translates into sub-standard clinical practices. This reality is seen in several services that deliver care to behavioral health patients. Foster, LeFauve, Kresky-Wolff, and Richards (2010) reported that the majority of staff in public treatment facilities do not hold advanced educational degrees in mental health and that organizations lack the training to provide appropriate treatment for this population. This project aimed to identify changes in providers’ attitudes toward people diagnosed with psychiatric illnesses after providing trauma-informed care training in a setting where integrated care is practiced.
Theoretical Framework

The framework utilized in this project was the Knowledge to Action framework (KTA) (Graham, et al., 2006). This framework was designed to translate research knowledge into clinical practice through a series of steps. These steps are known as the knowledge creation and the action cycle (Petzold, Korner-Bitensky, & Menon, 2010). This type of framework possesses the flexibility that allows the application of evidence-based practices in a variety of situations, regardless of the type of intervention that is being proposed (Wilson, Brady & Lesesne, 2011).

The step known as knowledge creation seeks to identify research articles that can justify the nature of the problem in question. Ward, House, and Hamer, (2009) described how knowledge creation starts with a broad inquiry of the identified problem to highlight common threads. Subsequently, a knowledge synthesis allows one to select the appropriate articles that are utilized in describing the clinical problem. A final step in knowledge creation is the identification of tools or products that can lead to translating the research into practice (Field, Booth, Llott & Gerrish, 2014). In this project, the knowledge cycle included the identification of the clinical problem as a result of reviewing incident reports and patient complaints. This step was followed by a review of the literature to support the initial question.

The action cycle is the implementation of the research designed to address the problem in question. The execution of all the action cycle steps maximizes the success of addressing the problem in question and increases the likelihood of maintaining the evidence-based practice in
place. In this project, action cycle helped achieve the aims of the project through the creation of a stakeholder team, a strength-weaknesses-opportunities-threats (SWOT) analysis, the design of an evidence-based training, the implementation of the training, the collection and review of the data, and the evaluation of the intervention.

The action cycle steps of the framework included the implementation of a trauma-informed care training designed to improve the quality of care for people with mental illness. Risking Connections® (Sidran Institute, 2012) was identified as the evidence-based model designed to improve health care provider’s knowledge about therapeutic relationships with people with mental illness and promote the implementation of skills to improve the quality of care when working with this population. This trauma-informed care model also aims to strengthen the relationship between provider and patient while ensuring self-care for the health professional (Sidran Institute, 2012). The action cycle continued through the assessment of trauma-informed care knowledge after the implementation of the training.

**Review of the Literature**

The sample for this literature review was obtained by conducting a search of the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Academic Search Premier, ERIC, PsychINFO, and SocINDEX. Most of the articles utilized were found through this search engine, however, some of the publications were chosen from the list of reference in related articles that were reviewed for this project. Articles from 2010 to 2015 were identified in order to capture the latest literature available on the subject. The themes identified included the positive outcomes related to implementation of trauma-informed care in several organizations,
proposed strategies for implementing organizational changes, and the essential component of mental health education and training in order to increase awareness around mental illness and improve patient-provider therapeutic relationship.

A decision was made to utilize articles that described the role of education, training, and organizational changes play in the delivery of care for people with mental illness. The chosen articles presented research findings from different types of institutions and settings, while primarily focusing on the effects of organizational changes in the context of behavioral health services. Articles excluded from this projected focused on trauma-informed care strictly under clinical point of views, such as specific clinical interventions. While certain articles provided valuable information about organizational changes, they were not included in this project as they were too specific on certain outcomes (i.e., restraints and seclusion reduction), which did not apply in the setting where this project took place. Finally, articles the focused on a specific sub-population (i.e., women, children, people with developmental disabilities) were not included as their findings could not be generalized to the general population.

**Relevance to Nursing Practice**

When treating people with mental illness, nurses often rely on a combination of standardized interventions as well as the therapeutic relationship they have established with the patient (Muskett, 2014). The nurse-patient relationship can be tainted by various degrees of stigma that the healthcare provider has towards the individual with mental illness, with a potential impact on the treatment outcomes. The main effects of stigma in the health care arena include decreased access to care, delayed treatment seeking, reduced resources to manage the clinical condition, and changes in the individual clinician’s approach and interventions.
Research has suggested that patients perceive the nurse-patient relationship as a key dimension of patient’s perceptions of both the effectiveness and quality of the care received (Muskett, 2014). This study showed that behaviors characterized by disinterest and disrespect on the part of the nurse contributed to reinforcing patient’s sense of inadequacy and low self-esteem. As highlighted in the study conducted by Corrigan et al. (2014), there is a need to afford health care providers with appropriate training to improve delivery of care for patients with mental illness and substance abuse.

Another important concern directly affecting the nursing profession is that stigmatizing behaviors have been documented among the health care providers who care for the mentally ill population. Studies conducted by Halter (2002) and Sercu, Ayala, and Bracke (2015) highlighted that mental health stigma may impact the identity crisis of psychiatric nurses threatening both the profession and the delivery of care. Halter (2002) suggested that targeted interventions to reduce mental health stigma may have a positive impact on both treatment of people with mental illness and attitude towards healthcare providers.

**Mental Health and Trauma Awareness**

In recent years, there has been a dramatic change in the mental health care system in the United States, redesigning treatment models from the traditional medical-model approach to a more person-oriented and trauma-informed method (Jones, 2013). There has been a shift from a symptoms-focus intervention to the application of a treatment plan that incorporates a broader view of the patient’s history. The recognition of history of trauma as a common denominator in
the lives of people with mental illness has been an emerging topic in recent years (Brown et al., 2012; Farro, Clark, & Hopkins, 2011; Muskett, 2014; Sansbury, Graves, & Scott, 2014).

Furthermore, the integrated care approach that developed at the beginning of this century has challenged the treatment interventions that have been utilized until now to care for people with mental illness. Foster et al. (2010) stated that much work is needed to provide properly integrated care to people with co-morbid mental health and medical conditions. Mental illnesses can no longer be treated as standalone diseases, but they need to be examined in the context of co-morbid conditions.

Need for Trauma-Informed Care Trainings

As described by Chernomas and Mordoch (2013), nurses need to gain awareness around the negative effects of trauma on their patients’ lives and must provide trauma-informed care. A connection must be made between the symptom clusters that are the expression of certain mental illnesses and the role that a traumatic history has played in the development of such symptoms. The authors suggested that organizations should implement training that educates health care providers on basic concepts of trauma-informed care (Chernomas & Mordoch, 2013). Sansbury et al. (2014) also identified the importance of creating a therapeutic environment in the clinical arena that fosters self-care for providers while delivering care that benefits patients.

The work done so far in educating health care providers is not sufficient and the material utilized to educate staff does not instill the knowledge and skills necessary to care for a traumatized population (Chernomas & Mordoch, 2013). Even for mental health nurses who have received additional training compared to their counterparts in the medical field, the struggle rests
with how to translate their knowledge into their daily practice (Muskett, 2014). Foster et al. (2010) stated that while it is essential to train providers in trauma-informed care when working with people with mental illness and substance abuse, it is as important to ensure that the leadership of any organization endorses this model and promotes recovery. Hodgdon, Kinniburgh, Gabowitz, Blaustein and Spinazzola (2013) described how staff benefitted from a trauma-informed training at many levels. They stated that staff learned the needed skills to be able to work with patients who present with challenging behaviors and their newly developed de-escalation techniques helped reduce the number of interventions requiring physical contact.

**Trauma Informed-Care and Organizational Changes**

As suggested by the literature, the implementation of trauma-informed care practices has shown positive results in the quality of care delivered to people with mental illnesses (SAMHSA, 2014). Farro et al. (2011) and Greenwald et al. (2012) demonstrated how the utilization of such training models for healthcare providers working with this population resulted in positive sustainable outcomes. However, positive changes are also connected to how invested the organization is in promoting a trauma-informed care culture. Clinical leaders who have embraced a trauma-informed care approach and applied changes to the day-to-day practice of the areas they oversee have enjoyed consistent positive outcomes (Muskett, 2014). These positive outcomes are also related to the implementation of educational support, trauma-informed supervision, and ongoing administrative guidance and oversight (Berger & Quiros, 2014).

Organizational changes that include the adoption of trauma-informed policies and procedures have demonstrated improvement in many areas of the service delivery. Some of the
improvements include a shift in staff’s attitude towards a more positive approach when working with people with mental illness and substance abuse (Brown et al., 2012). In addition, the findings of a quality improvement project demonstrated that trauma-informed care training has an impact on staff’s knowledge, beliefs, and behaviors (Brown et al., 2012). In this particular case, the staff’s knowledge was tested prior to and after the implementation of the training, while the beliefs and behaviors were assessed post training through self-reporting measures. Staff continued to be supportive and embracing of a trauma-informed model even 5-10 months after the training was implemented (Brown et al., 2012).

Organizations that serve people with mental illness and substance abuse need to be prepared to deliver services that mitigate a trauma-exposure and avoid re-traumatization. Along with providing staff with the appropriate training, the organizations need to create an infrastructure that responds to the needs of this population by developing a culture that promotes change at the leadership level (Hummer, Dollard, Robst, & Armstrong, 2010). This includes adopting a mission statement that reflects a trauma-informed care practice, hiring staff that are qualified to deliver care, and creating evaluation tools to assess interventions on a regular basis (Sansbury, et al., 2014).

Applying trauma-informed care interventions in clinical settings is only a portion of the work that needs to be done to improve services for people with mental illnesses. Rosenberg (2011) stated that a systemic approach is needed in order to address the needs of this population including instituting new guidelines and policies and procedures in settings accessed by behavioral health patients. Drabble, Jones, and Brown (2013) added that a trauma-informed system needs to include a sense of safety, trustworthiness, and collaboration at every level.
**Project Focus**

The project focuses on the provision of training for health care providers, including physicians, nurse practitioners, physician assistants, and clinical assistants in an urgent care center who provide care, among other patients, to individuals with mental illnesses. Targeting the health care providers’ ability to establish therapeutic relationships with behavioral health patients and ensuring positive outcomes while reducing stigmatizing behaviors is a key component of this project.

**Project Aims**

The first aim of this project was to improve the delivery of care for people with mental illnesses in an urgent care center, by implementing an evidence-based trauma-informed care training for all healthcare providers and assessing changes in perception and stigmatizing behaviors towards this population. The project sought to identify the health care providers’ knowledge on trauma-informed care and develop a training that addressed the current needs by utilizing evidence-based training. The second aim was to improve the knowledge base of the healthcare providers in order to improve the level of comfort when working with individuals with mental illnesses.

**Method**

**Ethical Issues**

This project received IRB approval from the university and the organization in which the project took place. The data collected during the project were obtained in anonymity and no ethical concerns emerged from the implementation of this project. No names or other identifying information was collected.
Setting

The setting for this project was an urgent care center located in a community health center in an urban area where patients are seen for urgent medical and psychiatric needs when their primary care provider is not available. This department also serves as the entry point for new patients who need to establish both primary and behavioral health care services. People with mental illnesses often present to the urgent care for medical concerns or psychiatric crisis. In this setting, they receive care from physicians, nurse practitioners, physician assistants, registered nurses or clinical assistants for medical concerns and nurse practitioners and psychologists for matters that are strictly mental health related.

Planning the Intervention

The first step in the project development was to identify a team of stakeholders that reviewed the current status of the behavioral health care delivery. The team included a representation of the urgent care staff members, the administrative leader of the department, a quality improvement staff member, and the leader of the project. Given the large size of the organization, it was decided to implement the project in the urgent care center as it is often the entry point for new behavioral health patients or patients in crisis. The team charter was developed with the objective of illustrating the purpose of the team and informing and orienting the senior leadership on the project proposed. The team charter identified the purpose of the project, the time commitment needed to identify problems and plan the implementation of solutions, desired results, and the outcome measures.

A SWOT analysis was conducted in order to design a trauma-informed care training that was tailored to the needs of the organization. The SWOT analysis involved the participation of a
representative all the providers in the urgent care center. The assessment of strengths identified the unique advantages related to the delivery of care for patients with mental illness and substance abuse. Weaknesses considered areas in need for improvement and aspects of care delivery that should be avoided. Opportunities highlighted the resources available to make positive changes in the current practice while threats focused on barriers that could prevent any changes from taking place or being endorsed by the organization. The planning phase included the adaptation of the evidence-based training module to fit the needs of the organization and the identification of the tools necessary to collect data as a result of the intervention.

**Implementation Phase**

The evidence-based model utilized for the project is known as Risking Connections®. This trauma-informed care model is designed to strengthen the relationship between provider and patient while ensuring self-care for the healthcare professional (Sidran Institute, 2012). This model was adopted to train staff on recognizing the impact of traumatizing events, assess staff’s reaction and develop self-awareness when working with traumatized individuals, and provide better care for both provider and patient. The training was adapted to meet the needs of the department and was delivered in two sessions of two hours each.

**Methods of Evaluation**

A knowledge-based questionnaire (K), developed by this author, was utilized pre-training to assess the basic knowledge of the staff on the trauma-informed care topic, post-intervention to assess the effectiveness of the training, and thirty days after the training to evaluate knowledge retention. The second tool, the Opening Minds Scale for Health Care Providers (OMS-HC) was adopted to evaluate attitude and stigmatizing behaviors towards people with mental illnesses.
The OMS-HC was administered pre-, post-, and thirty days post-training to identify changes in health care providers’ behaviors throughout the process. The OMS-HC has been described as an accurate and reliable measure to assess the effectiveness of programs designed to improve the quality of care for people with mental illness and substance abuse (Modgill, Patten, Knaak, Kassam, & Szeto, 2014).

Analysis

Statistics Solutions Pro version v1.15.10.16 was used for data analysis and narrative interpretation (Statistic Solutions, 2014). A comparison was made between the data collected prior to the implementation of the training, the data collected immediately post-training, and data collected thirty days after training. Three independent variables were chosen: ethnicity/race, gender, and years of education. This data analysis provided information on changes in stigmatizing behaviors in the context of staff’s knowledge acquisition, knowledge retention, and the independent variables.

Results

Frequencies and Percentages

The majority of participants fell into the category of Female for Gender (n = 13; 87%). Many of the participants fell into the category of Hispanic for Ethnicity Race (n = 6; 40%) or White for Ethnicity Race (n = 7; 47%). Many of the participants fell into the category of 0-2 Years for Years of Ed (n = 6; 40%) or 5+ Years for Years of Ed (n = 6; 40%). Frequencies and percentages for nominal variables are presented in Table 1.
Means and Standard Deviations

For OMS-HC pre-observations (OMS Pre) ranged from 32.00 to 62.00, with an average observation of 48.40 ($SD = 9.55$). For OMS-HC Post observations (OMS Post) ranged from 31.00 to 59.00, with an average observation of 47.87 ($SD = 7.74$). For OMS-HC 30 post observations (OMS 30p) ranged from 26.00 to 65.00, with an average observation of 46.00 ($SD = 11.39$). For K pre-observations (K Pre) ranged from 3.00 to 9.00, with an average observation of 6.33 ($SD = 2.13$). For K post observations (K Post) ranged from 4.00 to 10.00, with an average observation of 7.27 ($SD = 2.12$). For K 30 days post observations (K 30p) ranged from 2.00 to 10.00, with an average observation of 6.87 ($SD = 2.64$). Means and standard deviations for continuous variables are presented in Table 2.

Repeated Measures ANOVA

To examine the research question, a repeated measures analysis of variance (ANOVA) was conducted to assess if there were differences in OMS Pre, OMS Post, and OMS 30p and between K Pre, K Post, and K 30p. Prior to the analysis, the assumption of normality was assessed for each variable using a Shapiro Wilk test.

The results of the repeated measures ANOVA on MOS Pre, OMS Post, and OMS 30p were not significant, $F(2, 28) = 0.65, p = .529$. This suggests that there were not differences in the OMS Pre, OMS Post, and OMS 30p scores. Table 3 presents the means and standard deviations for OMS Pre, OMS Post, and OMS 30p scores. Figure 1 presents a line graph for OMS Pre, OMS Post, and OMS 30p scores.

The results of the repeated measures ANOVA on K Pre, K post, and K 30p were not significant, $F(2, 28) = 2.42, p = .108$. This suggests that there were not differences in the K Pre,
K Post, and K 30p scores. Table 4 presents the means and standard deviations for K Pre, K Post, and K 30p scores. Figure 2 presents a line graph for K Pre, K Post, and K 30p scores.

**Kruskal-Wallis**

A Kruskal-Wallis test was conducted to assess if there were differences in OMS Post by ethnicity/race. The results of the Kruskal-Wallis test were not significant, $\chi^2(2) = 3.78, p = .151$, suggesting there were not differences in OMS Post by ethnicity/race. Results of the Kruskal-Wallis test are presented in Table 5. Figure 3 shows a boxplot for OMS Post scores by ethnicity/race.

The same test was conducted to assess if there were differences in OMS Post by Years of Ed. The results of the Kruskal-Wallis test were not significant, $\chi^2(2) = 2.03, p = .362$, suggesting there were not differences in OMS Post by Years of Ed. Results of the Kruskal-Wallis test are presented in Table 6. Figure 4 shows a boxplot for OMS Post scores by Years of Ed.

**Spearman Correlation**

A Spearman correlation analysis was conducted for OMS Pre, OMS Post, OMS 30p, K Pre, K Post, and K 30p. There was a significant positive correlation between OMS Pre and OMS Post, $r = 0.53, p = .041$, indicating that as OMS Pre increases, OMS Post tends to increase. There was a significant positive correlation between K Pre and K Post, $r = 0.89, p < .001$, indicating that as K Pre increases, K Post tends to increase. There was a significant positive correlation between K Pre and K 30p, $r = 0.71, p = .003$, indicating that as K Pre increases, K 30p tends to increase. There was a significant positive correlation between K Post and K 30p, $r = 0.67, p = .007$, indicating that as K Post increases, K 30p tends to increase. The results of the analyzes are presented in Table 11.
Discussion

Interpretation

The results of this quality improvement project are not generalizable at this time, but they highlight some key elements that, if modified, may improve outcomes and, therefore, produce statistically significant data. It appears that K Post scores were low in staff who identified themselves as belonging to the 0-2 years of education category. It is possible that the content of the training was not adequate for their level of education and may need to be adjusted to meet their level of understanding.

As the quality improvement project is expanded to other departments of the organization, it is important to make the appropriate changes to ensure that the topic is understood and applied to the practice. Given the difference in levels of education between various professions, it may be appropriate to separate the groups and provide them with different types of training. This would also allow the application of trauma-informed care concepts in the context of specific tasks or situations.

Summary

Although the results of this project were not statistically significant, it was possible to notice that changes in healthcare providers’ stigmatizing behaviors were in the direction desired. It was also promising to observe that these positive changes were in the context of lack of knowledge retention. In other words, despite the fact that health care providers did not retain the knowledge acquired during the training for a long period of time, their attitude towards people with mental illness continued to improve.
As described in the literature, this project shows changes in provider’s attitude towards people with mental illness following a trauma-informed care training. Despite the lack of statistically significant results changes in staff’s perception of this population was noted. It would also be important to observe if staff’s behaviors change, through an ongoing review of incident reports and patient complaints.

**Limitations**

One of the limitations of this project was the inability of guaranteeing the healthcare providers’ knowledge retention upon completion of the training. This limitation could be addressed in the future by establishing a review of the training material on a regular basis as well as creating a culture change that embraces a trauma-informed care approach. In addition, knowledge does not necessarily translate into practice and while this project sought changes in healthcare providers’ approach towards people with mental illnesses, positive results could not have been ensured.

Furthermore, parts of the data collected for the evaluation of the project were obtained from staff self-reporting. While efforts were made to encourage providers to be honest in their reporting, it was not possible to control for the results. Finally, the size of the sample was also a limiting factor in obtaining statistically significant results and making the project generalizable.

It is essential to establish systems that allow for the positive results seen in the project to continue on the same trajectory. Such systems may include training at the time of hire and as continuing education, ongoing job performance evaluations that reflect the trauma-informed care philosophy, and review of incident reports and patient satisfaction survey to assess if the concepts learned translate into practice. This would ensure an ongoing appraisal of the effects of
trauma-informed care on the everyday practice.

**Conclusions**

Despite the lack of statistically significant results, the outcomes of this quality improvement project have been positive. The optimistic comments made by staff about participating in a new training that could be applied to their profession were encouraging. By tailoring trauma-informed care training to the need of each profession, we can achieve meaningful outcomes in terms of improved delivery of care.

It is essential to continue to equip healthcare providers with the tools necessary to deliver high quality of care. In the emerging world of integrated care, training medical providers in evidence-based behavioral health practices offers new meaning and importance. As professionals of all specialties become familiar with the unique needs of patients with mental illness, they will be able to incorporate targeted interventions in their treatment plans.

It is recommended to repeat this project to include a larger pool of medical providers and to tailor this trauma-informed care training to meet the needs of specific groups of providers. Furthermore, it would be informative to assess if the changes in attitude identified during this project translated into behavioral changes towards people with mental illnesses. Without changes in practice, even the positive results are futile.
References


Table 1

*Frequencies and Percentages for Nominal Variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>%</th>
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<tbody>
<tr>
<td>Gender</td>
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<tr>
<td>Female</td>
<td>13</td>
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</tr>
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<td>Male</td>
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<td>5+ Years</td>
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*Note.* Due to rounding error, percentages may not add up to 100.
Table 2

*Means and Standard Deviations for Continuous Variables*

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<tr>
<th>Variable</th>
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<tbody>
<tr>
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<td>K 30 Post</td>
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Table 3

*Means and Standard Deviations for OMS pre, OMS Post, and OMS 30p*

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<th>Variable</th>
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<td>OMS 30p</td>
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Table 4

Means and Standard Deviations for K pre, K post, and K 30p

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<td>K 30p</td>
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<td>2.64</td>
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Table 5

*Kruskal Wallis Test for OMS Post by Ethnicity Race*

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<tr>
<th>Ethnicity Race</th>
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<th>Other Mean Rank</th>
<th>White Mean Rank</th>
<th>$\chi^2$ (2)</th>
<th>$p$</th>
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<td>3.78</td>
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Table 6

*Kruskal Wallis Test for OMS Post by Years of Ed*

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<tr>
<th>Years of Ed</th>
<th>0-2 Years Mean Rank</th>
<th>3-4 Years Mean Rank</th>
<th>5+ Years Mean Rank</th>
<th>$\chi^2$ (2)</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.83</td>
<td>8.00</td>
<td>6.17</td>
<td>2.03</td>
<td>.362</td>
</tr>
</tbody>
</table>
Table 7

Spearman Correlation Matrix between OMS.pre, OMS.Post, OMS.30p, K.pre, K.post, and K.30p

<table>
<thead>
<tr>
<th></th>
<th>OMS.pre</th>
<th>OMS.Post</th>
<th>OMS.30p</th>
<th>K.pre</th>
<th>K.post</th>
<th>K.30p</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMS.pre</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OMS.Post</td>
<td>0.53*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OMS.30p</td>
<td>0.44</td>
<td>0.42</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.pre</td>
<td>-0.10</td>
<td>-0.16</td>
<td>-0.22</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.post</td>
<td>-0.01</td>
<td>-0.05</td>
<td>-0.11</td>
<td>0.89***</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>K.30p</td>
<td>0.09</td>
<td>-0.15</td>
<td>-0.05</td>
<td>0.71**</td>
<td>0.67**</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note.* *p* < 0.05. **p* < 0.01.
Mean of OMS pre, OMS Post, and OMS 30p

*Figure 1.* Mean score of OMS Pre, OMS Post, and OMS 30 Post
Figure 2. Mean score of K Pre, K Post, and K 30 Post
Figure 3. Boxplot for OMS Post by Ethnicity Race
Figure 4. Boxplot for OMS Post by Years of Ed
STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University’s Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person’s ideas or works.

The following standards for original work and definition of plagiarism are discussed in the Policy:

Learners are expected to be the sole authors of their work and to acknowledge the authorship of others’ work through proper citation and reference. Use of another person’s ideas, including another learner’s, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else’s ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University’s Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.
Statement of Original Work and Signature

I have read, understood, and abided by Capella University’s Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including the Policy Statements, Rationale, and Definitions. I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA Publication Manual.

Learner name and date
Marco Belluardo-Crosby, PMHNP-BC, Capella University

Mentor name and school
Debbie Nogueras, Ph.D., Capella University