

EDITORIAL PREFACE

Special Issue on Diverse Methods of Studying Risk: Phenomenology, Fuzzy Analysis, Calculus, Linear Programming, and Experiments

*Kenneth David Strang, School of Business and Economics,
State University of New York, Albany, NY, USA*

INTRODUCTION

The purpose of this issue is to showcase diverse methods for studying risk and uncertainty. Researchers often use quantitative statistical techniques to estimate and analysis the impact of uncertainty and risk, and while there is absolutely nothing wrong with that, we wanted to illustrate how other methods have also been successfully applied. It seemed only fitting that we conclude the issue with the summary of a research methods book to provide readers with a more complete state of the art resource if they wish to know more about how to design studies of any type.

The first manuscript uses phenomenology to describe the lived experience of how uncertainty and risk impacted home owners of foreclosed mortgages. The second manuscript illustrates how fuzzy analytics techniques were applied for quantifying uncertainty and

estimating the risk in complex projects. The next manuscript features general analytical techniques such as calculus; linear programming and simulation were leveraged to develop models for estimating disaster uncertainty. Another manuscript shows how to construct a structured experiment to measure the impact of socialized uncertainty on group decision making within four groups of emerging executives. The final manuscript provides a very detailed book review of a new visual-oriented research design book.

LITERATURE REVIEW

Negative Effects of Home Foreclosures on Mental and Physical Health Risks

Kizito (2015) uses the phenomenology method with interviews to capture data describing what participants ($N=25$) felt when they lost

their home during the 2008 global financial crisis. Alarmingly, Kizito revealed that home foreclosures constituted approximately 1 in 92 households in the USA. He was able to clearly identify the phenomenological link between foreclosures to and medical as well as psychological risks that generalize to approximately 1.5 million former home owners who lost their house. He documented four core themes, with the first being foreclosure processes resulting in hospitalization of family and foreclosure associated with the lack of family's health insurance and family health. The second theme was the negligence of doctor's prescriptions. The third theme was the perceived loss of money. The fourth theme was displacement and housing instability as a reason for depression. This is the first time we have published a manuscript using this constructivist ideology method. It is interesting to see an investment analyst apply qualitative methodology in a traditional quantitative discipline. His work will serve as an example to encourage more qualitative data collection and analysis studies in the field of risk and contingency management.

Fuzzy Quantitative and Semi-Quantitative Risk Assessment in Projects: A Review

Abdolshah (2015) uses a literature review to explain how quantitative and qualitative techniques may be applied for quantifying uncertainty and estimating the risk in complex (fuzzy) projects. An important point he makes is that Project Managers must apply risk assessment as a preventive method – rather than during the project. He articulates a number of techniques (cited to the best-practices literature) for the three categories of risk assessment: qualitative, semi-qualitative (semi-quantitative) and quantitative. His explanation of semi-quantitative risk assessment methods using fuzzy sets theory (FST) and defuzzification techniques was unique and is not often discussed in the contingency management or social sciences literature. The value of his contribution to the literature is mainly as a basis to stimulate more

research (through citations) and to serve as risk assessment training material for emerging project managers.

Contingency Design for Reliability in a Supply Chain

Bereriche and Aitkadi (2015) review the literature and apply general analytical techniques to develop models for estimating disaster uncertainty and for mitigating against these risks. The functional focus of their study was to improve the reliability of inventory supply chain operations during a crisis. As they noted, inventory supply chain operations is complicated by the uncertainties of demand and the duration of the crisis period. The review relevant operations research literature and develop a unique method based on calculus and linear programming. Then they use simulation software to validate their proposed model. They found that the results indicated that the proposed method would provide a reliability inventory level during a crisis. This serves as a good manuscript model for other uncertainty prediction studies in the supply chain discipline.

Impact of Socialized Uncertainty on Group Decision Making: An Experiment with Emerging Executives

Strang and Vajjhala (2015) performed a behavioral experiment ($N=32$), using ANOVA, t-tests and logistic regression to test their hypotheses. The premise of their study was that many stakeholders in society are concerned about the effectiveness of decision making behavior for our future generation of leaders, so they created an experiment to measure how effective young executives were in solving a complex problem, according to their risk profile. The divided the samples into four experimental groups controlled by their composition according to their risk taking culture and gender. Then they measured the impact of the two factors, gender and risk taking culture, on the group decision making behavior for a complex project activity. They found that gender did not impact decision

making behavior but the socialized uncertainty was a statistically significant casual factor. The result was that a low risk taking culture resulted in a better group decision. They admitted (and recommended) that more tests be done.

Book Review on The Palgrave Handbook of Research Design in Business and Management

Jung (2015) reviewed the new Palgrave Handbook of Research Design in Business and Management. He notes this was an edited book with 36 contributing authors, which itself is unique for textbook style publications. The purpose of the book is to help researchers prepare a blueprint for their design which starts with identifying their ideology (philosophy). The next step is to describe their strategy (units of analysis, level of analysis, and so on). Once the strategy is articulated, a formal method and relevant techniques are selected. Jung agrees that it is a good book, featuring relevant research design theories along with cutting-edge analytical best practices. The real value she claims is that it uses visual techniques to appease all learning styles. He found the visual diagrams were appealing and understandable. He commented that well-known Kennesaw University Professor Dr. Joe Hair was the foreword author and presented a very convincing prospectus of the book. Jung briefly reviewed all 28 chapters

which were grouped by three ideology sections: positivistic, pragmatic and constructivist. He included several URL's so that our readers may preview the book online.

CONCLUSION

We hope this issue will have stimulated researchers to consider alternative methods to examine how uncertainty, risk and contingency management could be studied. When combined with the previous issue that explained how these topics could be examined from various levels of analysis, and across disciplines, we feel this will be informative to both emerging and experienced researchers. It should stimulate their creativity in how to design and conduct future studies plus it will provide links to valuable resources.

In closing, I want to thank everyone on the IJRCM board since we are all volunteers and we do not receive even a single penny from our hard work on this journal so please send emails and testimonials to thank your volunteers who make such great efforts to contribute to the scholarly body of knowledge!

*Kenneth David Strang
Editor-in-Chief
IJRCM*