Break-Need Fit: Development of a New Scale Measuring the Effectiveness of Work Breaks

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Introduction

- Work breaks have been studied as a way to recover from work, but the findings on the effectiveness of work break characteristics have been mixed
  - Recovery: The process of regaining something that has been lost and of returning to a former state (Sonnentag, Niessen, & Neff, 2012, p. 867)
  - Work break characteristics include break length, frequency, activities, timing, location, and preference (e.g., Hunter & Wu, 2016)
- Assumption that the effectiveness of work break characteristics is static across workdays, regardless of the day-to-day job demands employees experience, is a potential explanation for inconsistent findings
  - However, effectiveness of work break characteristics could fluctuate depending on the specific daily job demands
- **Aims of Present Study**
  - Focus on the overall effectiveness of work breaks rather than individual break characteristics
  - Study introduces the novel construct break-need fit
    - Break-need fit: The degree to which work breaks meet an employee's recovery needs during working hours
  - Development of a scale to measure break need fit

Method

Stage I: Item Generation
- Conducted interviews with 13 employees from a variety of industries:
  - What types of work breaks are most recovering to you?
  - What types of breaks help you restore your energy the most?
- Examined existing scales as potential sources for items (e.g., needs-supplies fit; Cable & DeRue, 2002)
- Generated 29 items

Stage II: Psychometric Properties of the Break-Need Fit Scale
- Evaluated the psychometric properties of the 29 items using a sample from Amazon's MTurk (N = 417)
  - Sample was divided into 2 subsamples
- Subsample 1 (n = 208) was used to conduct an exploratory factor analysis (EFA) and examine the scale's reliability using Cronbach's alpha
  - Set of 29 items was reduced to 8 items
- Subsample 2 (n = 209) was used to conduct a confirmatory factor analysis (CFA) and to assess construct and criterion-related validity of the 8-item break-need fit scale
- Measures used to assess **convergent** validity: Needs-supplies fit, job autonomy
- Measures used to assess **discriminant** validity: Learning goal orientation, innovative work behavior
- Measures used to assess **criterion-related** validity: Vigor, fatigue

Results

Items	Factor Loadings
1. The activities I engage in during my work breaks help me recover.	.72
2. I take the types of work breaks that help me recover the most.	.75
3. I can mentally disconnect from work during my work breaks.	.72
4. The work breaks I take at my job help me unwind from the demands of my job.	.85
5. The time of the day when I take my work breaks helps me recover.	.77
6. The location where I take my work breaks helps me recover.	.84
7. I feel recovered from the work breaks I take in a given day.	.83
8. The number of work breaks I take helps me recover.	.91

- Final 8 items loaded onto 1 factor
- Cronbach's alpha for final 8 items was .91
- CFA found good fit for final 8 items

	1	2	3	4	5	6	7
1. Break-Need Fit	-						
2. Needs-Supplies Fit	.36**	-					
3. Job Autonomy	-.03	-.04	-				
4. Vigor	.36**	.44**	.03	-			
5. Fatigue	-.28**	-.32**	.06	-.51**	-		
6. Learning Goal Orientation	.16*	.24**	.06	.23**	-.14*	-	
7. Innovative Work Behavior	.15*	.32**	.09	.50**	-.13	.51**	-

- Correlation between break-need fit and construct supports validity
- Correlation between break-need fit and construct does not support validity
- ** p < .01
- * p < .05

Discussion

- Findings on the factor structure and reliability of the scale were in line with expectations

- Findings on the validity of the break-need fit scale were a bit more nuanced
  - Positive relationship between break-need fit and needs-supplies fit supports convergent validity
  - Lack of significant relationship between break-need fit and job autonomy could be due to the job autonomy scale that was used
  - Correlations with learning goal orientation and innovative work behavior were relatively small, which still provides some support for discriminant validity
  - Correlations with vigor and fatigue support criterion-related validity

- Taken together, the findings provide support for the psychometric soundness of the break-need fit scale

Implications

- This study expands the literature on recovery by providing a new way to assess the effectiveness of work breaks

- The findings on break-need fit can inform organizational practices and policies

- **Future Directions**
  - Examine the relationship between break-need fit and other variables relevant to recovery
  - Measure break-need fit across days in order to examine its dynamic nature
  - Examine potential mediators and moderators for the relationship between break-need fit and recovery

References

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