

# An Examination of Stress, Coping, and Adaptation in Nurses in a Recovery and Monitoring Program

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## Abstract

Addiction rates in nurses are higher than in the general population. The relationship between stress, coping, and adaptation in nurses ( $N = 82$ ) enrolled in a recovery and monitoring program in the state of New Jersey was examined. Social support, a variable tested as a mediator of this relationship, was also examined. Participants completed the Perceived Stress Scale, Multidimensional Scale of Perceived Social Support, and Psychological General Well-Being Index. Negative relationships were found between stress and social support and stress and well-being, and a positive relationship was found between social support and well-being (all  $ps < .05$ ). The direct relationship between stress and well-being was decreased in the presence of social support. The findings of this research suggest that, to assist nurses, an increased awareness of stress and its injurious effects on overall well-being must be identified so proactive measures can be implemented to prevent potential untoward consequences. Ultimately, methods to strengthen social support and social networks will enhance the probability of sustained recovery, relapse prevention, and safe reentry into nursing practice. Implications for behavioral health providers and health care practitioners are discussed.

**Keywords:** addiction, recovery, social support, stress, well-being

## INTRODUCTION

Drug and alcohol addiction have been a peril to healthcare throughout American history. These addictions have no boundaries and cross gender, age, racial, religious, cultural, educational, socioeconomic, and professional lines. In the United States, approximately 9.2% of the general population experiences a chemical dependency disorder (Hansen, Ganley, & Carlucci, 2008). According to Shaw, McGovern, Angres, and

Rawal (2004), 10% of nurses in the United States experience drug and alcohol addiction. Of greater significance is a reported 6–8% of nursing professionals whose addictions impede judgment and negatively impact the delivery of healthcare services (Talbert, 2009). However, these numbers may be appreciably higher as self-reporting behaviors are often found to be inconsistent with actual use (Rockett, Putnam, Jia, & Smith, 2006).

The most significant issues related to addiction within the nursing profession are danger to patient safety, the harm it causes the nurse, liability to the institution, and negative portrayal of the profession. Nurses licensed by the state of New Jersey who have been identified with a drug and/or alcohol addiction are required to enroll in a recovery and monitoring program (RAMP) or face disciplinary action by the New Jersey State Board of Nursing (New Jersey Legislature, 2010).

As of 2009, 43 states offered alternative to discipline programs for nurses. The RAMP is the only alternative to discipline program for nurses in the state of New Jersey. RAMP is a structured program designed to assist the nurse with a substance use disorder (SUD) throughout the recovery process. The goal is to return the nurse to safe practice. Nurses in the program must agree to attend weekly peer support group meetings, attend appropriate 12 step meetings such as Narcotics Anonymous or Alcoholics Anonymous, undergo random drug screening, and satisfy all treatment recommendations. These recommendations may include obtaining treatment and documentation from rehabilitation facilities, therapists, physicians, and/or pain management specialists. Failure to meet the terms of the program can lead to suspension of nursing licensure (RAMP of New Jersey, 2010).

Antecedents to addiction have been identified as family history of addiction, dysfunctional family dynamics, successful professional careers, employment in high-stress areas, and perfectionist behaviors (Dunn, 2005; Monroe, 2009; Trinkoff & Storr, 1998; West, 2003). Contributing factors to addiction have been identified as stress, chronic exposure to trauma, role strain, access to controlled narcotics, chronic disability, and depression (Cross & Ashley, 2007; West, 2003). Research suggests that there is no one specific basis of drug and/or alcohol addiction in nursing, but a combination of causalities that results in ineffective coping, which leads to drug use and addiction (West, 2003). It is posited that exposure to high levels of stress combined with ineffective coping strategies and inadequate social

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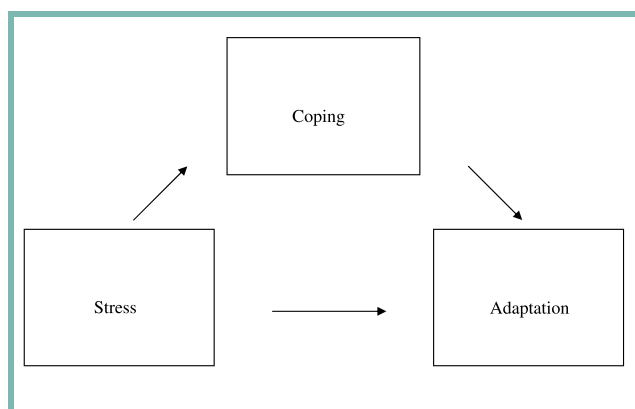
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support may be responsible for drug and/or alcohol addiction and poor health in nurses. Examination of these contributing factors may be beneficial as recovering nurses who re-enter the profession are at risk for relapse if they do not identify and appropriately manage stressors that negatively impact their coping strategies (Lewandowski & Hill, 2009). Moreover, social support as a coping mechanism may have a favorable effect on nurses in a RAMP.

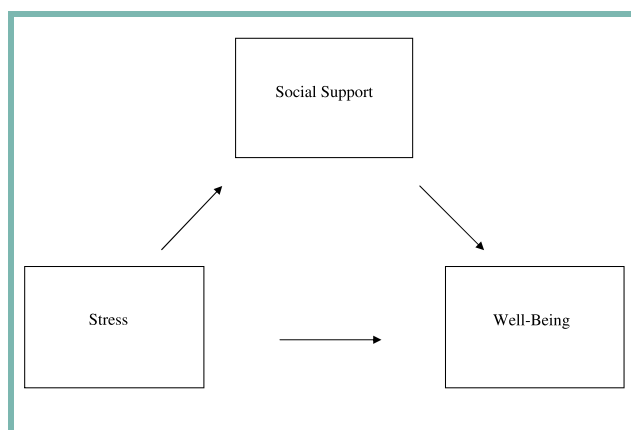
## PURPOSE

The purpose of this research was to examine the relationships among stress, social support, and well-being, as well as to examine the mediation effect of social support on the relationship between stress and well-being in nurses who participate in the New Jersey RAMP program. The theoretical framework that guides this research is the Transactional Model of Stress and Coping by Lazarus and Folkman (1984). The model includes three fundamental constructs that include stress, appraisal, and coping (see Figure 1). The framework posits that stressful situations are appraised as either irrelevant, benign-positive, or stressful. Irrelevant and benign-positive appraisals require no coping response. When an event is appraised as stressful, a secondary appraisal process leads to an examination of internal and external resources that assist in determining the level to which the stress can be modified. At this level, some damage or loss to the individual has occurred within the physical, social, and emotional realms of self. If coping strategies are inadequate, an individual's physical and emotional well-being may be jeopardized (Lazarus & Folkman, 1984). Moreover, drug and alcohol abuse is cited as a maladaptive behavior utilized when the coping skills are ineffective against stress (Lillibrige, Cox, & Cross, 2002).

Social support may have a mediating effect on stress and well-being (see Figure 2). Social support, as a coping mechanism, enhances an individual's ability to deal with life stressors, health, well-being, and adjustment (DeLongis, Lazarus, & Folkman, 1988; Skok, Harvey, & Reddihough, 2006). Use of social support systems may be assistive for nurses with a SUD as it may lead them from isolation to participation and



**Figure 1.** The theoretical model that relates stress and coping to adaptation (Lazarus & Folkman, 1984).



**Figure 2.** A model proposing the mediating effect of social support on stress and well-being.

disclosure and to recovery. Supportive relationships are found to increase addiction program completion rates and aid in relapse prevention (Darbro, 2005; Mulia, Schmidt, Bond, Jacobs, & Korcia, 2007).

## DEFINITION OF TERMS

Stress, for the purpose of this study, is theoretically defined as a relationship between a person and the environment that is appraised by the individual as impeding or exceeding the internal or external resources available, thereby jeopardizing their well-being (Lazarus & Folkman, 1984). Stress is operationalized by a score on the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983).

Social support, for the purpose of this study, is theoretically defined as the provision of resources that provide appropriate assistance that people draw upon to thrive or cope (Lazarus & Folkman, 1984). Social support is operationalized by a score on the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988).

Well-being, for the purpose of this study, is theoretically defined as a satisfactory state of physical and emotional health and social functioning (Lazarus, DeLongis, Folkman, & Gruen, 1985). Well-being is operationalized by a score on the Psychological General Well-Being (PGWB) Index (Dupuy, 1984).

## LITERATURE REVIEW

### Stress and Social Support

Stress can be viewed as detrimental, threatening, or taxing. Social support is found to minimize stress by making perceived intrusions less significant, enhancing both coping skills and feelings of life satisfaction, and assisting in an individual's recovery from chronic illness (Lazarus & Folkman, 1984; Rambod & Rafii, 2010). Social support can be found through various sources such as significant other partners, family, friends, community members, coworkers, social networks, and pets (Krause-Parello, 2008). Brown, Trinkoff, and Smith

(2003) conducted a study of 622 nurses in an alternative to discipline recovery program. The study revealed that the higher the perceived stress levels the nurses experienced, the lower their confidence in the ability to resist relapse.

### Social Support and Well-Being

Social support and its positive effect on a variety of health outcomes has been well documented (Cohen & Wills, 1985; Lewandoski & Hill, 2009; Rambod & Rafii, 2010). In a study of 75 married couples over a 6-month period, DeLongis et al. (1988) found that high levels of emotional support moderate psychological and somatic health disturbances ( $r = .59, p < .001$ ). Social support has been found to provide positive effects on prevention, coping, and recovery from illness (Suls, 1982). Individuals who receive adequate support from others may perceive stressors to be less taxing and therefore report an improved sense of well-being and improved health (Cohen & Wills, 1985). People may exhibit a generalized feeling of positive morale and overall health when they believe social support is available when needed. Support by family members and within the community is found to have a positive effect on individuals who have an addiction problem (Lewandoski & Hill, 2009). Participation in a peer support group for addiction has been shown to have an affirmative effect on sustained recovery (Boisvert, Martin, Grosek, & Claire, 2008).

### Stress and Well-Being

In addition to the psychological turmoil stress causes, stress also has physical consequences such as hypertension, depression, cardiac arrhythmias, headaches, digestive problems, and addiction disorders (Kabat-Zinn, 1990; Rice, 1999). Carlson and Larkin (2009) found that when substance abuse becomes a self-medicating response to life stressors and addiction occurs, another set of life stressors is created including legal, employment, and relationship problems. These patterns of behavior and consequences are often detailed by nurses who experience an addiction problem (Darbro, 2005). A study examining the psychological well-being of adults, ages 23–75 years, found that overall social support moderated the negative effect of perceived stress ( $p = .001$ ; Warleby, Moller, & Blomstrand, 2002).

### Gaps in the Literature

The history of nurses and addiction dates back to 1850 but was not officially acknowledged by the profession of nursing until 1982 (Heise, 2003). Nurses historically viewed their peers with addiction as moral failures and looked the other way, hoping the problem would cure itself (Heise, 2003; Taylor, 2003). Peer and societal misconceptions about SUDs in nurses and within the general population have shown little evolution (Quinlan, 2003). **Despite social support being found to have a positive effect on individuals in recovery, no literature on the mediating effect of social support on stress and well-being exists related to nurses with a SUD in a RAMP.**

## Research Questions

This study sought to provide answers to the following questions:

1. What is the relationship between stress and social support in nurses enrolled in RAMP?
2. What is the relationship between social support and well-being in nurses enrolled in RAMP?
3. What is the relationship between stress and well-being in nurses enrolled in RAMP?
4. Does social support have a mediating effect on the relationship between stress and well-being in nurses enrolled in RAMP?

## METHODOLOGY

### Sampling/Setting/Methods

The data for this descriptive, correlational study were obtained from nurses who were participating in the RAMP program. The nurses were in different stages of the program, which varied from less than 1 year to over 5 years. There are 22 nursing peer support groups in New Jersey. All groups were invited to participate. Seven groups agreed to participate, of which, two were from northern New Jersey, one was from central New Jersey, and four were from southern New Jersey. Inclusion criteria for participation included nurses who are (a) currently enrolled in RAMP, (b) of ages 18 years and above, (c) able to speak in English, and (d) able to read and write in English.

A demographic information sheet and three established instruments were utilized for data collection. The demographic sheet included a 16-question form for data collection regarding age, gender, race, religion, marital status, number of children, level of education, amount of time enrolled in RAMP, years of nursing experience, employment environment, family history of addiction, and their own personal feelings about the monitoring program (see Table 1).

On the basis of the power tables to ensure a medium effect size of  $f^2 = .15$  and a .05 level of significance, a minimum number of 75 participants were required to achieve a power of .82 for regression analysis (Cohen, Cohen, West, & Aiken, 2003). A total of 82 subjects (12 men and 70 women) participated in the study.

## INSTRUMENTS

### PSS

Stress was measured by a score on the PSS. The PSS measures the global perception of stress, coping, and control experienced in the last month (Cohen et al., 1983). The PSS is a 10-item, 5-point, Likert-type self-reporting instrument that measures perceived stress using anchors from 0 (*most positive response*) to 4 (*most negative response*). Scale scores can range from 0 to 40, with higher scores indicating higher levels of stress. Evidence of the validity of the PSS was found in a study of three populations: two of the college students and one within a community group (Cohen et al., 1983). The Cronbach's alpha was .84 and .86 in each of the three samples. The psychometric evidence for the PSS has been reported in a sample of stress prevalent individuals ( $n = 153$ ) with a Cronbach's alpha of

**TABLE 1** Self-Reported Demographics of Nurses Participating in Recovery and Monitoring Program (n = 82)

Variable	n	%
Race		
Black/African American	6	7.3
White/Caucasian	67	81.7
Hispanic/Latino	5	6.1
Asian or Pacific Island	4	4.9
Gender		
Male	12	14.6
Female	70	85.4
Age (in years)		
18–30	8	9.8
31–40	24	29.3
41–60	50	60.9
Religion		
Roman Catholic	48	58.5
Protestant	11	13.4
Jewish	4	4.9
Other	19	23.2
Education		
Associate degree or below	59	71.9
Bachelor's degree or above	23	28.1
Marital status		
Single	16	19.5
Married	39	47.6
Widowed	2	2.4
Separated/divorced	25	30.4
Number of children		
None	18	22.0
1–2	42	51.2
3	15	18.3
4 or more	7	8.5
Nursing practice years prior to RAMP entry		
1 year or less	3	3.7
2–3 years	11	13.4
4 years or more	68	82.9

Continues

**TABLE 1** Continued

Variable	n	%
Time enrolled in RAMP		
1 year or less	36	43.9
2–3 years	30	36.6
4–5 years	14	17.1
Over 5 years	2	2.4
Weekly 12 step meetings		
0	7	8.5
1–2	7	8.6
3 or more	68	82.9

Note. RAMP = recovery and monitoring program.

>.80 (Trouillet, Gana, Lourel, & Fort, 2009). In a study conducted by Hyman, Paliwal, and Sinha (2007), the PSS was used to examine the association between a history of childhood maltreatment and perceived stress in a sample ( $n = 91$ ) of treatment-engaged cocaine-dependent adults (Cronbach's  $\alpha = .80$ ). The Cronbach's alpha obtained for the current study was .87.

### MSPSS

Social support was measured by a score on the MSPSS. The MSPSS measures the participant's self-perception of social support. The MSPSS addresses the subjective assessment of social support adequacy from three specific (subscale) sources: family, friends, and significant others (Zimet et al., 1988). The MSPSS is a 12-item, 7-point, Likert-type self-reporting instrument that measures perceived social support using anchors from 1 (*very strongly disagree*) to 7 (*very strongly agree*). Scale scores can range from 12 to 84, with higher scores indicating higher levels of social support. Zimet et al. (1988) administered the MSPSS to 275 undergraduate students to measure subjective social support. The reported internal consistency was Cronbach's alpha of .88. The psychometric evidence for the MSPSS has been reported (Cronbach's  $\alpha = .88$ ) in a sample of 51 mothers (women) of children with cerebral palsy (Skok et al., 2006). The Cronbach's alpha obtained for the current study was .93.

### PGWB

Well-being was measured by a score on the PGWB Index, which measures emotional states that reflect well-being or feelings of distress (Dupuy, 1984). The PGWB is a 22-item Likert-type self-reporting instrument that measures six sub-domains of well-being that include depressed mood, anxiety, positive well-being, self-control, vitality, and general health. Scores are anchored from 5 (*more positive well-being responses*) to 0 (*more negative well-being responses*). Scale scores can range



from 0 to 110, with the higher scores indicating a greater perception of well-being. In a study of the impact of weight gain on quality of life among persons with schizophrenia ( $n = 286$ ), the PGWB Index indicated excellent internal consistency (Cronbach's  $\alpha = .91$ ; Allison, Mackell, & McDonnell, 2003). The Cronbach's alpha obtained for the current study was .93.

### Data Collection Methods

The rights of the individuals participating in this study were protected before data collection by obtaining approval from the institutional review board of Kean University. Peer support group facilitators were contacted via e-mail or telephone regarding the objectives and purpose of the project and permission to attend a meeting for data collection purposes. If the facilitators agreed for their support group to be a site for data collection, they were sent a letter detailing the purpose of the study and the opportunity for the members of RAMP to participate. After the peer support group facilitators introduced the letter to the group and the members of the group agreed to participate, the researchers were then invited to attend a scheduled peer support meeting.

The researchers introduced the study and answered any questions raised by the potential participants. Signed informed consent was obtained and retained by researchers, and a copy was given to participants to take home. Participants then received a 16-item demographic sheet and three established surveys evaluating stress, social support, and well-being. The data collection sessions lasted approximately 45 minutes. Upon completion of the data collection, the participants were thanked for their time and participation.

### Data Analysis Procedure

Data were analyzed using the Pearson product-moment on Questions 1 through 3 and regression analyses on Question 4, using SPSS, version 19.0 for Windows (SPSS, Inc., 2010). Two-tailed tests were used to determine the level of significance at the .05 level.

## FINDINGS AND RESULTS

The mean score for stress was 14.63 ( $SD = 5.88$ ). The mean score for social support was 71.39 ( $SD = 12.50$ ). The mean score for general well-being (GWB) was 77.9 ( $SD = 14.04$ ).

The result for Question 1 supported a statistically significant inverse relationship between stress and social support ( $r = -.43, p = .00$ ). The result for Question 2 supported a statistically significant positive relationship between social support and GWB ( $r = .40, p = .00$ ). The result for Question 3 supported a statistically significant inverse relationship between stress and GWB ( $r = -.72, p = .00$ ).

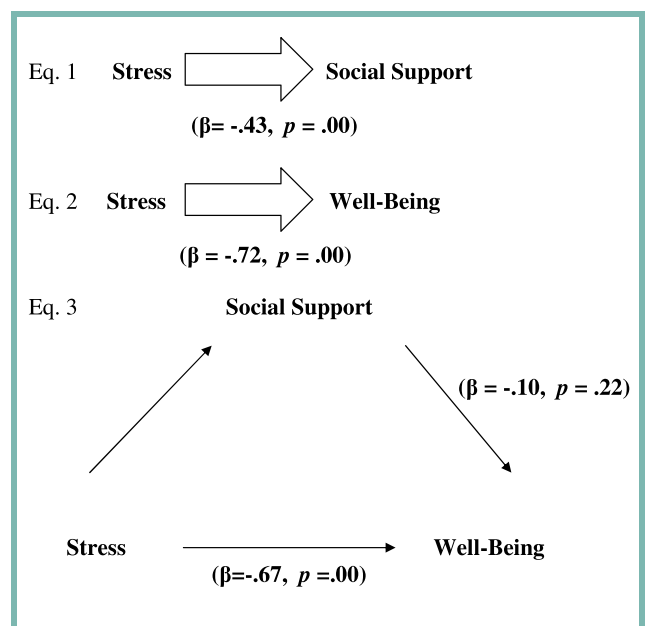
The mediation effect of social support on the relationship between stress and well-being was tested. Regression analyses were conducted according to Baron and Kenny's (1986) Mediation Model. For this study, the causal model seeks to determine that the independent variable (stress) has an effect on the intervening or mediating variable (social support) and

that the independent variable (stress) has an effect on the dependent variable (well-being) and to further establish that the intervening variable (social support) has a mediating effect on the relationship between stress and well-being. According to Baron and Kenny (1986), for mediation to take place, all results in the regression analysis must have statistical significance and the direct relationship between the independent variable (stress) and the dependent variable (well-being) must be decreased.

The result for Question 4 supported in the first regression analysis that the independent variable (stress) had a significant effect on the mediating variable (social support;  $\beta = -.43, p = .00$ ). In the second regression analysis, the independent variable (stress) had a significant effect on the dependent variable (GWB;  $\beta = -.72, p = .00$ ). In the third regression analysis, both the independent variable of stress and the mediating variable of social support were entered into the equation simultaneously with the dependent variable of GWB. In the third regression analysis, the mediating variable social support did not have a significant effect on well-being ( $\beta = -.10, p = .22$ ). However, the direct relationship between stress and GWB was decreased ( $\beta = -.67, p = .00$ ; see Figure 3).

## DISCUSSION OF FINDINGS

The results of this study and previous research indicate that stress can have a negative impact on physical, mental, and emotional levels of functioning. The nurses in this study reported a decrease in levels of perceived stress when social support was increased. These findings are consistent with research by DeLongis et al. (1988) that individuals who have higher levels of stress are susceptible to illness and mood disturbances. DeLongis et al. (1988) further identified psychosocial resources



**Figure 3.** A model showing the effect of social support on stress and well-being.

as having a moderating effect on well-being and sustained stress. This finding is supported by research conducted by Rambod and Raffii (2010), who suggested that adequate social support enhances physical and emotional health. The significant inverse relationship identified in this research between levels of perceived stress and its effect on well-being must be highlighted ( $r = -.72, p = .00$ ). Moreover, the decrease in the relationship between stress and well-being when social support was added ( $\beta = -.67, p = .00$ ) emphasizes the importance of social support, in the presence of stress, as an enhancement to overall well-being. These data support previous research that identifies behavioral, cognitive, and social distress as major contributors of physical health illnesses (Provencher, 2007).

Individual analysis of these defined constructs offer evidence that supports previous research related to stress, coping, and adaptation. Although social support, as related to friends, family, and significant others, did not mediate the relationship between stress and well-being in this sample of RAMP nurses, it did have a positive effect on the perception of well-being and stress. Social support networks that have a positive effect on enhanced well-being are identified as family and coworker support (Darbro, 2005; Mulia et al., 2007). These support systems may be inadequate, ineffective, or absent for the nurses in this study. Substance abuse in healthcare professionals has been strongly associated with a family history of addiction or abuse. Seeking social support from family members with addiction histories may be counterproductive and detrimental to the recovering nurse (Dunn, 2005). Moreover, the recovering nurse who is permitted to return to work may face collegial alienation and an unsupportive work environment (Darbro, 2005). Literature supports that having a large number of social relationships may mask loneliness, and family members, although supportive, may have a negative impact on well-being (Green, Hayes, Dickinson, Whittaker, & Gilheany, 2002). Social support may also have an adverse effect on well-being if the assumed supportive relationships are damaged or strained (Lewandowski & Hill, 2009).

## LIMITATIONS OF STUDY

There are limitations in this study, which could have contributed to social support not mediating the effect of stress on well-being. For example, the MSPSS instrument seeks to measure one's perception of social support from three subscale sources that include family, friends, and significant others. Informational, material, and financial support were not evaluated in this study. These concepts are found to be major contributors in sustained recovery and feelings of positive well-being in individuals experiencing an addiction disorder (Mulia et al., 2007). In addition, specific support services, such as Narcotics Anonymous and Alcoholics Anonymous or RAMP itself, were not analyzed in this study. Structured peer support has been found to have an affirmative effect on stress and coping (Provencher, 2007). Variations in supportive measures related to gender were not accounted for, thereby limiting the generalizability of the findings. Levels of identified stress, forms of effective

social support, and feelings of well-being may be different for men and women experiencing addiction. The identification and use of social support may be gender distinct (Barbee et al., 1993).

## IMPLICATIONS FOR PRACTICE

This study addresses a gap in the literature and adds to the body of nursing science and health-related disciplines as it discusses stress, social support, and well-being and its impact on nurses in RAMP program. The findings provide insight into the complexity of addiction and the various measures that assist nurses in a monitoring program. **To assist nurses, an increased awareness of stress and its injurious effects on overall well-being must be identified so proactive measures can be implemented to prevent potential untoward consequences. Ultimately, methods to strengthen social support and social networks may assist in relapse prevention and re-entry into nursing practice.**

**Behavioral health providers, alternative to discipline group leaders, and other healthcare practitioners must identify factors that have a detrimental effect on nurses in monitoring programs. Treatment agency practitioners can provide resource information that encourages positive and supportive relationships, assist in informational or financial support, and aid in stress management efforts as adjunctive measures. Aligning nurses with the most supportive environments and the development of effective stress reduction techniques may offer positive benefits for enhanced well-being.**

## RECOMMENDATIONS FOR FUTURE RESEARCH

Replication of this study using a broader-range social support scale is recommended to determine if other sources of support would have a significant effect on well-being. Furthermore, analysis of continued peer support may be beneficial to determine its effectiveness throughout the monitoring process. In addition, further research should be conducted to explore gender-specific social support considerations for nurses in a RAMP. Future research should include a longitudinal design because gathering data over specific points in time may assist in understanding how nurses adapt throughout the monitoring process.

A robust sample including greater portions of northern and southern New Jersey may assist in reaching a broader representation of the sample population to increase the generalizability of the findings.

## CONCLUSION

This study adds to the body of research on SUDs in nurses. In particular, it emphasizes the complex dynamic of stress, social support, and well-being and their inter-relatedness during the recovery process. The results of this study support previous research that highlights the injurious effects of sustained stress

and the maladaptive behaviors that lead to SUD. The findings accentuate the variations in social support measures and their implication for nurses in monitoring programs. The scarcity of data related to the effects of various social support measures for nurses in a RAMP cannot be underscored. Future research in this area is necessary as it may provide further insight into the specific supportive methods that assist in safe re-entry into nursing practice.

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## REFERENCES

- Allison, D. B., Mackell, J. A., & McDonnell, D. D. (2003). The impact of weight gain on quality of life among persons with schizophrenia. *Psychiatric Services*, 4(54), 565–567.
- Barbee, A., Cunningham, B., Derlega, V., Gulley, M., Yankeelov, P., & Druen, P. (1993). Effects of gender role expectations on the social support process. *Journal of Social Issues*, 49, 175–191.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Boisvert, R. A., Martin, L. M., Grosek, M., & Claire, A. J. (2008). Effectiveness of a peer support community in addiction recovery: Participation as intervention. *Occupational Therapy International*, 15(4), 205–220.
- Brown, J., Trinkoff, A., & Smith, L. (2003). Nurses in recovery: The burden of life problems and confidence to resist relapse. *Journal of Addictions Nursing*, 14, 133–137.
- Carlson, B., & Larkin, H. (2009). Meditation as a coping intervention for treatment of addiction. *Journal of Religion and Spirituality in Social Work: Social Thought*, 28, 379–392.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). The global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385–396.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357.
- Cross, C., & Ashley, L. (2007). Trauma and addiction: Implications for helping professionals. *Journal of Psychosocial Nursing and Mental Health Services*, 45(1), 1–7.
- Darbro, N. (2005). Alternative diversion programs for nurses with impaired practice: completers and non-completers. *Journal of Addictions Nursing*, 16, 169–185.
- DeLongis, A., Lazarus, R., & Folkman, S. (1988). The impact of daily stress on health and mood: Psychological and social resources as mediators. *Journal of Personality and Social Psychology*, 54(3), 484–495.
- Dunn, D. (2005). Substance abuse among nurses: Defining the issue. *Association of Perioperative Nurses*, 82(5), 775–802.
- Dupuy, H. J. (1984). The psychological general well-being (PGWB) index. In N. K. Wenger, M. E. Mattson, C. D. Furberg, & J. Elinson (Eds.), *Assessment of quality of life in clinical trials of cardiovascular therapies* (pp. 170–183). New York, NY: Le Jacq.
- Green, G., Hayes, C., Dickinson, D., Whittaker, A., & Gilheany, B. (2002). The role and impact of social relationships upon well-being reported by mental health service users: A qualitative study. *Journal of Mental Health*, 11(5), 565–579.
- Hansen, M., Ganley, B., & Carlucci, C. (2008). Journey from addiction to recovery. *Research and Theory for Nursing Practice*, 22(4), 256–272.
- Heise, B. (2003). The historical context of addictions in the nursing profession: 1850–1982. *Journal of Addictions Nursing*, 14(3), 117–124.
- Hyman, S. M., Paliwal, P., & Sinha, R. (2007). Childhood maltreatment, perceived stress, and stress-related coping in recently abstinent cocaine dependent adults. *Psychology of Addictive Behaviors*, 21(2), 233–238.
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness*. New York, NY: Delta.
- Krause-Parello, C. A. (2008). The mediating effect of pet attachment support between loneliness and general health in older females living in the community. *Journal of Community Health Nursing*, 25(1), 1–14.
- Lazarus, R., & Folkman, S. (1984). *Stress, appraisal and coping*. New York, NY: Springer.
- Lazarus, R. S., DeLongis, A., Folkman, S., & Gruen, R. (1985). Stress and adaptation outcomes. The problem of confounded measures. *American Psychologist*, 40(7), 770–779.
- Lewandowski, C. A., & Hill, T. (2009). The impact of emotional and material support on women's drug treatment completion. *Health and Social Work*, 34(3), 213–221.
- Lillibridge, J., Cox, M., & Cross, W. (2002). Uncovering the secret: Giving voice to the experiences of nurses who misuse substances. *Journal of Advanced Nursing*, 39(3), 219–229.
- Monroe, T. (2009). Addressing substance abuse among nursing students: Development of a prototype alternative-to-dismissal policy. *Journal of Nursing Education*, 48(5), 272–278.
- Mulia, N., Schmidt, L., Bond, J., Jacobs, L., & Korcha, R. (2007). Stress, social support and problem drinking among women in poverty. *Addiction*, 103, 1283–1293.
- Naegle, M. A. (1992). Impaired professional practice: Management issues. *NLN Publications*, 211–296.
- New Jersey Legislature. (2010). *Alternative to discipline program for impaired nurses through NJ Board of Nursing*. Retrieved from [http://www.njleg.state.nj.us/2004/Bills/PL05/83\\_.pdf](http://www.njleg.state.nj.us/2004/Bills/PL05/83_.pdf)
- Provencher, H. L. (2007). Role of psychological factors in studying recovery from a transactional stress-coping approach: Implications for mental health nursing practice. *International Journal of Mental Health Nursing*, 16, 188–197.
- Quinlan, D. (2003). Impaired nursing practice: A national perspective on peer assistance in the U.S. *Journal of Addictions Nursing*, 14, 149–155.
- Rambod, M., & Rafii, F. (2010). Perceived social support and quality of life in Iranian hemodialysis patients. *Journal of Nursing Scholarship*, 42(3), 242–249.
- Recovery and Monitoring Program of New Jersey. (2010). A program of the Institute for Nursing. Retrieved from <http://www.njsna.org>
- Rice, P. (1999). *Stress and health. Stress, concept, theories and models*. Pacific Grove, CA: Brooks/Cole.
- Rockett, I. R., Putnam, S. L., Jia, H., & Smith, G. S. (2006). Declared and undeclared substance use among emergency department patients: A population-based study. *Addiction*, 101, 706–712.
- Shaw, M. F., McGovern, M. P., Angres, D. H., & Rawal, P. (2004). Physicians and nurses with substance abuse disorders. *Journal for Advanced Nursing*, 47(5), 561–571.
- Skok, A., Harvey, D., & Reddihough, D. (2006). Perceived stress, perceived social support, and wellbeing among mothers of school-aged children with cerebral palsy. *Journal of Intellectual and Developmental Disability*, 31(1), 53–57.
- SPSS, Inc. (2010). *SPSS 19.0 for Windows*. Chicago, IL: Author.

- Suls, J. (1982). *Social support, interpersonal relations and health: Benefits and liabilities. Social Psychology of Health and Illness*. Hillsdale, NJ: Erlbaum Associates.
- Talbert, J. J. (2009). Substance abuse among nurses. *Clinical Journal of Oncology Nursing*, 13(1), 17–19.
- Taylor, A. (2003). Support for nurses with addictions often lacking among colleagues. *The American Nurse*, 35(5), 10–11.
- Trinkoff, A. M., & Storr, C. L. (1998). Substance use among nurses: Differences between specialties. *American Journal of Public Health*, 88(4), 581–585.
- Trouillet, R., Gana, K., Lourel, M., & Fort, I. (2009). Predictive value for age in coping: The role of self-efficacy, social support satisfaction and perceived stress. *Aging and Mental Health*, 13(3), 357–366.
- Warleby, G., Moller, A., & Blomstrand, C. (2002). Spouses of first-ever stroke victims: Sense of coherence in the first phase after stroke. *Journal of Rehabilitative Medicine*, 34, 128–133.
- West, M. M. (2003). A kaleidoscopic review of literature about substance abuse impairment in nursing: Progress toward identification of early risk indicators. *Journal of Addictions Nursing*, 14, 139–144.
- Zimet, G., Dahlem, N., Zimet, S., & Farley, G. (1988). The multi-dimensional scale of perceived social support. *Journal of Personality Assessment*, 52, 30–41.