

Contents

1	Introduction	1
2	Theoretical Foundation	9
2.1	Serious Games	10
2.1.1	Explanation of Serious Games	10
2.1.2	Serious Games vs. Gamification	12
2.1.3	Business Simulations	14
2.2	Experiential Learning Theory	18
2.2.1	Basic Understanding of Experiential Learning	18
2.2.2	Critical Appraisal of the Experiential Learning Approach	25
2.3	Synthesis of Business Simulations, Experiential Learning and Non-Cognitive factors	26
2.3.1	Business Simulations as Experiential Learning Application	26
2.3.2	Relevance of Non-Cognitive Factors in Experiential Learning	30
2.4	Hypothesis Development	34
2.4.1	Selection of Non-Cognitive Factors	34
2.4.2	Motivation	34
2.4.3	Self-Beliefs	37
2.4.4	Openness	42
2.4.5	Positive Affect	45
2.4.6	Grit	48

2.4.7	Playfulness	50
2.4.8	Preference for Teams: Exploration of a Group Component	53
3	Operationalizing Learning within a Business Simulation Setup	63
3.1	Experimental Frame: Business Simulation “SysTeamsChange”	64
3.1.1	Business Simulation Setup	64
3.1.2	Business Simulation Structure	68
3.2	Complexity of Business Simulation Performance Metrics	72
3.3	Scale Development for the Dependent Variable	75
3.3.1	Rationale for Qualitative Interviews	75
3.3.2	Data Collection	76
3.3.3	Summarizing Content Analysis	80
3.3.4	Quality Criteria for Qualitative Research	81
3.3.5	Within-Case Results	83
3.3.6	Summary of Interviews	91
3.3.7	Development of a Self-Report Scale	92
3.3.8	Development of an Objective Measure	94
4	Empirical Analysis of Non-Cognitive Factors in a Business Simulation Environment	99
4.1	Aim and Research Model of the Quantitative Analysis	99
4.2	Paper–Pencil–Survey	101
4.2.1	Rationale of a Questionnaire Study	101
4.2.2	Structure of Questionnaires	102
4.3	Pilot Study Results	104
4.4	Data Processing Procedure	107
4.4.1	Data Collection	107
4.4.2	Data Analysis	108
4.5	Quantitative Quality Criteria	111
4.6	Multi-Item Measures in the Questionnaires	112
4.7	Sampling and Description of the Sample	116
4.7.1	Sampling Method	116
4.7.2	Sample	117
5	Results	121
5.1	Brief Review	122
5.2	Assumptions Check	122
5.3	Data Overview	124

5.3.1	Correlations	124
5.3.2	Group-level Differences	129
5.4	Results of the Hierarchical Regression Analysis	137
5.4.1	Overview of Hierarchical Regression Results	137
5.4.2	Multicollinearity	140
5.4.3	Residual Check	140
5.4.4	Linearity, Homoscedasticity and Autocorrelation	142
5.5	Results of the Explorative Moderation Analysis	144
6	Discussion of the Results	149
6.1	Theoretical Contribution	149
6.2	Implications for Education and Practice	165
6.2.1	Implications for Universities	165
6.2.2	Managerial Implications	168
6.3	Limitations	169
6.4	Future Research	170
7	Conclusion	175
	Bibliography	177