

Investigating the role of individual differences in needs and workplace supplies in job satisfaction: A response surface analysis

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Job satisfaction

- *Job satisfaction refers the way how people feel about their job and its various aspects. It has to do with the extent to which people like or dislike their job.* Spector (1997)
- Job satisfaction is substantially related to numerous constructs and outcomes under consideration in I/O psychology and applied settings
 - Job performance Judge et al. (2001)
 - Identification with the organization de Moura et al. (2009)
 - Turnover intention Van Dick et al. (2004); de Moura et al. (2009)
 - Organizational citizenship behavior Organ and Ryan (1995)

Person-Job Fit

- Person-job fit (person-environment fit) Edwards, Caplan, & Harrison (1998)
 - Demands-abilities fit
 - Need-supply fit

- Core of many models and theories in I/O psychology
 - Person-Environment (P-E) Fit Theory Edwards, Caplan, & Harrison (1998)
 - Holland's theory of vocational choice Holland (1959)
 - The Minnesota Theory of Work Adjustment Dawis & Lofquist (1984)

- Person-job fit plays a major role in job satisfaction and motivation
Dörendahl, Niepel, & Greiff (2020); Keller & Semmer (2013); Kristof-Brown et al. (2005); Krumm, Grube, & Hertel (2013); Spokane, Meir & Catalano (2000)

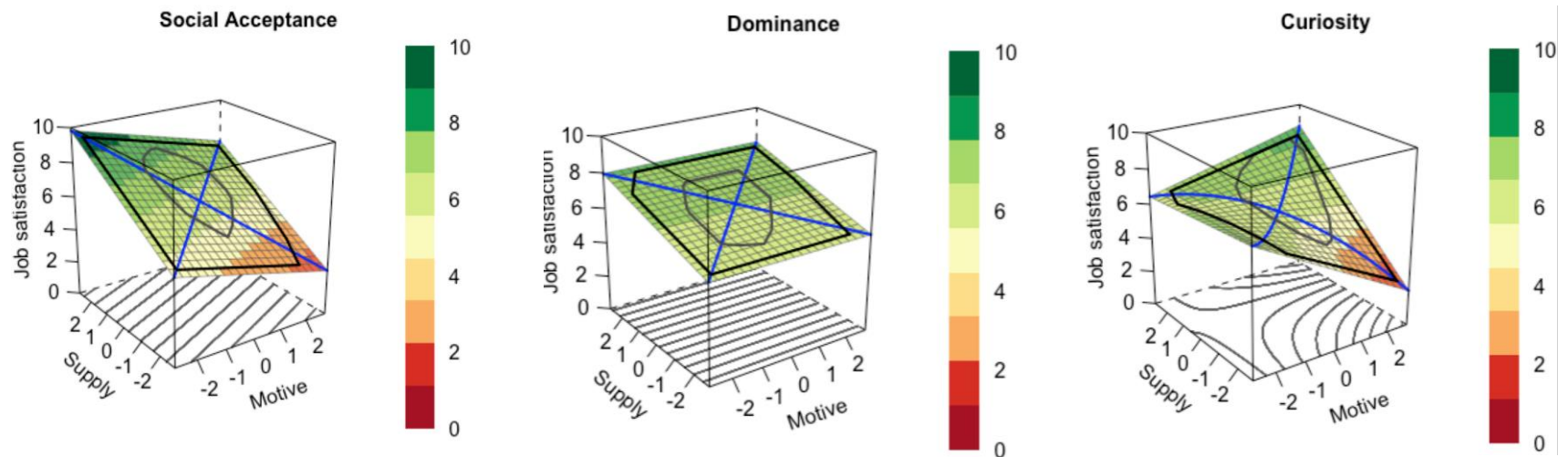
Need-Supply Fit

- Study of Dörendahl, Niepel, and Greiff (2020) on the effects of need-supply fit on job satisfaction
 - Fine-grained analysis of the effects of need-supply patterns for 16 fundamental motives Dörendahl, Niepel, & Greiff (2021); Kemper (2021); Kemper, Dörendahl, & Greiff (2017); Reiss (2004)

Motive	Description
Social acceptance	Need to be accepted by other people
Status	Need to gain and maintain reputation and acquire a prominent position in society
Autonomy	Need for independence from other people
Sex	Need for a fulfilling sex life and erotic experiences
Retention	Need to build up and maintain stocks
Dominance	Need to influence people as well as processes
Family	Need to provide solicitude for one's family. The motive mainly refers to one's family of origin but might also include one's partner or offspring
Physical Exercise	Need for physical activity and exercise
Food Enjoyment	Need to have pleasurable experiences involving food. This motive goes beyond the bodily need of eating
Curiosity	Need to expand one's knowledge, gain new insights, and engage in intellectual challenges
Safety	Need for a peaceful and secure life
Idealism	Need to support disadvantaged people and improve society
Social Participation	Need for companionship
Structure	Need to organize and structure one's environment in a simple and unambiguous manner
Morality	Need to comply with social norms that apply to society
Revenge	Need to retaliate wrongs or insults from others

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 - Response Surface Analysis Edwards & Parry (1993)



Research question

- Main goal: Replication of effects observed by Dörendahl et al. (2020)
 - Precise knowledge on predictor combinations is necessary to improve decision making in applied settings
 - Interaction effects are usually difficult to replicate
 - Do the observed effects hold for other measures and samples?

Methods

Measures

Construct	Current study	Dörendahl et al. (2020)
Needs	16 fundamental motives - Motivation Survey (Kemper, 2021) 3 items per motive ($\omega = .60 - .90$)	16 fundamental motives 16 MRS (Dörendahl, Niepel, & Greiff, 2021) 3 items per motive ($\omega = .58 - .88$)
Supplies	- Ad hoc scale for supplies of 16 fundamental motives - Single items	- Ad hoc scale for supplies of 16 fundamental motives - Single items
Job satisfaction	- Abridged job in General Scale (Stanton et al., 2001) 8 Items ($\alpha = .85$)	- Ad hoc scale - Single item

Participants

- N = 203 German employees (62.5% female), age M = 30.6 years ($SD = 12.5$)
- Employment status
 - 75% full time job (≥ 35 h per week)
 - 25% part time job (25-34h per week)
- Different sectors
 - 9.9% Health care
 - 7.4% Education and training
 - 6.9% Business consulting
 - 6.9% Public administration
 - 5.9% Automobile trade and repair
 - ...



RSA Model Selection

Identify pool of well-fitting models Schönbrodt (2016)

- 1) Exclude models with $CFI < .95$
- 2) Exclude models with $AICc > 2$

Replication attempt (successful)

- 3a) Check if model of Dörendahl et al. (2020) is in the pool
- 4a) Compare model of Dörendahl et al. (2020) to our best fitting model according to $AICc$ with Likelihoodratio-test (LRT)

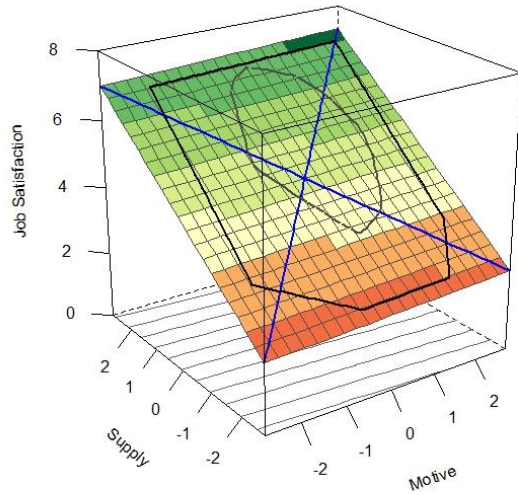
Replication attempt unsuccessful

- 3b) Compare most restrictive model in our pool to the next more liberal model with Likelihoodratio-test (LRT)

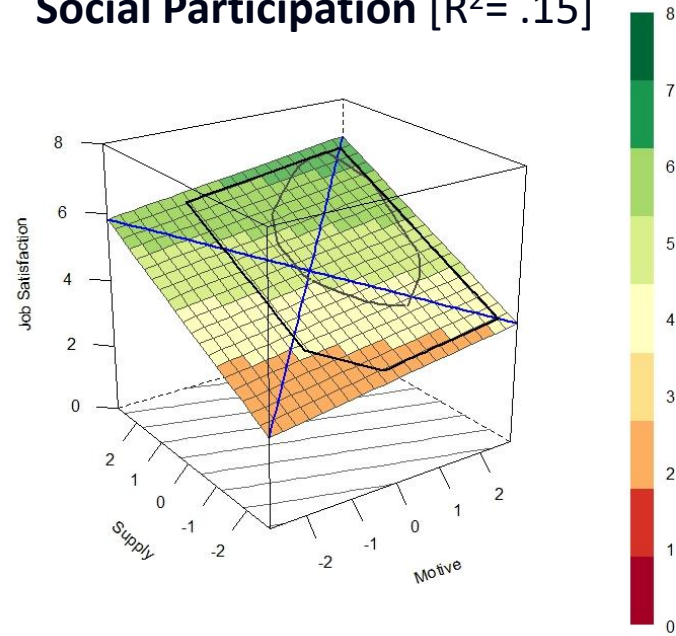
Results

Replicated Effects I

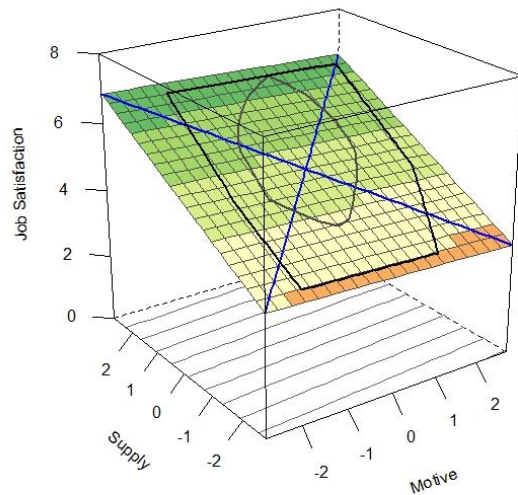
Social Acceptance [$R^2 = .31$]



Social Participation [$R^2 = .15$]

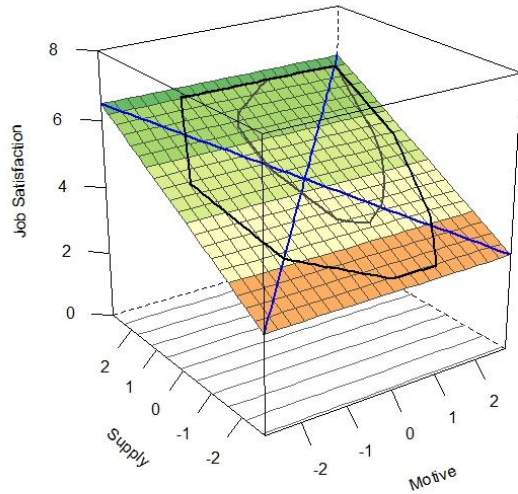


Status [$R^2 = .15$]

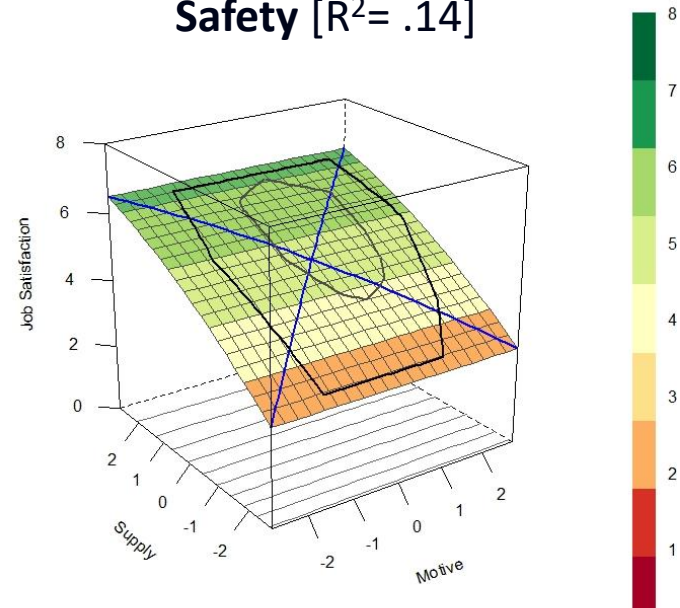


Replicated Effects II

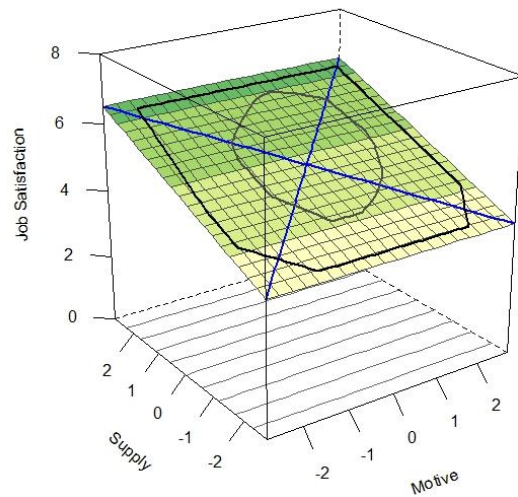
Structure [$R^2 = .18$]



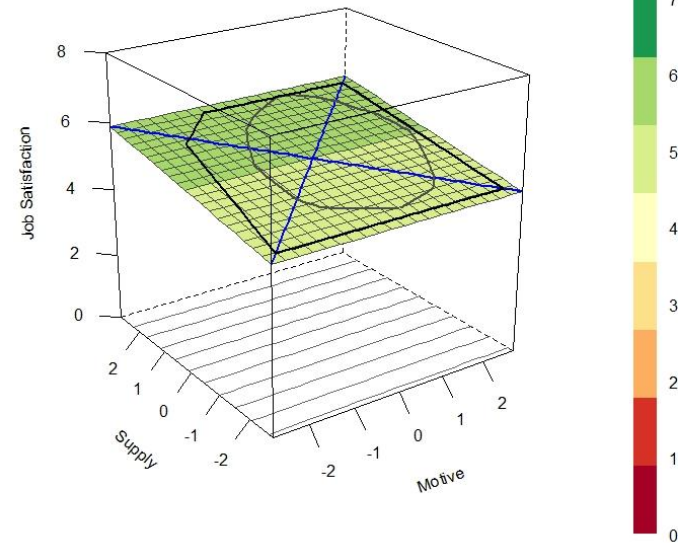
Safety [$R^2 = .14$]



Dominance [$R^2 = .11$]

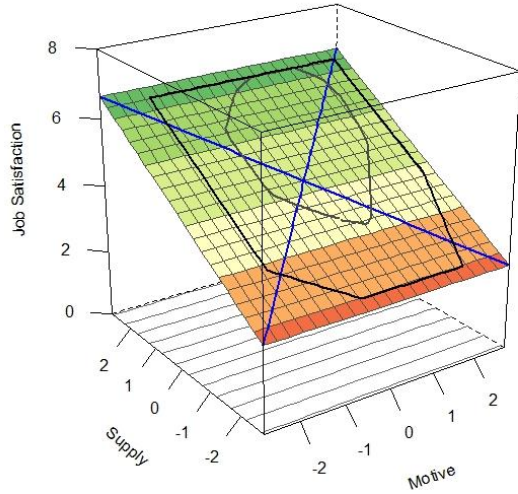


Physical Exercise [$R^2 = .02$]

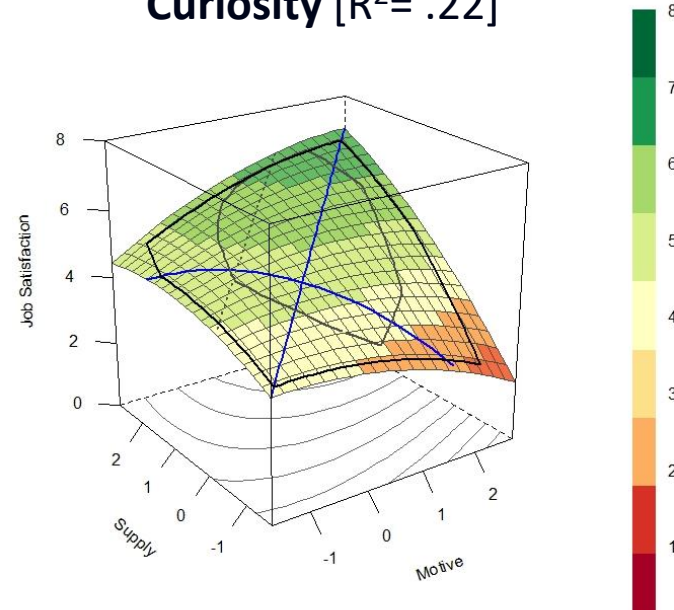


Further Effects (not replicated)

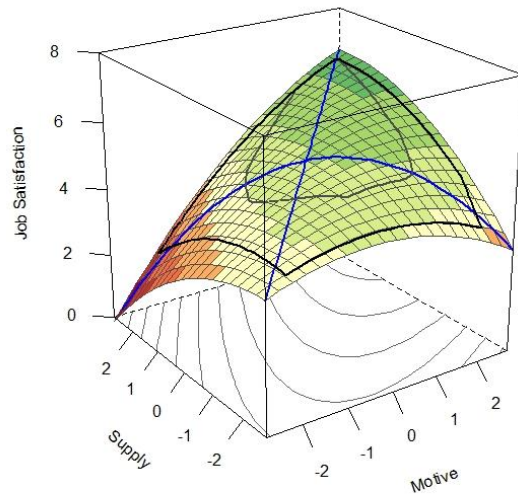
Autonomy [$R^2 = .21$]



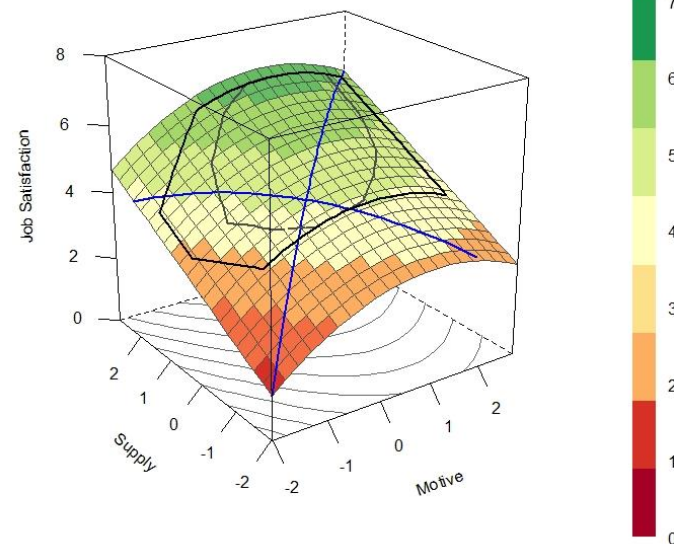
Curiosity [$R^2 = .22$]



Idealism [$R^2 = .15$]



Morality [$R^2 = .15$]



Summary and Discussion

Take Home Message

- Replication of the effects reported by Dörendahl et al. (2020)
 - About half of the models were replicated, but no interaction effects
- Additive effects (Social Acceptance, Social participation, Status)
 - Motive strength may play a role and should be considered
- Main effects of supply (Structure, Safety, Dominance)
 - Motive strength not relevant, focus on creating necessary conditions
- Interaction effects for some motives (Curiosity, Idealism, Morality)
 - Motive strength highly relevant, consider it to avoid detrimental effects on Job satisfaction
- Are we any wiser now?
 - Yes, more confidence in the effects of many motive-supply combinations
 - Better use a multi-item measure of supply next time **Edwards & Shipp (2007)**



Thank you for your
attention and interest in
our research!