

Abstract

The present study investigated the relationship between web intervention engagement and the reduction of job burnout in a randomized controlled trial. We examined both subjective and objective measures of engagement and how they affect the reduction of job burnout. We generated objective engagement measures based on participants' user history. Results showed small to medium negative correlations between engagement and job burnout. The number of unique pages visited was significantly correlated with subjective engagement measures. Patterns that emerged for correlations among job burnout and subjective engagement measures were discussed.

Introduction

- With the rapid advances in computer technology and internet access there has been a growing trend in the provision of mental health interventions over the Internet (Wells, Mitchell, Finkelhor, & Becker-Blease, 2007).
- Research has shown positive psychological, behavioral, and clinical outcomes (Cavanagh, et al., 2006; Tate & Zabinski, 2004) for those that use the intervention; however, limited participation and high attrition rates are common for mental health web interventions (Eysenbach, 2005; Ybarra & Eaton, 2005).
- As a result, the degree of engagement can have a significant effect on key outcomes and quality of life impact (Bennett & Glasgow, 2009).

This study examined the objective and subjective measures of engagement and how engagement affects the reduction of job burnout in a randomized controlled trial (RCT) for SupportNet, a web intervention developed to reduce job burnout by enhancing self-efficacy and social support among military behavioral healthcare providers.



Figure 1. SupportNet Web Intervention

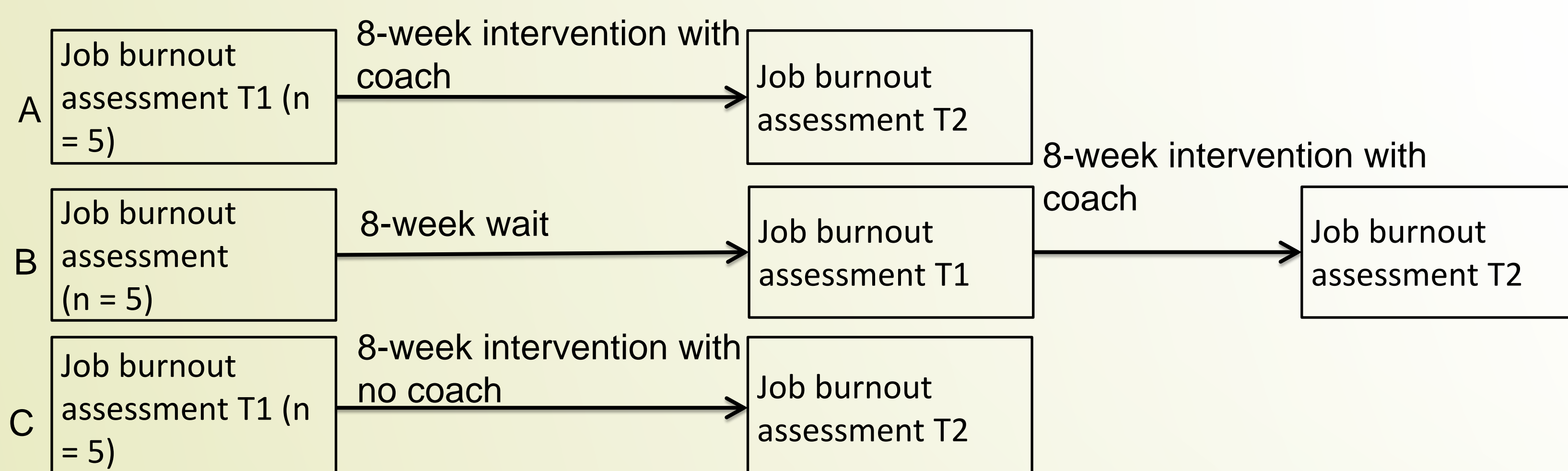
Method

Participants

U.S. Military behavioral healthcare providers ($N = 15$, 80.0% female, mean age = 48.67).

Inclusion criteria

- Working at least one year as a healthcare provider (e.g., physician, nurse), clinical psychologist, counselor, or social worker.
- Indirectly exposed to trauma through interaction with patients.
- Oldenburg Burnout Inventory (OLBI) score > 2.0 (range 1-5) (Halbesleben & Demerouti, 2005).



Results

Table 1. Cronbach's Alpha, Means, and Standard Deviations for Job Burnout

Job Burnout	α	Mean	SD
Time 1			
Overall	.85	2.62	.49
Disengagement	.63	2.43	.42
Exhaustion	.82	2.80	.66
Time 2			
Overall	.90	2.31	.59
Disengagement	.85	2.31	.66
Exhaustion	.82	2.32	.60

Table 2. Means and Standard Deviations for Engagement

	Mean	SD
Subjective Measures		
How many hours (Duration)		
Goal Setting	0.73	0.70
Self-Assessment	0.80	0.56
Resource Room?	0.60	0.51
Social Networking?	0.43	1.34
How often (Frequency)		
SupportNet use in general	3.27	1.16
Goal Setting	2.33	0.98
Self-Assessment	2.33	0.98
Resource Room	2.13	0.99
Social Networking	1.57	1.16
Objective Measures		
Total Minutes	113.56	105.60
Mean Minutes / Page	0.71	0.43
Number of		
Clicks	123.8	68.30
Logins	5.71	4.23
Unique Pages Visited	12.07	1.38
Social Connections	0.86	1.23
Goals	1.14	0.95

Table 3. Partial Correlations between Subjective Engagement and Job Burnout

Job Burnout Time 2	Hours spent (Duration)				Frequency				
	Self-Asmt	Social Ntwkg	Goal Setting	Res Rm	SupportNet use	Goal Setting	Self-Asmt	Res Rm	Social Ntwkg
Overall	-.11	.00	-.44	-.14	-.36	-.44	-.43	-.39	.00
Disengagement	-.14	.15	-.46	-.16	-.25	-.43	-.40	-.39	.12
Exhaustion	-.01	-.12	-.27	-.09	-.31	-.29	-.29	-.27	-.11

Note. asmt = assessment; ntwkg = networking; res rm = resource room.

Table 4. Partial Correlations between Objective Engagement and Job Burnout

Job Burnout Time 2	# Clicks	Total Minutes	Mean Minutes / Page	# Logins	# Unique Pages	# Social Connections	# Goals
Overall	-.30	-.42	-.36	-.43	.08	-.31	-.02
Disengagement	-.24	-.31	-.28	-.40	.15	-.20	.02
Exhaustion	-.31	-.47	-.38	-.41	.04	-.36	.05

In the correlations between objective and subjective engagement measures, the number of unique pages visited (objective) was strongly correlated with subjective measures of engagement (see Table 5).

Table 5. Pearson Correlations between Objective and Subjective Engagement

	# Clicks	Mean Minutes / Page	Total Minutes	# Logins	# Unique Pages	# Social Connections	# Goals
General SupportNet use							
Goal Setting (hrs)	.31	.28	.28	.33	.56*	.15	.37
Self-Assessment (hrs)	.39	.16	.21	.33	.49	.14	.51
Resource Room (hrs)	.21	-.01	.05	.08	.43	.08	.20
Social Networking (hrs)	.23	.20	.26	.28	.60*	.41	-.37
Goal Setting (frq)	-.01	.36	.11	.08	.21	-.00	-.06
Self-Assessment (frq)	.37	.46	.40	.50	.63*	.26	.19
Resource Room (frq)	.40	.41	.34	.48	.45	-.08	.53
Social Networking (frq)	.30	.36	.36	.43	.50	.28	-.04
Social Networking (frq)	-.07	.22	.04	.05	.21	-.10	-.15

* $p < 0.05$ level (2-tailed). hrs = hours; frq = frequency.

Discussion

This study examined (1) the degree to which web engagement influences 8-week job burnout outcomes; (2) the differences in subjective and objective measures when correlated to job burnout, and (3) the relationships between subjective and objective engagement measures.

- Job burnout disengagement subscale is an indicator of the behavioral aspect of job burnout.
- Participants who reported feeling disengaged from their jobs also perceived low web engagement.
- Among objective measures of engagement, no such pattern was shown.
- Participants who used more features of the web intervention perceived themselves to be more engaged with the intervention.

Limitations:

- Small sample size
- Lack of attrition data

Future studies:

- Identify characteristics of participants most likely to disengage
- Include additional social cognitive predictors of engagement such as outcome expectations, perceived need, and self-efficacy.

References

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