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De Theatro Motivarum, Motivation: In Search of Essentials. Research on a Theoretical Model of the Process of Motivation and on Critical Determinants of Interference

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Chapter 9

Conclusions

9.1. Introduction

The objective of the study was initially formulated in a two-fold Problem Definition Chapter 2.2.:

- *This dissertation was to aim, as its primary objective, at providing insights into the concept of Motivation,*
- *to unveil elementary processes involved in addressing Motivation.*

Through a series of Fundamental Assumptions the field of study was reduced to a Process of Motivation addressed by a Process of Interference, to be observed in its constituent components. The Process of Motivation was to be observed separately from the Process of Interference that was assumed to consist of three sequential Determinants.

As stated Chapter 1.5., the dissertation proclaims a reintroduction of inductive inference in the generation of comprehensive explanatory theoretical Models at the basis of empirical research. In a clear demarcation from hypothetico-deductive hypothesis testing, from these Models, critical hypotheses are derived. Support from empirical research for an embedded hypothesis thus reflects on the robustness of the explanatory framework or Model. Multiple hypotheses, within multiple empirical studies, embedded in a common explanatory Model further add to its authority.

Thus, a four-fold Problem Statement was defined, each consisting of a theoretical Model and associated hypotheses.

In concluding this dissertation, results are observed to determine if the insights and findings called for in the Problem Statement have been adequately met, and, ultimately, to determine if the objectives of the study have been reached.

In defining these Principal Conclusions, the Problem Statement, formulated Chapter 2.5., is used as a reference.

9.2. Overview of Principal Conclusions

With Reference to the Problem Statement

9.2.1. The Process of Motivation

This dissertation was to provide, as its primary objective, insights into the Process of Motivation, by means of:

- *A theoretical Model, as obtained through inductive inference, provided in a summarized overview. The overview was provided in Chapter 3, revealing a*

sequential, cyclical Process evolving around an objective and consisting of 24 Stages, clustered in 8 Phases.

- *An embedment in current literature, that was to be provided by a brief, annotated overview of principal findings. These Principal findings from literature were provided in Chapter 4. Following the analysis in Chapter 4.4., a vast majority of current theories from literature on human Motivation was found to be covered within the 24 Stages of the Model of Motivation. The analysis of the empirical research in Chapter 4.5. provided a sustained confirmation for the various Phases of the Model and their assumed effects on Motivation. It was concluded that the assumptions made in the Model of Motivation, appeared to have been supported by a majority of findings from empirical research in literature.*
- *Empirical research that was to provide evidence of the elementary constructs, from the Model, in terms of components and their respective items, capturing the Process of Motivation, thus providing empirical evidence in support of the Model of Motivation.*

Following observations made in Chapter 5.2., critical elements associated to the Model of Motivation were captured in hypotheses provided Chapter 5.4.3. The empirical research in Chapter 5 was performed in two stages:

- *Study 1, in Chapter 5.5.1., aimed at providing evidence of elementary constructs, capturing Motivation in its essence. It was hypothesized that the elementary components reduced from a primary Core Data-set, would include all items associated with a theoretical categorization of the most important Phases of the Model, i.e. Phases 3 and 8, as defined in hypothesis H1A., Chapter 5.4.3. All items associated with both Phases were found to be included in primary components produced by the PCA.*
- *Study 2, in Chapter 5.5.2., provided evidence formulated in hypothesis H1B, Chapter 5.4.3., where a perfect match was obtained between the two primary components, designated as 'DEDICAT' and 'ACHIEV', indicative of Phases 3 and 8 of the Process of Motivation. A further verification of these findings was pursued:*
 - *In Study 3, Chapter 5.6.1., by hypothesizing that these findings would be unrelated to performance, formulated in hypothesis H2A, Chapter 5.4.3., where a partial confirmation was obtained;*
 - *In Study 4, Chapter 5.6.2., by hypothesizing that these findings would be unrelated to cultural influences, hypothesis H2B, Chapter 5.4.3., with confirming evidence obtained at three different locations world-wide: in Malaysia, South-Africa and the USA;*
 - *In Study 5, Chapter 5.6.3., by hypothesizing that these findings would be unrelated to specific company-related influences, hypothesis H2C, Chapter 5.4.3., with confirming evidence obtained in differentiated companies.*
- *In Study 6, Chapter 5.7.1., a suitable course of action was defined in generating factor scores to be used in subsequent analyses.*

In conclusion, with hypotheses H1A and H1B confirmed, and substantial evidence

supporting hypotheses H2A, H2B and H2C, following the statements made in Chapter 5.4.3., it was found that both components DEDICAT and ACHIEV could be designated as the essential constructs in capturing the Process of Motivation.

Following the Problem Statement defined in Chapter 2.5. the empirical research provided evidence, then, that components DEDICAT and ACHIEV as obtained from the analysis, were indicative of Phases 3 and 8 of the Process of Motivation, and were the elementary constructs that capture the Process of Motivation, thus providing first empirical evidence in support of the Model of Motivation.

As a Principal Conclusion, then, the insights in the Process of Motivation called for in the Problem Statement, Chapter 2.5., are assumed to have been met, with reference, however, to critical observations made in the Discussions associated with various the Studies.

9.2.2. Conditions

Referring to the Problem Statement, Chapter 2.5., from these insights, the dissertation was to unveil elementary processes involved in addressing Motivation, by subsequently providing insights in the Process of Interference.

Providing insights in the Process of Interference was to consist of:

First, insights into Conditions necessary for effects to occur within the Process of Motivation, by means of:

- a theoretical Model based on the Model of Motivation, as obtained through inductive inference, that was to be provided in a summarized overview. The overview was provided in Chapter 6.2.2., revealing four distinct Conditions, elementary in addressing Motivation.
- Empirical research that was to provide evidence of the relation between the isolated constructs operationalizing the Process of Motivation and concepts presumed to be indicative of the Conditions.

Following observations made in Chapter 6.2.3., critical elements associated to the theoretical Model were captured in hypotheses provided Chapter 6.4.3.

The empirical research was performed in three consecutive stages:

- Study 7, in Chapter 6.5.1., consisted of an exploratory research that aimed at providing an Inventory of all aspects, or so-called 'Elements', that could possibly affect an Intervention.
- It was assumed that a number of those Elements would be active in instigating Motivation, thus would display a relation with constructs DEDICAT and ACHIEV obtained from Chapter 5, capturing the Process of Motivation. In Study 8, Chapter 6.5.2. a confirmation could be found, formulated in hypothesis H1, Chapter 6.4.3. Although Conditions were assumed to affect both components DEDICAT and ACHIEV that were to capture Motivation, it was hypothesized that a difference would occur in the extent at which both components were affected, as observed in the

Model of Motivation. A confirmation was found for these assumptions, formulated in hypothesis H2, defined Chapter 6.4.3., with an observation, however, that Elements appeared to display a correlation with component DEDICAT, and some correlations were found with component ACHIEV, but none of these met criteria initially set.

- *Where Motivation was assumed to be initiated by one or more of the four Conditions obtained from the inductive inference, it was hypothesized that a vast majority of the obtained Elements had to be related directly or indirectly to one or more of these four Conditions. A verification of these findings was obtained in Study 9, Chapter 6.5.3., confirming hypothesis H3A, defined Chapter 6.4.3. However, no confirmation could be obtained for hypothesis H3B, Chapter 6.4.3., in items correlated to ACHIEV.*

In conclusion, with hypotheses H1 and H2 confirmed, and substantial evidence supporting hypothesis H3A, following the statements made in Chapter 6.4.3., it was found that correlational evidence was obtained for the assumed relation.

Following the Problem Statement defined in Chapter 2.5., then, the empirical research provided exploratory and descriptive correlational evidence for a relation between constructs capturing Motivation and Conditions enabling an adequate Intervention within the Process of Motivation.

In addition, these findings provided secondary empirical evidence in support of the Model of Motivation, from which these Conditions were derived.

As a Principal Conclusion, then, the first insights on Conditions in the analysis of the Process of Interference called for in the Problem Statement, Chapter 2.5., are assumed to have been obtained, with reference, however, to critical observations made in the Discussions associated with the various Studies.

9.2.3. Competencies

Referring to the Problem Statement, Chapter 2.5., the dissertation was to provide insights in the Process of Interference consisting of:

Secondly, insights in Competencies initiating the Conditions to come into effect, by means of:

- *a theoretical Model based on the Model of Motivation, as obtained through inductive inference, that was to be provided in a summarized overview. The overview was presented in Chapter 7.2.2., revealing that two distinct approaches, or Modalities, could be observed in addressing Motivation:*
 - *An Extrinsic Modality in Management of Motivation, consisting of:*
 - *An Extrinsic Attitudinal Competency;*
 - *Extrinsic Technical Competencies.*
 - *An Intrinsic Modality in Management of Motivation, consisting of:*
 - *Intrinsic Attitudinal Competencies;*
 - *Intrinsic Technical Competencies.*

- *Empirical research that was to provide evidence of the relation between concepts presumed to be indicative of Conditions and concepts operationalizing the Competencies.*
Following observations in Chapter 7.2.3., critical elements associated with the theoretical Model were captured in hypotheses provided Chapter 7.4.3.
The empirical research in Chapter 7.5. was performed in two stages:
 - *The Conditions were operationalized in a single concept, in order to avoid co-variation and conceptual overlap. A first Preliminary Analysis in Study 10, Chapter 7.5.1., aimed at a verification of this single concept: First of its presumed suitability capturing the distinct Conditions; The analysis confirmed the proposed single concept to be an adequate representation of the targeted Conditions. Second, of the relation between the single concept and Motivation as expressed in factor scores, following the analysis in Chapter 5; In the analysis the assumed inherent relation could be established.*
 - *A second analysis consisted of an overview of relations between the single concept capturing Conditions and the more specific concepts capturing all Competencies, both Attitudinal and Technical, following an Extrinsic and Intrinsic approach using multiple regression procedures. Study 11, Chapter 7.5.2., revealed significant support for the two sets of Competencies suggested in both Extrinsic and Intrinsic Modalities.*
In observing Extrinsic Intervention Competencies:
 - *A first regression analysis provided support for the assumption that the single Extrinsic Attitudinal Competency was positively related to the single concept capturing the targeted Conditions, as formulated in hypothesis H1A, Chapter 7.4.3.;*
 - *In a second series of regression analyses evidence was obtained in support of the assumption that the Extrinsic Technical Competencies were positively related to the single concept capturing the targeted Conditions, as formulated in hypothesis H1B, Chapter 7.4.3.*
In observing Intrinsic Intervention Competencies:
 - *Regression analysis provided support for the assumption that the Intrinsic Attitudinal Competencies were positively related to the single concept capturing the targeted Conditions, formulated in hypothesis H2A, Chapter 7.4.3.:*
 - *In a final regression analysis evidence was obtained in support of the assumption that the Intrinsic Technical Competencies were positively related to the single concept capturing the targeted Conditions, as formulated in hypothesis H2B, Chapter 7.4.3.*

In conclusion, then, with hypotheses H1A, H1B and H2A, H2B confirmed, and following the statements made in Chapter 7.4.3., it was found that substantial evidence was obtained for establishing the assumed relations.

Following the Problem Statement defined in Chapter 2.5., then, the empirical research provided evidence for establishing a relation between concepts presumed to be indicative of Conditions enabling Motivation and concepts operationalizing these

Competencies.

In addition, these findings provided secondary empirical evidence in support of the Model of Motivation, from which these Competencies were derived.

As a third Principal Conclusion, then, the insights in the analysis of the Process of Interference, of Competencies initiating Conditions necessary for an effect to occur called for in the Problem Statement, Chapter 2.5., are assumed to have been obtained, with reference, however, to critical observations made in the Discussions associated with the various Studies.

9.2.4. Instruments

Referring to the Problem Statement, Chapter 2.5., the dissertation was to provide insights in the Process of Interference consisting of:

Thirdly, insights into exemplary Instruments that provide the means for these Competencies to occur, by means of:

- *a theoretical Model based on the Model of Motivation, as obtained through inductive inference, that was to be provided in a summarized overview. The overview was presented in Chapter 8.2.2., revealing an Instrumentation aimed at an Intrinsic Modality in Management of Motivation, consisting of a training setting and a structured interview.*
- *Empirical research that was to provide evidence for a causal relation to exist between the isolated constructs operationalizing the Process of Motivation and concepts operationalizing the Instruments.*

Following observations in Chapter 8.2.3., critical elements associated with the theoretical Model were captured in hypotheses provided Chapter 8.4.3.

An optimal research design was defined based on criteria of internal, external, construct and statistical validity. The empirical research in Chapter 8.5. consisted of a series of Comparative Analyses:

- *A brief synopsis was provided of Study 12, Chapter 8.5.1., referring to the original research Project detailed in Mennes (2016, in press).*
- *In Study 13, Chapter 8.5.2., a sequence of Comparative Analyses Independent Measures confirmed hypothesis HID, defined Chapter 8.4.3., where a four-fold, or higher, exposure to Treatment was assumed to lead to a significantly higher Motivation.*
No significant results were obtained in the various analyses for factor scores associated with component ACHIEV on pretest and posttest conditions.
- *A brief synopsis was provided of Study 14, Chapter 8.5.3., referring to the original research Project detailed in Mennes (2016, in press).*

In conclusion, with hypothesis HID confirmed in Study 13, following the statements made in Chapter 8.4.3., it was found that evidence was provided for a causal relation assumed to exist between an application of Instruments and a successful Intervention

within the Process of Motivation.

Following the Problem Statement defined in Chapter 2.5., then, the empirical research produced evidence for a causal relation to exist between isolated constructs operationalizing the Process of Motivation and concepts operationalizing the exemplary Instrumentation.

In addition, these findings provided secondary empirical evidence in support of the Model of Motivation, from which these exemplary Instruments were derived.

In a final Principal Conclusion, then, insights in the analysis of the Process of Interference, of exemplary Instruments enabling Competencies that would initiate Conditions necessary for an effect to occur in the Process of Motivation, as called for in the Problem Statement Chapter 2.5., are assumed to have been obtained, with reference however, to critical observations made in the Discussions in Study 13.

9.3. Summary of Principal Conclusions

In four Principal Conclusions, then, it was assumed that insights have been obtained called for in the Problem Statement, as defined Chapter 2.5.

The study appears to provide evidence:

- *that the Process of Motivation, as represented by a Model obtained in an inductive inference and supported by findings from literature, produced through empirical research the elementary constructs from the Model, capturing Motivation, which transformed the complex concept into a measurable entity;*
- *that based on the Model of Motivation, Determinants from the Process of Interference could be derived:*
 - *Four Conditions, supported by results obtained from empirical research, that enabled an adequate addressing of the Process of Motivation;*
 - *Attitudinal and Technical Competencies, specifically defined within two Modalities in Management of Motivation, an Extrinsic Modality and an Intrinsic Modality, supported by findings from empirical research;*
 - *And, within an Intrinsic Modality, an exemplary Instrument that produced a significant effect in Management of Motivation.*

Thus providing secondary empirical evidence in support of the Model of Motivation, from which these Determinants were derived.

Consequently, it is concluded the objectives of this dissertation have been reached.

With these results adding to the robustness of the explanatory theoretical Model of the Process of Motivation and its derived Process of Interference, a number of Implications ex post inferred from the theoretical Model are to be presented, in accordance to observations made in Chapter 1.5. These Implications are to follow the main Summary that is to conclude the dissertation in Chapter 10.