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ANTECEDENTS OF BUSINESS MODEL INNOVATION IN SMES: THE ROLE OF CEO PSYCHOLOGICAL TRAITS

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MOTIVATION

Business model innovation (BMI) as a way of changing business logic attracts rapt attention being an available source of novelty and nontrivial changes in the key elements of value creation, delivery, and capture of a firm that lead to sustainable success (Foss & Saebi, 2017).

Enterprises reactions to the environmental changes depend significantly on the internal factors, especially during the time of uncertainty (Steinerowska-Streb, 2012).

Recent studies show that the competitive advantage of a firm strongly depends on its ability to innovate and experiment with its’ business model(s), especially in the SME context (Heikkilä et al., 2018; Lopez-Nicolas et al. 2019).

Moreover, the role of CEOs, their personal characteristics, and the decision-making process undertaken by them have a crucial role in sustainable development, innovative activity, and competitive advantage achievement of SME (Del Giudice & Maggioni, 2014; Carr, Vardaman, Marler, McLarty, & Blettner, 2021).

RQ

1) How do personal traits of CEO relate to the BMI in the SME context?

2) How does the general uncertainty moderate the relationship between BMI and CEO psychological traits?

MAIN DEFINITION

Business model innovation - “an innovation process which is associated with radical change (i.e., designed, novel, nontrivial changes) in the configuration of an existing BM, aimed at building and maintaining competitive advantages” (Zhang , et al., 2020, p. 1)

THEORETICAL FRAMEWORK

Strategic choice perspective (Judge & Zeithaml, 1992; Miles & Snow, 1978)
Upper echelons theory (Hambrick & Mason, 1984)

ANTECEDENTS

Persistence (persistent behavior) - "a desire of a person to undergo the obstacles to achieve the goal" (Howard and Crayne, 2019)

ADHD Attention-Deficit/Hyperactivity Disorder (ADHD-like behavior) - "chronic hyperactivity, impulsivity, and inattentiveness" (American Psychiatric Association [APA], 2013)

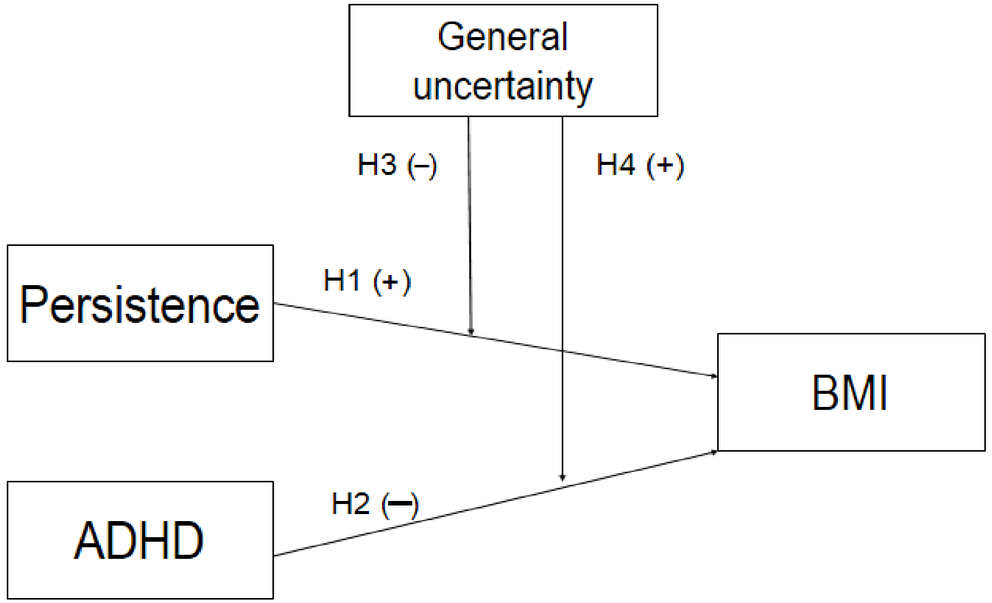

Figure 1. Theoretical model

MODERATOR

General uncertainty - changes perceived by individual which happen to a particular extent involving traditional way of working, applied organizational strategy, values and structure (Rafferty & Griffin, 2006)

HYPOTHESIS

H1: Persistence is positively related to the BMI in SMEs
H2: ADHD is negatively related to the BMI in SMEs
H3: General Uncertainty negatively moderates positive relationship between Persistence and BMI in SMEs
H4: General Uncertainty positively moderates negative relationship between ADHD and BMI in SMEs

DATA AND METHOD

Survey questionnaires (dependent variable, predictors, and moderator) and **financial data of 133 Russian SMEs** collected in July – August 2019. (collected during the project "From start-up to global innovative company: Development of sources of competitive advantage in Russian entrepreneurial firms" Grant ID 19-18-00081, total number of companies = 600)

CV – firm age, ROA, Revenue, Ownership, Gender, Age, Education, Dynamism, Heterogeneity, Hostility, Region, Industry

Method: Regression analysis (hierarchical linear modeling HLM)

RESULTS

	BMI	Innovation Index
ADHD, aggregated	0.737 (0.597) [0.220]	1.984* (0.793) [0.014]
Persistence, aggregated	1.023*** (0.211) [0.000]	1.310*** (0.280) [0.000]
ADHD X General uncertainty. aggregated	-0.134 (0.144) [0.353]	-0.383* (0.191) [0.047]
Persistence X General uncertainty. aggregated	-0.202*** (0.051) [0.000]	-0.350*** (0.068) [0.000]
Controls	Yes	Yes
Region (dummies)	Yes	Yes
Industry (dummies)	Yes	Yes
R^2	0,33	0.32

H1: Persistence is positively related to the BMI in SMEs (**confirmed**)

H2: ADHD is negatively related to the BMI in SMEs (**insignificant, but refuted in robustness check**)

H3: General Uncertainty negatively moderates positive relationship between Persistence and BMI in SMEs (**confirmed**)

H4: General Uncertainty positively moderates negative relationship between ADHD and BMI in SMEs (**insignificant, but refuted in robustness check**)

CONCLUSION AND DISCUSSION

Our research contributes to the strategic entrepreneurship literature at least **in three ways:**

First, our research adds to the growing body of research on psychological drivers of innovations and BMI. Addressing the review of (Foss & Saebi , 2017) we argue that personality traits can become drivers and facilitators of innovations, based on specific circumstances.

Second, we provide better explanations of BMI antecedents among SMEs, considering the CEO's characteristics. Grounding on the upper echelon theory and strategic choice perspective we show the bound between a leader's personal characteristics and the development of BMI in SMEs.

Third, we examine the moderating effect of general uncertainty on the relationship between of CEOs ADHD-like and persistent behavior and BMI. We show that due to the differences in risk sensitivity and perception of the environment, uncertainty dramatically changes CEO's decision to innovate a business model.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

1) The link between personality traits and BMI is not guaranteed in a long period (cross-sectional data) – longitudinal study is needed
2) Self-reported data - a potential common method bias. Can be solved by experimental design
3) The levels of examined data are close to each other and hard to differentiate due to the SME context (firm and individual levels) – in future research the large companies' context should be tested

Future research directions should lay in a more detailed exploration of ADHD-like behavior involved in the decision-making process. Also, other personality traits (in ex. Dark Triad) can provide promising insides on the personal level antecedents of the BMI

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