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An Inquiry of the Effects of Stress Management on Recovery for Hospitalized Patients

Clair Walters

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An Inquiry of the Effects of Stress Management on Recovery for Hospitalized Patients

Clair Walters
 Dr. Catherine Franssen
 PSYC 301 Honors Enhancement
 Psychobiology of Stress

Abstract

Stress-particularly the physiology of stress- holds a lot of precedence when it comes to those who are suffering from an illness. The premise of this research is to analyze stress management strategies that were implemented across prevalent populations that had a significant impact on either physical or mental health. Ultimately, it is anticipated that this research will inspire Longwood to reduce stress for all the various populations that reside in the town of Farmville.

Methods

The bulk of our methodology centered around reading through scientific literature in order to refine our research question. On PsychInfo, we searched for key terms such as, "stress AND illness, recovery, and hospitals." We found 10 different peer reviewed articles that described stress management interventions across a spectrum of populations. We extracted key information from each source and searched for common themes amongst the sources.

Results

Based on the results of the studies that we looked at, there were significant differences between the health of the participants before and after the the stress management interventions (refer to Fig. 2 and 3) The most common interventions that were implemented involved some sort of stress education. In other words, participants were enrolled in a curriculum that was constructed for the sake of the study that included various important aspects of the relationship between stress and illness and how to manage symptoms of stress.

Discussion

The results of this research have inspired us to create our own stress education curriculum with the hopes that we would see a similar outcome. Prior to continuing our research, however, we will thoroughly examine more scientific literature as this project only contained 10 sources. We will also use other databases in different fields, such as Nursing.

Stress education is the most significant approach to recovering from illnesses that are directly caused or exacerbated by stress.



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Table 2. Psychological and physical outcomes.

	PRE			POST			p-value
	N	Mean	Std. Dev	N	Mean	Std. Dev	
Anxiety ^a	35	40.486	11.001	30	36.433	11.605	NS
Medical symptoms ^b	35	22.771	11.617	30	21.2	13.273	NS
Stress ^c	35	20.314	5.764	30	17.167	6.046	0.031
Depression ^d	35	19.314	7.741	30	14.4	8.783	0.039
Mental Function ^e	35	17.086	3.543	30	18.6	4.157	NS
Physical Function ^f	35	26.486	5.643	30	26.233	3.626	NS
Hostility ^g	35	17.143	8.640	30	16.533	8.665	NS

^aState Trait Anxiety Inventory (STAI).
^bMedical Symptoms Checklist (MSCL-90).
^cPerceived Stress Scale (PSS).
^dCenter for Epidemiologic Studies Depression Scale (CES-D).
^eMental Functioning Health Measure (SF-36).
^fPhysical Functioning Health Measure (SF-36).
^gHostility Measure (Cook-Medley).



Figure 1. Statistical analysis of guided meditation intervention on patients with coronary heart disease (Olivoa, Lavellea, Wrena, Fangb, and Oza, 2009). There was a significant difference between the participants overall stress levels after the intervention and at baseline.

Outcomes	Baseline (T1)	Follow-up (T2)	p-value	6-month follow-up (T3)	p-value
	(n = 16)	(n = 16)		(n = 15)	
SMBQ	4.7 (0.80)	4.4 (0.74)	0.05 ^a	4.0 (0.74)	0.01 ^a
PBSE scale	3.4 (0.81)	3.1 (0.60)	0.03 ^a	3.1 (0.77)	0.04 ^a

^aPaired samples t-test compared to baseline levels at T1.



Figure 2. Statistical analysis of stress education intervention on parents with chronically ill children (Lindstrome, Aman, Anderzen- Carlsson, Norberg, 2016). There were significant differences between the participants at baseline compared to 6 months after the intervention.



Better stress management education = better mental & physical health outcomes

"Psychiatric nurses in (inpatient) mental health centers should have the ability to provide the ISMP (integrated stress management program) intervention to improve (...) mental health." (S.Kim, H. Lee, H. Kim, D Noh, and Hyunhwa Lee, 2015)

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