

Research in Management Accounting & Control
Hrsg.: Utz Schäffer

Franz Michael Fischer

**The Application of the
Controllability Principle
and Managers' Responses**

A Role Theory Perspective



RESEARCH

Franz Michael Fischer

**The Application of the Controllability Principle
and Managers' Responses**

GABLER RESEARCH

Research in Management Accounting & Control

Herausgegeben von Professor Dr. Utz Schäffer,
WHU – Otto Beisheim School of Management, Vallendar.

Die Schriftenreihe präsentiert Ergebnisse betriebswirtschaftlicher Forschung im Bereich Controlling. Sie basiert auf einer akteursorientierten Sicht des Controlling, in der die Rationalitätssicherung der Führung einen für die Theorie und Praxis zentralen Stellenwert einnimmt.

The series presents research results in the field of management accounting and control. It is based on a behavioral view of management accounting where the assurance of management rationality is of central importance for both theory and practice.

Franz Michael Fischer

The Application of the Controllability Principle and Managers' Responses

A Role Theory Perspective

With a foreword by Prof. Dr. Utz Schäffer



RESEARCH

Bibliographic information published by the Deutsche Nationalbibliothek
The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie;
detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>.

Dissertation European Business School Oestrich-Winkel, 2009

D 1540

1st Edition 2010

All rights reserved

© Gabler Verlag | Springer Fachmedien Wiesbaden GmbH 2010

Editorial Office: Ute Wrasmann | Anita Wilke

Gabler Verlag ist eine Marke von Springer Fachmedien.

Springer Fachmedien ist Teil der Fachverlagsgruppe Springer Science+Business Media.

www.gabler.de



No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the copyright holder.

Registered and/or industrial names, trade names, trade descriptions etc. cited in this publication are part of the law for trade-mark protection and may not be used free in any form or by any means even if this is not specifically marked.

Cover design: KünkellOpka Medienentwicklung, Heidelberg

Printed on acid-free paper

Printed in Germany

ISBN 978-3-8349-2267-0

Foreword

The starting point of Franz Fischer's dissertation thesis is the long-established claim to hold people accountable only for what they can control. Whereas early publications take the application of the so-called controllability principle as a matter of course, subsequent works justify the principle's application with the help of psychological or social psychological findings: The violation of the controllability principle is supposed to have negative motivational effects and thus decreases managers' effort on the job. Recently, however, doubts have been raised about the principle's meaningfulness. Also, empirical studies show that the principle is frequently not applied in corporate practice. In short: We do not have satisfactory knowledge about the effects of the principle's application or nonapplication on managers' mental models and their behavior. At the same time, we recognize that the question of whether or not to apply the principle is a major issue for management control in organizations of all sizes.

In view of this, Franz Fischer's dissertation thesis contributes to existing literature in at least three ways: First, Franz Fischer successfully adopts a role theory perspective in the investigation of cognitive, affective, and behavioral consequences of (not) applying the controllability principle in managers' performance evaluation. Thus, he demonstrates that role theory enriches a stream of literature that has so far been dominated by motivational theories. Second, he introduces a new conceptualization and operationalization of the application of the controllability principle which depict this latent variable as a second-order construct. Third, Franz Fischer does not restrict his empirical study to the investigation of mechanistic relationships between the (non)application of the controllability principle in managers' performance evaluation on the one hand and their perceptions and work behavior on the other. He rather draws a more sophisticated conclusion: Franz Fischer reveals that the relationships between the (non)application of the controllability principle and its affective and behavioral implications are mediated by managers' role perceptions. He also shows that the relationships between the (non)application of the controllability principle and these mediating variables are additionally moderated by organizational factors and personality factors, i.e. managers' hierarchical level and their self-efficacy.

Together with further findings delineated in this work, Franz Fischer's dissertation thesis is highly conducive to academic research in the field of management accounting and control. It also contains several practical implications and suggestions. For these reasons, I hope that the

dissertation thesis will be well received by a large circle of readers and that it stimulates further research on this topic. If this did not happen, it would be a pity.

Utz Schäffer

Preface

The politician Woodrow T. Wilson is known to have said: “I not only use all the brains that I have, but all that I can borrow”. It is my firm conviction that such an approach is not only beneficial to the work of great political minds but, more generally, adds value to any intellectual endeavor. In fact, I rather intensively borrowed the brains of others while writing my dissertation thesis “The Application of the Controllability Principle and Managers’ Responses: A Role Theory Perspective”. And I did not only borrow the brains of others, but also their commitment, devotion, patience, and encouragement. For this, I would like to give credit to all of them.

First and foremost, I would like to thank my doctoral supervisor and academic mentor Prof. Dr. Utz Schäffer. At many stages in the course of my dissertation project I benefited from the resources he made available to me and, more importantly, from his advice and guidance, particularly so when developing my research questions and hypotheses. His positive attitude, open-mindedness towards new ideas, and clear trains of thought inspired me and made the dissertation project a rewarding experience. At the same time, I would like to thank Prof. Dr. Andreas Hackethal who was kind enough to undertake the secondary review of my dissertation thesis demonstrating an unusually high level of involvement and interest.

Several others have contributed to my dissertation thesis in one way or another. To name only a few, I would like to thank Dr. Michael Burkert, Dr. Augustin Kelava, Prof. Dr. Pascal Langevin, Dr. Martin Messner, Dr. Clemens Pelster, Prof. Dr. Bob Scapens, Prof. Dr. Karin Schermelleh-Engel, and Prof. Dr. Dr. h.c. Jürgen Weber for their ideas, suggestions for improvement, discussions at doctoral workshops and conferences, feedback to my working papers, and their general interest in my topic. I also owe thanks to Sebastian Becker, Danijela Fischer, Gerhard Fischer, Maria Fischer, and Rüdiger Schmidt who all read this dissertation and contributed much helpful advice concerning its linguistic quality, layout, and style. Furthermore, I would like to thank the office managers Angela Molinari and Sabine Petrakakis as well as the research fellow Stevan Lutz who numerously assisted the administrative side of my work in a very professional and friendly manner.

I further want to express my gratitude to several colleagues at the European Business School (EBS). Sebastian Becker, Marc Ehrenberg, Kerim Galal, Dr. Christian Gessner, Dr. Philipp Götting, Yvonne Kiefer, Dr. Carsten Kruchen, Dr. Rainer Lueg, Dr. Marius Mann, Dr. Philip Matlachowsky, Eike Perrey, Nico Rose, Christian Schürmann, Dr. Joachim Vogt, and Elmar Wyszomirski created an enjoyable and, at the same time, stimulating working environment

with many of them having become true friends. Their helpfulness, sense of humor, and honesty have a large share in making my dissertation project an unforgettable experience.

Apart from great friends and colleagues, my utmost thanks go to my family. My wife Danijela Fischer was at any moment willing to grant me the necessary freedom to finish my dissertation thesis and supported me in such an amicable way for which I will always admire and love her. My parents Gerhard and Maria Fischer, my sister Luisa Fischer, and my uncle Dr. Helmut Steinsdorfer always had a sympathetic ear for my everyday research problems, helped me to stay focused, and constantly supported me throughout my academic career without asking for anything in return. This dissertation thesis is, therefore, dedicated to my family.

Franz Michael Fischer

Table of Contents

Foreword	V
Preface	VII
Table of Contents	IX
List of Tables	XV
List of Figures	XVII
List of Abbreviations	XIX
A Introduction	1
1. Motivation and Objective	1
2. Course of Analysis	5
B Literature Review on the Controllability Principle	9
1. The Conceptual Scope of the Controllability Principle	10
1.1 The Controllability Principle in Different Research Streams	10
1.1.1 Management Accounting	10
1.1.1.1 Analytical Management Accounting.....	10
1.1.1.2 Empirical Management Accounting.....	13
1.1.2 Administrative Science	14
1.1.3 Psychology	15
1.2 Definitions of the Controllability Principle.....	16
1.2.1 Traditional Definition of the Controllability Principle	17
1.2.2 Redefinition of the Controllability Principle Emphasizing Informativeness	19
1.2.3 Redefinition of the Controllability Principle Emphasizing Influenceability.....	23
1.3 The Importance of Subjectivity for the Controllability Principle	25
1.4 Controllability of Performance Measures as Conceptual Specification.....	29
2. The Rationale of the Controllability Principle	32
2.1 Responsibility in Organizations	32
2.2 Authority in Organizations.....	35
2.3 Justifications for the Application of the Controllability Principle	37
2.3.1 Justifications Based on Agency Theory	38

2.3.2	Justifications Based on Administrative Science.....	40
2.3.3	Justifications Based on Theory of Learned Helplessness	41
2.3.4	Justifications Based on Expectancy Theory.....	42
2.3.5	Justifications Based on Justice Theory.....	44
3.	The Application of the Controllability Principle.....	46
3.1	General Remarks on the Applicability of the Controllability Principle.....	46
3.2	A Classification of Uncontrollable Factors.....	48
3.3	Empirical Evidence on the Application of the Controllability Principle	50
3.3.1	Organizational Interdependencies	54
3.3.1.1	Horizontal Interdependencies.....	55
3.3.1.2	Vertical Interdependencies	60
3.3.2	Uncontrollable External Factors.....	67
3.4	Explanations for the Limited Application of the Controllability Principle.....	71
C	Introduction to Role Theory.....	77
1.	Overview of Classical Role Theory	79
1.1	History of Role Theory	79
1.2	Terminology and Basic Concepts of Role Theory	80
1.2.1	Role	81
1.2.2	Role Stress.....	83
1.2.2.1	Role Conflict	83
1.2.2.2	Role Ambiguity	84
1.2.3	Coping Efforts and Symptom Formation	85
1.2.4	Surrounding Conditions	87
1.2.4.1	Organizational Factors	87
1.2.4.2	Personality Factors.....	87
1.2.4.3	Interpersonal Relations.....	88
1.3	The Role Episode as Causal Sequence in Role Processes	88
2.	Recent Developments and Expansions to Role Theory	91
2.1	Role Orientation	92
2.2	Extra-Role Behavior.....	94
3.	Role Theory in Management Accounting Research	96
D	Development of the Causal Models.....	105
1.	The Basic Line of Argument.....	106
2.	The Main Models	110
2.1	Proposed Effects of the Application of the Controllability Principle on Cognitive Mediators.....	110

2.1.1	Proposed Effect of the Application of the Controllability Principle on Role Conflict	110
2.1.2	Proposed Effect of the Application of the Controllability Principle on Role Ambiguity	113
2.1.3	Proposed Effect of the Application of the Controllability Principle on Flexible Role Orientation	117
2.2	Proposed Effects of Cognitive Mediators on Affective Outcome Variables	119
2.2.1	Proposed Effect of Role Conflict on Job Tension and Job Satisfaction.....	119
2.2.2	Proposed Effect of Role Ambiguity on Job Tension and Job Satisfaction	121
2.3	Proposed Effects of Cognitive Mediators on Behavioral Outcome Variables...	122
2.3.1	Proposed Effect of Role Conflict on In-Role Performance.....	122
2.3.2	Proposed Effect of Role Ambiguity on In-Role Performance	123
2.3.3	Proposed Effect of Flexible Role Orientation on Extra-Role Performance	125
2.4	Summary of the Main Models.....	127
3.	The Moderated Models	129
3.1	Proposed Effects of Hierarchical Level	129
3.2	Proposed Effects of Self-Efficacy	131
3.3	Proposed Effects of Trust in Superior.....	133
3.4	Summary of the Moderated Models.....	135
E	Development of the Research Design	139
1.	Elements of the Research Design.....	139
1.1	Methodology	139
1.2	Method	141
2.	Operationalization of the Research Model.....	145
2.1	Variables Used in the Main Models.....	148
2.1.1	Application of the Controllability Principle.....	148
2.1.2	Role Conflict	151
2.1.3	Role Ambiguity	153
2.1.4	Flexible Role Orientation.....	153
2.1.5	Job Tension	155
2.1.6	Job Satisfaction	156
2.1.7	In-Role Performance	157
2.1.8	Extra-Role Performance	158
2.2	Variables Used in the Moderated Models	159
2.2.1	Hierarchical Level.....	159
2.2.2	Self-Efficacy.....	160

2.2.3	Trust in Superior.....	161
3.	Structural Equation Modeling.....	162
3.1	Fundamentals of Structural Equation Modeling.....	163
3.2	Alternative Approaches to Structural Equation Modeling.....	166
3.3	The Choice of the LISREL Approach.....	168
3.4	Test for Mediating Effects.....	169
3.5	Test for Moderating Effects.....	170
3.6	Goodness-of-Fit Measures.....	172
3.6.1	Reliability and Validity.....	172
3.6.2	Criteria of First-Generation Statistical Techniques.....	175
3.6.3	Criteria of Second-Generation Statistical Techniques.....	177
4.	Data Collection and Sample.....	186
4.1	Data Collection Process.....	186
4.2	Target Population and Final Sample Characteristics.....	187
F	Empirical Results.....	193
1.	Descriptive Statistics and Evaluation of the Measurement Models.....	193
1.1	Application of the Controllability Principle.....	194
1.2	Role Conflict.....	197
1.3	Role Ambiguity.....	198
1.4	Flexible Role Orientation.....	199
1.5	Job Tension.....	200
1.6	Job Satisfaction.....	201
1.7	In-Role Performance.....	202
1.8	Extra-Role Performance.....	203
1.9	Self-Efficacy.....	204
1.10	Trust in Superior.....	205
1.11	Test for Discriminant Validity.....	206
2.	Evaluation of the Main Models.....	208
2.1	Effects of the Application of the Controllability Principle on Job Tension.....	208
2.2	Effects of the Application of the Controllability Principle on Job Satisfaction.....	209
2.3	Effects of the Application of the Controllability Principle on In-Role Performance.....	210
2.4	Effects of the Application of the Controllability Principle on Extra-Role Performance.....	211
2.5	Summary of the Main Models.....	212
3.	Evaluation of the Moderated Models.....	213
3.1	Effects of Hierarchical Level.....	214

3.2	Effects of Self-Efficacy	215
3.3	Effects of Trust in Superior	216
3.4	Summary of the Moderated Models.....	217
G	Discussion.....	219
1.	The Application of the Controllability Principle as Corporate Practice	219
2.	The Application of the Controllability Principle and Managers' Cognitive Responses	227
2.1	Role Stress.....	228
2.2	Role Orientation	233
3.	The Application of the Controllability Principle and Managers' Affective Responses.....	236
3.1	Job Tension	236
3.2	Job Satisfaction	237
4.	The Application of the Controllability Principle and Managers' Behavioral Responses.....	238
4.1	In-Role Performance	238
4.2	Extra-Role Performance.....	240
H	Conclusion.....	243
1.	Summary of the Results	243
2.	Practical Implications.....	250
3.	Limitations and Future Research Directions	253
	References	257

List of Tables

Table 1:	Exemplary Definitions of the Traditional Controllability Principle.....	18
Table 2:	Exemplary Definitions of the Conditional Controllability Principle	20
Table 3:	Exemplary Definitions of the Influenceability Principle.....	24
Table 4:	Classifications of Uncontrollable Factors in Prior Literature.....	48
Table 5:	Empirical Studies Investigating the Application of the Controllability Principle..	51
Table 6:	Management Accounting Studies Informed by Role Theory	98
Table 7:	Operationalization of the Construct Application of the Controllability Principle.....	151
Table 8:	Operationalization of the Construct Role Conflict.....	152
Table 9:	Operationalization of the Construct Role Ambiguity.....	153
Table 10:	Operationalization of the Construct Flexible Role Orientation.....	155
Table 11:	Operationalization of the Construct Job Tension	156
Table 12:	Operationalization of the Construct Job Satisfaction	157
Table 13:	Operationalization of the Construct In-Role Performance.....	158
Table 14:	Operationalization of the Construct Extra-Role Performance.....	159
Table 15:	Operationalization of the Construct Hierarchical Level.....	160
Table 16:	Operationalization of the Construct Self-Efficacy	161
Table 17:	Operationalization of the Construct Trust in Superior	162
Table 18:	Overview of Goodness-of-Fit Measures	183
Table 19:	Overview of Field Interviews	188
Table 20:	Descriptive Statistics for the Latent Variables	194
Table 21:	Assessment of the Instrument for Application of the Controllability Principle...	196
Table 22:	Assessment of the Instrument for Role Conflict	198
Table 23:	Assessment of the Instrument for Role Ambiguity	199
Table 24:	Assessment of the Instrument for Flexible Role Orientation	200
Table 25:	Assessment of the Instrument for Job Tension.....	201