It is important to pick a good research model and show our ability to narrow our interests from broad research questions and reading in our field because that will also give you a sense of how to frame our ideas in the technical language of our field.

Picking a good research model also identify, our commitment to a compatible area of interest. This commitment will involve, collecting qualitative data on opinions on process-issues for selecting areas for research, research design, and appropriate methodological approaches.

It is important to pick a good research model in our field that incorporate qualitative and positivistic researcher methods. (Ahrens & Chapman, 2006). I plan to do so by performing good reasoning with data collected from interviews, triangulation and peer consultation, cross-checking and data verification for findings are recommendations to set the specific context outlined in our papers. Our research should be yielded interesting empirical findings, also determined that a mixed approach, one that involves both quantitative and qualitative methods as it is more appropriate for choosing the right research. Qualitative evidence from research question also interdisciplinary and systemic research, over that of traditional disciplinary research with good research plan, long-term goals in our research field.

The intent to build research argument that contribute to the field. There are many great topics out there, but some topics are more feasible than others. Research is typically written for an audience, whether it be a select group of individuals or broader population, and the need to keep this audience in mind as we select our research topic is important. We may be very interested in a topic, but if it does not meet our intended audience’s needs, our end goal, then it is probably not a good topic to select. Moreover, it will be extremely difficult to receive funding for research that does not generate others’ interest.

# References

Ahrens, T., & Chapman, C. S. (2006). *Doing qualitative field research in management accounting: Positioning data to contribute to theory.* Accounting, Organizations and Society,.

Hello Sarah

I do share you point of view when you said, finding a good research model gives your research a solid foundation and the research purpose becomes more comprehensible to any reader. I also read your citation with Joseph Maxwell in his book, “Qualitative research design” where he emphasizes the activities of collecting and analyzing data, developing and modifying theory, elaborating or refocusing the research questions, and identifying and dealing with validity threats are usually going on more or less simultaneously, each influencing all of the others. Coming back to your point advocating that a good research model links the research hypothesis with the concepts and theories which were mentioned in the literature review.

References

Maxwell, J. A. (2005). Qualitative research design. Thousand Oaks, Calif: Sage Publications.

Thanks

Alex

Hello John

I can see your quoting well the extract on the web page from University of Wisconsin-Milwaukee regarding good models. I agree with the statement: good research model gives the research a direction and set boundaries for the reader’s understanding, by identifying the possible knowledge gaps in the literature and showing the reader how the building of the investigation is done on sound research principles. I would be interested to see you outline those prinpiple in your own research plan.

Thanks

Alex

4

My research topic will constitute a framework that demonstrates how an asset manager can use an assistant robot to operate large trading transaction with little interaction. Designing an effective trading set of instruction that would be utilized computer programming-based decision model will provide the conclusive demonstration. We will the generalized by demonstrating why an organization fails in the long run if they do not adopt highly creative and interactive robotic ideas to will be contributing to the business case with their human counterpart to minimize their costs. I plan to use the Bayesian statistical framework, based on the idea that the knowledge of a given system with uncertainty can be gradually updated through new evidence. The process is achieved by computing the probability that a given hypothesis is correct, considering both existing knowledge and new data. The main advantage of this approach related to my own research aspirations is that it seems better fitted to evaluate competing models under high levels of uncertainty. Despite its interest, scientific research delay on the adoption was mainly caused by the mathematical complexities of applying Bayesian statistics to non-trivial problems. Selecting the null hypothesis, will hold the basic assumption that there is no significant relationship between the independent variable and dependent variable. We also have the development of new computational methods such as Markov Chain Monte-Carlo and Approximate Bayesian Computation (ABC), which has mainly explained the current success of Bayesian inference. (Rubio-Campillo, 2016).

Those formulation will help me demonstrating the leadership role a robot will play to increase productivity and consumer experience. Well elaborated thoughts and concepts that contribute to the good of the company and the society in general where robotic concept prevail seems to be the direction for all. Hypotheses formulation and selection are important because it gives long term value to the paper. The extensive use of formal models allows historians long after the paper is published to re-evaluate hypotheses formulated. So well formulated hypotheses give long life to the topics and make those still subject to debate due to the adequate quantitative framework it involves.

# References

Rubio-Campillo, X. (2016). *Open Access Model Selection in Historical Research Using Approximate Bayesian Computation.* PloS one.

Hello Alejandro

I am very interested when you quote Alvesson & Karremanit in their demonstration on how hypothesis formulation is crucial as it enables one to prove an observation, and testing observations on the results obtained.   The theory and the hypothesis are critical in coming up with a method of proving the observation as a scientific observation (Alvesson & Karreman, 2007). I totally agree that to be able to prove an observation, we need to search and identify the theory that we believe impacts the outcome to be observed. In specific, we need to point the ways empirical material can be used to facilitate and encourage critical reflection to enhance our ability to challenge, rethink, and illustrate well our theories.

References

Alvesson, M., & Karreman, D. (2007). Constructing mystery: Empirical matters in theory development. *Academy of Management Review, 32*(4), 1265-1281.

Hello John

Based on what you read in this article published in Arizona State University website, I see you agree with the fact that the cause and effect factor should be considered while writing a good hypothesis and that the clarity of a good hypothesis could be judged according to previous studies. In the document I was concerned the impact of testable proposition deduced from theory in our hypotheses selection. The importance of independent and dependent variables to be separated and measured separately. Also how verification, justification, refutability, validity, rectification, repeatability are important concepts to put in minds while narrowing and formulating own research question, objectives or hypotheses.

**Reference**

Prasad, S., Rao, A., & Rehani, E. (2001). Developing hypothesis and research questions.

       Retrieved from http://www.public.asu.edu/%7Ekroel/www500/hypothesis.pdf.

3

This paper utilized in case 3 titled: “An adaptive portfolio trading system: A risk-return portfolio optimization using recurrent reinforcement learning with expected maximum drawdown” extends work in recurrent reinforcement learning (RRL) and build an optimal variable weight portfolio allocation under a coherent downside risk measure, with a coherent risk-adjusted performance objective function, to obtain both buy and sell signals and asset allocation weights and that variable weight RRL long/short portfolios outperform equal weight RRL long/short portfolios under different transaction cost scenarios. A risk-return portfolio optimization using recurrent reinforcement learning with expected maximum drawdown”

The Authors are using trading each algorithms comparison as a hypothesis to demonstrate the research question. The test conducted on that hypothesis or algorithms will result in three trading result set, producing different trading decisions for the same set of assets. The resulting portfolio rebalancing methods are the Sharpe ratio RRL (SR-RRL) for Sharpe ratio recurrent reinforcement learning portfolios, the Sterling ratio RRL (TR-RRL) for Sterling ratio recurrent reinforcement learning portfolios, and the Calmar ratio RRL (CR-RRL) for Calmar ratio recurrent reinforcement learning portfolios. (Chauhan, 2008). The research question will be resolved by successively assess and demonstrate the merits of each performance ratio based on each algorithm in generating trading signals that will optimize the portfolio of trade problem.

It is appropriate for this paper to abundantly use of the variation of regression analysis, to squared error from the result in multiple experiments to deduct the unbiased estimate of error variance. It was appropriate to justify or demonstrate the hypothesis that way because of the nature of the tests and the type of result expected. The paper performs tests of the actual value generated with the expected values accounted using a portfolio consisting of the most frequently traded exchange-traded funds, to demonstrate that the expected maximum drawdown risk-based objective function yields superior return performance compared to previously proposed RRL objective functions (SaudAlmahdi & Y.Yang, 2017)

**Reference**

SaudAlmahdi, & Y.Yang, S. (2017). *An adaptive portfolio trading system: A risk-return portfolio optimization using recurrent reinforcement learning with expected maximum drawdown.*

Sedgewick, R. (2016). *Putting the Science Back into Computer Science.* Princeton University.

Hello John

I do agree with your conclusion regarding the fact that methodology used to address the RQs are appropriately employed, especially with the open thematic analysis (Boyatzis 1998). The researchers are able to obtain results which answered all the questions which makes the result obtained from the study satisfactory. Thanks for bringing those facts that up. From the book titled: ‘Transforming Qualitative Information’, it shows shows how to sense themes in the first step in analyzing information as well as how to develop codes, through the use of numerous examples from myriad research settings. It also shows that research design issues that are essential to rigorous and high-quality use of qualitative information are addressed, by identifying, sampling, scoring and scaling, and reliability.

References

Boyatzis, R. E. 1998. Transforming Qualitative Information: Thematic Analysis and Code Development, Thousand Oaks, CA: SAGE Publications.

Hello Sarah

I have seen the theme you have chosen to elaborate on interesting. In that article which have reviewed issues regarding “Flexible working times: effects on employees’ exhaustion, work-non work conflict, and job performance.” As that research aimed to give a useful conceptualization of flexible working hours and assess the relationship between employee’s well-being and working times(Sushil, et al., 2016) it does provide a lot on the research questions and hypothesis. I also find out that these topics are supported by research and case studies situated in different sectors and countries across Asia, the book will provide a useful resource for a broad readership including: management students and researchers, practicing business managers, consultants, and professional institutions. Thanks for that brilliant illustration.

Reference:

Sushil, Connell, J. &amp; Burgess, J., 2016. Flexible Work Organizations: the Challenges of

Capacity Building in Asia. New Delhi: Springer India

2 –

Most research emphases on the relation between two variables, an independent variable X and an outcome variable Y. Mediating and moderating variables are illustrations of third variables. Case statistics for two variable effects are variable like the correlation coefficient, odds ratio, and regression coefficient. With two variables, there are a limited number of possible causal relations between them: X causes Y, Y causes X, both X and Y are reciprocally related. Mediation and moderation are names given to two types of third-variable effects.

A moderator is a third variable (Z) that changes the relation between a predictor (X) and an outcome (Y), thereby affecting the strength and/or direction of the relation between the two variables. The moderator (typically a covariate or secondary predictor of interest) interacts with the primary predictor variable to influence the outcome, such that any effects of the primary predictor on the dependent variable are conditional on, or dependent on, values of the moderator.

A mediator is a third variable that explains how or why two other variables are related. The mediation model is a three variable model where an independent variable (X) predicts a mediator variable (M), which in turn predicts an outcome (Y). The mediator intervenes in the relation between X and Y illustrating the mechanism through which the two variables are related.

For instance, let imagine researchers evaluating the effects of a new cholesterol drug. The researchers vary the participants in minutes of daily exercise with predictor or independent variable and measure their cholesterol levels after 30 days with criterion or dependent variable. They find that at low drug doses, there is a small association between exercise and cholesterol levels, but at high drug doses, there is a huge association between exercise and cholesterol levels. Drug dosage moderates the association between exercise and cholesterol levels.( Frank, Amso, & Johnson, 2014)

Reference

[2] Frank, M. C., Amso, D., Johnson, S. P. (2014). Visual search and attention to faces during early infancy. Journal of Experimental Child Psychology, 118, 13–26

Hello Sarah

I can never agree better with that statement: Moderators can either be quantitative or qualitative. There is a huge relationship between organizational performance and flexible working hours, but at low devotion to work, there is a small relationship between the dependent and independent variable. When we fully account for the effect of the mediator, the relation between independent and dependent variables may go away. For instance, if we find a positive association between note-taking and performance on an exam, this association may be explained by number of hours studying, which would be the mediating variable.

Thanks

Hello Alejandro

I am glad you conclude, the findings of you study will add new knowledge in addition to improving and creating understanding among researchers, investors, partners, managers, and beneficiaries of NPOs on the future direction of management accounting practices. The follow your explains I will add that A covariate in regards to moderators and mediators, is a variable that is related to a predictor and outcome variable but does not appreciably change the bivariate relation between the two when included in a model. Covariates are often used in analysis to reduce unexplained variability in an outcome variable.

Thanks

1

Regression analysis refers to a method of mathematically sorting out which variables may have an impact. It is useful for my research because I plan to use electronic trading in a capital market where designed computer algorithm identified as robotic co-workers show be able to act as a human trader by incorporating managerial leadership, participative leadership, situational leadership, transactional leadership to accomplish a usual trading task. That will sum up all aspect of the neuro-network interactive methodology that minimized Human intervention while giving more trust and credit to investment decision made by a robot The importance of regression analysis for this type of study is that it helps determine which factors matter most, which it can ignore, and how those factors interact with each other. The importance of regression analysis lies in the fact that it provides a powerful statistical method that allows a business to examine the relationship between two or more variables of interest. The benefits of regression analysis are manifold: The regression method of forecasting is used for, as the name implies, forecasting and finding the causal relationship between variables. An important related, almost identical, concept involves the advantages of linear regression, which is the procedure for modeling the value of one variable on the value of one or more other variables.

The pros are: We have two main advantages of regression over Chi2 or Fischer's exact test. We can include more than one explanatory variable (dependent variable) and those can either be dichotomous, ordinal, or continuous. The second is that regression provides a quantified value for the strength of the association adjusting for other variables by removing confounding effects just like in artificial intelligence, and machine learning study that will affect employment in today’s society. The exponential of coefficients correspond to odd ratios for the given factor as we assume that expected payoffs are always non-negative, the fixed upper bounds Rmax and Varmax on the means and variances of the payoff distributions, necessary for finite-time convergence results are fixed. (Kearns & Singh, 2002).

The cons are: we need enough participants with each possible set of explanatory variable. And if we are using a dependent variable that is not binomial, we need to test the assumption of linearity before including it in the model. Regression combines both binomial and normal distribution. This can sometimes cause problems. Specially with Cognitive systems, that are designed to solve problems by taping in machine learning (ML) engine and natural language processing (NLP) just as human’s way of solving problems; by thinking, reasoning and remembering while reducing compliance in business risk with accuracy. Even if quadrature check can be used to verify that these problems did not occur, relative differences must then be kept below 0.01 (1%) for all parameters.

Reference

Kearns, M., & Singh, S. (2002). *Near-Optimal Reinforcement Learning in Polynomial Time.* Machine Learning.

Hello Sarah

You underscored effect of regression in businesses and how they related to the success of the productivity. Through the regression, a company can make better and viable decisions, encompassing anything from the prediction of sales to understanding supply and demand and inventory levels. We both agree regression analysis cannot be used by businesses to solve issues which involve qualitative phenomenon for instance cases on crime or honesty. But it can be well used in predictive analytics, which involves forecasting future opportunities and risks. For example, predictive analytics might involve demand analysis, which seeks to predict the number of items that consumers will purchase in the future, thus highlighting the importance of regression analysis in business.

Hello Jeremy

I will always memorize this part of your explanation saying the simplest study starts with descriptive studies and works its way up to causal modeling. I will definitely agree that causal modeling allows us to identify a change in Y as caused by this change in X. I also find out that result of regression using Box-Cox transform shows more details in dependent variables that help device a strategy to increase productivity through the selection of appropriate control variables. (Porter et al., 1981, p. 399).

Reference

Welc, J., & Esquerdo, P. J. (2018). Applied regression analysis for business: tools, traps, and applications. Cham, Switzerland: Springer.