Opportunities to modify one's job and having challenge demands associated with basic need satisfaction profile that predicts better occupational well-being outcomes concurrently and after 4 months



Antecedents and well-being outcomes of latent basic psychological need proles: A two-wave study



Presenter: Merit Morikawa | merit.morikawa@aalto.fi

# Introduction

Aim: To identify basic psychological need satisfaction (BPNS) subgroups that experience need satisfaction in a similar way
Research questions:

What BPNS subgroups may be identified in a general working population sample?
Do job demands and job crafting predict subgroup membership?
Does subgroup membership predict occupational well-being outcomes?

Relevance: Lack of similar person-centered studies in representative samples highlights the theoretical contribution of the study to research on self-determination theory (Deci & Ryan, 2000; Deci et al., 2017) and Job-demands and resources theory (Bakker et al., 2023)



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Classes	u	Para- meters	BIC	aBIC	AIC	Entropy	BLRT p-value
1	-10,045	6	20,135	20,116	20,101		
2	-9,487	10	19,050	19,018	18,994	0.71	0

3	-9,323	14	18,753	18,709	18,675	0.78	0
4	-9,206	18	18,548	18,491	18,448	0.83	0
5	-9,119	22	18,406	18,336	18,283	0.74	0
6	-9,059	26	18,315	18,232	18,170	0.75	0
7	-9,020	30	18,267	18,171	18,099	0.77	0
8	-8,982	34	18,223	18,115	18,033	0.79	0
9	-8,954	38	18,197	18,076	17,985	0.80	0



# Methods

- Data: Nationally representative survey sample of Finnish workers (n = 1972) & follow-up survey 4 months later with 398 participants
- BPNS subgroups were identified using latent profile analysis based on basic psychological needs (need satisfaction and autonomy, competence and relatedness)
- Scales: Burnout Likert scale 1-5, others 1-7
- LPA was conducted using MPlus, comparing 2-9 latent profile solutions. Analysis with 1000 starts and 50 iterations to find global solutions
- Predictors: Multinomial logistic regression was used to predict subgroup membership with workload, challenge demands, hindrance demands and job crafting.
  Outcomes: Subgroups were used to predict occupational wellbeing outcomes of work engagement and burnout symptoms with analyses of variance and Bonferroni post-hoc tests

# Results

Four-profile solutions was selected based on fit indices and solutions content

		Autonomy satisfaction M (SD)	Competence satisfaction M (SD)	Relatedness satisfaction M (SD)
Profile 1: Dissatisfied	n = 86	2.12 (0.96)	2.53 (0.91)	2.31 (1.03)
Profile 2: Neutral	n = 721	3.7 (0.94)	4.43 (0.75)	4.25 (0.80)
Profile 3: Satisfied	n = 1085	4.95 (1.19)	6.1 (0.66)	5.85 (0.84)
Profile 4: Dissatisfied yet				
competent	n = 80	2.78 (1.26)	6.02 (0.77)	2.18 (0.77)

- Predictors: Job crafting, workload, challenge demands, hindrance demands were significantly associated with the concurrent profile membership
- Outcomes: Membership to different profile groups predicted both work engagement and, with smaller group differences, burnout outcomes both concurrently and longitudinally

Note. Need satisfaction measured with 3 items per need from need satisfaction scales from BPNSF (Chen et al., 2015)

	Profile 2: Neutral				Profile 4: Dissatisfied	Profile 4: Dissatisfied yet competent	
	Est. [95% CI]	OR [95% CI]	Est. [95% CI]	OR [95% CI]	Est. [95% CI]	OR [95% CI]	
Job crafting	0.63 [0.39, 0.88]	1.88 [1.47, 2.40]	1.23 [0.98, 1.49]	3.43 [2.66, 4.42]	0.39 [0.07, 0.71]	1.48 [1.07, 2.04]	
Workload	-0.05 [-0.21, 0.12]	0.95 [0.81, 1.13]	-0.24 [-0.41, -0.07]	0.79 [0.66, 0.93]	-0.25 [-0.47, -0.03]	0.78 [0.63, 0.97]	
Hindrance demands	-0.25 [-0.45 <i>,</i> -0.05]	0.78 [0.64, 0.95]	-0.50 [-0.70, -0.29]	0.61 [0.5 <i>,</i> 0.74]	0.28 [0.02 <i>,</i> 0.54]	1.32 [1.02, 1.71]	
Challenge demands	0.26 [0.06, 0.46]	1.3 [1.06, 1.58]	0.75 [0.54, 0.95]	2.11 [1.72, 2.6]	-0.20 [-0.46, 0.06]	0.82 [0.63, 1.06]	

*Note*. Profile 1: Dissatisfied is the reference category, significant. Demographic variables of age, gender and level of education were controlled for, they did not have significant coefficients. Used measures: Job crafting with OJCS (Vanbelle et al., 2017), Workload 3 items adapted from Quality of Employment survey (Karasek, 1979), Hindrance and challenge demands (Harju, 2021).

# Conclusions

- The identified BPNS subgroups differed mainly in their overall level of need satisfaction, understandable as needs have been found to be strongly intercorrelated.
- Especially ability to modify one's job was associated with membership to subgroups with greater BPNS. Challenge demands were positively related to membership to subgroups with higher BPNS. Hindrance demands were related to membership to dissatisfied and especially dissatisfied yet competent group.
- The subgroups with more overall need satisfaction had more favourable well-being outcomes. Having strong competence satisfaction seemed to have small protective effect cf. the dissatisfied group.

#### Authors

Merit Morikawa, Doctoral researcher Frank Martela, Assistant professor

		ed Profile 2: Neutral	Profile 3: Satisfied	Profile 4: Dissatisfi yet competent	Significant differences
	M [95% CI]	M [95% CI]	M [95% CI]	M [95% CI]	(Bonferroni post hocs)
Work engagement a	at T1 3.47 [3.22;3.73]	4.77 [4.68;4.86]	6.00 [5.93;6.07]	4.07 [3.81;4.34]	3 > 2*** > 4*** > 1**
Work engagement a	at T2 3.33 [2.83;3.84]	4.63 [4.42;4.83]	5.71 [5.52;5.90]	3.49 [2.76;4.21]	3 > 2*** > 4*** > 1*
					1 > 2, 4, > 3
Burnout at T1	3.27 [3.11;3.42]	2.67 [2.61;2.72]	2.09 [2.04;2.13]	2.83 [2.67;2.99]	(all p < .001)
					1, 2, 4 > 3
Burnout at T2	3.09 [2.83;3.35]	2.72 [2.62;2.83]	2.32 [2.22;2.41]	3.17 [2.80;3.55]	(all p < .001)

Note. Used measures: Work engagement with UWES-3 (Schaufeli et al., 2019), Burnout with 4 item version of BAT (Schaufeli et al., 2020)

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Organization structural characteristics should be considered as antecedents for autonomous motivation and basic psychological need satisfaction



# The influence of structure: How organization structural characteristics affect motivation? – A conceptual review

**Presenter and author:** Merit Morikawa | merit.morikawa@aalto.fi

### Introduction

• Literature on flat organizing: flatter organizing is more human-centric and empowering (Bernstein et al., 2016; Hamel & Zanini, 2020; Laloux, 2014, Morikawa et al., 2024) & flatter organizations need more autonomous motivation (Martela & Kostamo, 2018) • Only sparse research directly considering relationship between organization structural characteristics and employee motivation (Foss & Klein, 2022; Lee & Edmondson, 2017) • While organization design literature is more concerned with successful organizing, work psychology research is focused in interpersonal relations and work design rather than organizational structures • Research on autonomous motivation has focused on job characteristics, social support, types of leadership, personal differences and compensation practices (Deci et al., 2017; Forest et al, 2023) not organizational structures • How organization structural characteristics may enable or hinder autonomous motivation?

# Background

- Self-determination theory: Innate basic psychological needs of autonomy, competence and relatedness necessary for well-being and autonomous motivation (Deci & Ryan, 2000; Vansteenkiste et al., 2010)
- **Circumplex model:** Need supportive behavior a combination of Autonomy and Competence support (structure) (Aelterman et al., 2019; Aelterman & Vansteenkiste, 2023)
- Organization design:
  - Enabling control > coercive control (Adler & Borys, 1996), but coercive systems may be favoured if they create more clarity (O'Grady, 2019)
  - Organizational formalization leads to team empowerment, but job formalization does not (Hempel et al., 2012)
  - Selective intervention experienced as arbitrary, negatively affecting employee satisfaction (Foss, 2003)
  - Organizational and employee self-management are positively related to work engagement and negatively to burnout (Morikawa et al., 2024)
- Work design: Stimulating, mastery, autonomy, relatedness and tolerable characteristics (Parker & Knight, 2023)

Characteristics that conceal and cloud the workings of the operating context and role of one's own work in there so that one feels restricted in what and how they can do there, and how one's work relates to others in the organization

Low directiveness

Characteristics that increase opportunities to make decisions in the organization, and use one's own discretion to accomplish tasks and partake in the development of the organization and its practices

# **Examples:**

- Reasoning behind rules is unclear
- Ambiguous or unclear decisionmaking structure
- Implicit hierarchies
- "Too much" or conflicting formalization

Need thwarting

#### **Examples:**

- Formalization of behavior (Mintzberg, 1979)
- Authoritative decision-making

Characteristics that control one's behavior in a way that determines how one can act in the organization

# Model and proposed relationships

- Organization structural characteristics that are clarifying and engaging are need supportive while, chaotic and prescriptive are need thwarting
- Combination of engaging and clarifying characteristics will lead to best conditions for



### **Examples:**

- Flexibility and repair (Adler & Borys, 1996)
- Target and competence formalization (Mintzberg, 1979)
- Employee self-management (Morikawa et al., 2024)

#### **Examples:**

- Internal and global transparency (Adler & Borys, 1996)
- Explicit decision-making structures (Martela, 2022)

Characteristics that help organizational members understand the operating context where they are, why things are the way they are, and how they can function there in a meaningful way

#### **Organization: Less interpersonal**

autonomous motivation through basic need satisfaction

- This effect is partly mediated by work characteristics, participation, having a voice and job crafting
- The effect may be more prominent in contexts with less interpersonal supervision and leadership through practices and structures

# Implications

- For research: Organization structural characteristics should be more explicitly considered in research on autonomous motivation and wellbeing in organizations.
- For practice: By designing organizational structures and practices to be  $\bullet$ engaging and clarifying, not obstructive and prescriptive, it is possible to create contexts that better enable autonomous motivation.

References

https://tinyurl.com/532c6rkm

#### supervision

#### **Individual differences**

• Tenure

- Competence
- Position

**Organization structural** 

characteristics

• Clarifying (+)

• Engaging (+)

• Prescriptive (-)

• Chaotic (-)

Participation, voice, crafting

**Need supportive/ thwarting** work characteristics (see Parker & Knight, 2023) Mastery

- Autonomy
- Tolerable

**Basic need** satisfaction/ frustration  $\rightarrow$ Autonomous motivation