Coaching for Workers with Chronic Illness: Evaluating an Intervention

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Overview

This study is a pragmatic randomized control trial designed to test the effectiveness of a 12-week, 6-session phone-based coaching intervention to help promote resources and alleviate strain in working adults with chronic illnesses. Fifty-nine full-time workers with chronic illnesses were randomly assigned to either a coaching group or a waitlisted control group. Compared with the control group, the coaching group showed significantly improved work ability perceptions, exhaustion burnout, core self-evaluations, and resilience – yet no significant improvements were found for job self-efficacy, disengagement burnout, or job satisfaction.

Background

Chronic illnesses are prevalent in the U.S. According to the 2010 U.S. census data, 7.2 percent of people age 16 to 64 (14.4 million) indicated difficulty finding or maintaining a job due to a physical or mental health condition (Brault, 2012). Individuals with chronic illnesses who are employed may face challenges related to maintaining work and developing their careers. These challenges can be stressful and result in strains (long-term detriments to physical or psychological well-being). Effective interventions to help workers manage challenges related to working with illness may help prevent or alleviate worker strains and improve worker well-being.
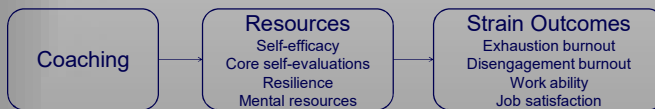
Challenges of Working with Chronic Illness
- Work limitations, difficulties managing symptoms at work, coming to work when sick, low levels of workplace support, disclosing illness at work (Munir et al., 2007)
- Stigmatization and discrimination (McGonagle & Barnes-Farrell, 2013)
- Meeting expectations for regular and consistent work hours (Vickers, 2003)
- Self-presentation and impression management (Clair et al., 2005; Ragins, 2007)
- Career management anticipating future capacities (Beatty, 2012)

How Coaching May Help
- Coaching may boost or activate coachees' internal resources (Behrendt, 2004; Grawe, 2004; Greif, 2007)
- Maintaining high levels of resources can help prevent or mitigate stressful appraisals (Lazarus & Folkman, 1984) and help prevent future resource loss and loss spirals (Hobfoll, 1989).

Proposed Model

Coaching → Resources (Self-efficacy, Core self-evaluations, Resilience, Mental resources) → Strain Outcomes (Exhaustion burnout, Disengagement burnout, Work ability, Job satisfaction)

Coaching Intervention
- Six one-hour sessions over 12 weeks (one session every other week)
- Phone-based for convenience and confidentiality
    - Calls were also recorded for analysis if coachee agreed
- Followed International Coach Federation (ICF) guidelines
- Framework: GROW model (Goal, Reality, Options, Way forward)
- "Homework" between sessions (e.g., journaling, reading)
- Focus on coachee empowerment
    - Coachees set their goals for the overall coaching session, as well as individual sessions; coach followed up at the end of each session and during the final session to check progress toward stated goals
- Aimed to provide social support, improve coachee insight and perspective, help coachees clarify and enact values, and support positive behavior change
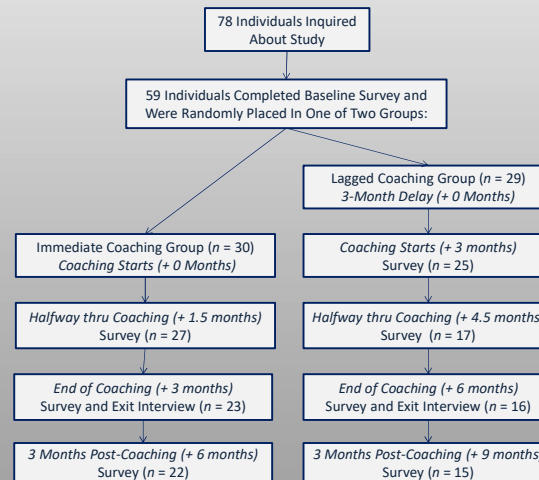
Method

Participants and Procedure
Study participants were recruited from two Midwestern Universities, a health insurance provider, and a pharmaceutical organization. Also, flyers were posted in three health care clinics and an advertisement was sent out via online social media (Twitter and blogs). We received requests for information from 78 individuals; 59 of them met enrollment criteria (currently working at least 30 hours per week, not planning to retire within two years, having one or more chronic health conditions). Participants were predominately female (86%), were well-educated (73% had a 4-year college degree or above) and were 38.7 years old on average. They worked an average of 41 hours per week, and had an average of 6.5 years' tenure with their employers. Most (69%) reported that their supervisor was aware of their illness, and 66% reported needing a workplace accommodation. Illnesses included: ankylosing spondylitis ($n = 6$), nerve injury or neuropathy ($n = 5$), fibromyalgia ($n = 4$), diabetes (types 1 and 2; $n = 3$), multiple sclerosis ($n = 3$), psoriatic arthritis ($n = 3$), psychiatric illness ($n = 3$), and Sjögren's syndrome ($n = 3$).

Study Design and Participant Flow
Participants were randomized into a coaching group or a waitlisted control group. They then completed an online survey just prior to starting coaching (coaching group) or just prior to their 12-week waitlisted period (control group), and completed the same survey 12 weeks later (post-coaching or just prior to starting coaching). They also completed a survey three months after coaching ended.

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                78 Individuals Inquired
                    About Study
                         |
     59 Individuals Completed Baseline Survey and
     Were Randomly Placed In One of Two Groups:
              |                          |
    Immediate Coaching Group      Lagged Coaching Group (n = 29)
    (n = 30)                      3-Month Delay (+ 0 Months)
    Coaching Starts (+ 0 Months)          |
              |                   Coaching Starts (+ 3 months)
    Halfway thru Coaching         Survey (n = 25)
    (+ 1.5 months)                        |
    Survey (n = 27)               Halfway thru Coaching (+ 4.5 months)
              |                   Survey (n = 17)
    End of Coaching (+ 3 months)          |
    Survey and Exit Interview     End of Coaching (+ 6 months)
    (n = 23)                      Survey and Exit Interview (n = 16)
              |                           |
    3 Months Post-Coaching        3 Months Post-Coaching (+ 9 months)
    (+ 6 months)                  Survey (n = 15)
    Survey (n = 22)
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Measures
- Job self-efficacy: Chen et al. (2004); 8 items; α = .83
- Core self-evaluations: Judge et al. (2003); 12 items; α = .84
- Resilience: Campbell-Sills & Stein (2007); 10 items; α = .88
- Mental resources: Tuomi et al. (1998); 4 items; α = .81
- Work ability: Tuomi et al. (1998); 4 items; α = .71
- Burnout: Demerouti et al. (2010); 16 items; α = .70 (exhaust); .83 (disengage)
- Job satisfaction: Cammann et al. (1983); 3 items; α = .89
- Illness severity: Moss-Morris et al. (2002); 5 items; α = .80
- Psychological distress: Nguyen et al. (1983); 10 items; α = .87
- General health: single item: "Would you say that in general your health is…"

Results

Group Differences on Baseline Measures: Results of t-tests and chi square tests of differences between the coaching group and the control group in their demographics and survey measures at baseline revealed no significant differences

Group X Time Interactions: To determine whether coaching participants had improved their standing on each of the outcome variables after coaching compared with the control group, we ran a series of univariate repeated measures ANOVAs with group X time interactions. We used p-value of .019 to determine statistical significance of each univariate test (we used a Bonferroni correction with family-wise p value set at .15).

Outcome Measures	Coaching Group (n = 23) Mean (SD)	Waitlisted Control (n = 25) Mean (SD)	F	Partial η²
Job Self-Efficacy			4.60†	.09
Pre	3.42 (.66)	3.62 (.57)		
Post	3.70 (.58)	3.59 (.80)		
Core Self-Evaluations			9.73**	.18
Pre	2.84 (.48)	3.09 (.55)		
Post	3.27 (.59)	3.12 (.57)		
Resilience			7.28*	.14
Pre	2.40 (.57)	2.54 (.73)		
Post	2.67 (.55)	2.41 (.80)		
Mental Resources			18.53***	.29
Pre	2.91 (.86)	3.28 (.95)		
Post	3.72 (.69)	3.13 (.83)		
Work Ability			5.91*	.11
Pre	3.39 (.75)	3.36 (.66)		
Post	3.82 (.39)	3.23 (.91)		
Exhaustion Burnout			8.75**	.16
Pre	2.92 (.40)	2.86 (.38)		
Post	2.65 (.46)	2.89 (.34)		
Disengagement Burnout			.17	.00
Pre	2.42 (.55)	2.46 (.56)		
Post	2.33 (.57)	2.43 (.44)		
Job Satisfaction			.52	.01
Pre	3.62 (.92)	3.49 (.93)		
Post	3.53 (.99)	3.59 (1.00)		

†p < .05. *p < .019. ** p < .01. ***p < .001.

Indirect Effects of Coaching on Strain Outcomes via Resources: We used the Hayes (2013) process macro, controlling for baseline levels of both the mediators and outcome variables in all equations. Coaching group was the independent variable, resources at time 2 (post-coaching) were mediators, and strain-related outcomes also at time 2 (post-coaching) were outcomes. Indirect effects were observed from coaching group to work ability through core self-evaluations, resilience, and mental resources; from coaching group to exhaustion burnout through mental resources, from coaching group to disengagement through job self-efficacy, core self-evaluations, and resilience, and from coaching group to job satisfaction through job self-efficacy, core self-evaluations, and resilience.

Stability of Results: Paired samples t-test results indicated no significant differences between post-coaching outcome scores and 12 weeks post-coaching outcome scores, providing support for the stability of effects over 12 weeks post-coaching.

Attrition Analysis: Results of chi square tests and t-tests indicated that completers had higher levels of education than attriters and attriters had higher levels of psychological distress t(28) = 2.42, p < .05 than completers. No other significant differences were found.