Are you thinking what I'm thinking? Explaining the relation between management control systems and managers' causal mental models

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Doctor of Philosophy

2016

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Certificate of original authorship

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Acknowledgements

I am deeply grateful to the team at ResCare for their support of and enthusiastic participation in this study. In particular, my thanks go to ResCare's CEO for her trust and generosity in championing my research, as well as each of the individual study participants for their time, hospitality and candour. The extraordinary welcome that I received at ResCare ensured that my fieldwork was an enriching and thoroughly enjoyable experience.

My research would not have been possible without the backing of the Accounting Discipline Group at UTS, which has provided not only the institutional means of undertaking this PhD but also the time, space, and support within which to produce a work that I am truly proud of. In this respect, I am grateful to Professors Peter Wells and Martin Bugeja for my place in the PhD program, to Judy Evans and her administrative team for their cheerful help and many small kindnesses, and to my many colleagues within the group for their advice, encouragement, and humour, which made a potentially long and tedious process pass in the blink of an eye.

I would like to extend heartfelt thanks to those who have had direct input into the development of the thesis. My thanks go to Shona Bates, for her eagle eye and helpful insight in editing the thesis. I am grateful to Professor Vicky Arnold for giving me renewed confidence in my idea, and providing direction and guidance that shaped the study at a critical juncture. I would like to thank Dr Nicole Sutton for teaching me the value of patience and persistence in the research process, especially when undertaking field work. Her ability to balance great passion and enthusiasm for ideas with calm and confident execution was invaluable in maintaining the momentum of this project (and – at times – my sanity!).

I am especially grateful to my principal supervisor, Professor David Brown, without whom I would never have commenced much less completed this PhD. Thank you for your faith in my ability to deliver my 'big idea'; for allowing me to experience the joy of my own discoveries; and for sharing so much of your insight into both the world of academia and world beyond. I am so grateful for your contribution not only to the development of the ideas in this thesis, but also to my own development as a researcher and as a person.

Finally, I would like to express my gratitude for the support of my wonderful family, which has grown alongside my thesis. Thank you to my parents and brothers, who never wavered in their belief that I could – and should – complete a PhD. Thank you to my patient and loving husband Chris, who, having endured a wait of seemingly indefinite duration, will finally get to meet his wife *sans* thesis. And a very tender thanks to our precious Henry, who gave me the gift of perspective when I needed it the most.

This research is supported by an Australian Government Research Training Program Scholarship.

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ACFI	Aged Care Funding Instrument
AM	Accommodation Manager
BAC	Board Advisory Committee
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CM	Clinical Manager
CTA	Cognitive Task Analysis
GAM	General Manager – Accommodation
GCM	General Manager – Clinical Services
GOM	General Manager – Operations
GP	General Practitioner
KPIs	Key Performance Indicators
LLLB	Living Longer Living Better
LLO	Leisure and Lifestyle Officer
MCS	Management Control Systems
OM	Operations Manager
RN	Registered Nurse
TAPS	Think Aloud Problem Solving

Abstract

Research into the cognitive effects of management accounting and control systems is largely oriented toward understanding how decision makers use accounting information to inform their judgement and decision making activity. However, the effect of these systems on decision making is not limited to the provision of information; instead, management accounting and control systems may influence decision makers' underlying mental representations, which in turn form a critical input to judgement and decision making in an organisational context. As such, the objective of this thesis is to explore and then explain how the use of management control systems relates to the development of a type of mental representation: managers' causal mental models. In order to answer this question, I undertake a qualitative embedded case study of a medium-sized residential aged care service provider in Australia, incorporating specific Cognitive Task Analysis (CTA) techniques to elicit the causal mental models of individual study participants.

First, I draw on theory and concepts from cognitive psychology to develop the construct of causal mental models for application in an accounting context. I then develop a general theoretical model which identifies the conditions under which the use of management control systems is likely to lead to changes in the causal mental models of either senior and/or operational managers, and provides an explanation of the mediating relationship between management control systems and managerial judgement and decision making activity. This conceptual and methodological development allows for the direct observation of the content and composition of causal mental models, and the development and testing of more nuanced hypotheses relating the use of management accounting and control systems to judgement and decision making outcomes, and ultimately, to managerial and organisational performance.

Second, I apply and extend the general theoretical model in order to develop an explanation of the underlying socio-cognitive dynamics of Simons' (1987) concept of *interactive control*. Specifically, I explain *why* the interactive use of control systems would facilitate learning and contribute to improved managerial cognition and performance, and use the theoretical explanations that I generate to evaluate the conflicting conceptualisations of the interactive control construct present in the literature. I find that all five dimensions of interactive control identified by Bisbe, Batista-Foguet and Chenhall (2007) are required for interactive control to have the hypothesised effects on managerial learning and organisational performance, and provide support for their position that interactive control should be treated as a multidimensional, emergent construct.

Third, I apply my general theoretical model to the phenomenon of *budget participation*, in order to develop a *cognitive explanation* of the effects of participation on managerial cognition and capacity for judgement and decision making. Application of the theoretical model to the phenomenon of budget participation generated a set of three specific explanations: first, it suggests an expanded definition of participation is necessary to completely capture the potential of budgeting for information sharing and coordination; second, it explains the theoretical value of conceptualising job-relevant information in terms of the components of managers' causal mental models; and third, it explains both how and why budget participation can facilitate the transfer of causal knowledge and beliefs between levels of management.