Journal of MultiDisciplinary Evaluation
Volume 10, Issue 23, 2014

JMDE
Journal of MultiDisciplinary Evaluation

ISSN 1556-8180
http://www.jmde.com

Impact Evaluation Based on Buddhist Principles

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Background: This is one in a series of articles in which the authors attempt to relate Eastern philosophy to contemporary programme planning and evaluation.

Purpose: The authors examine impact evaluation through the lens of Eastern Philosophy.

Setting: Not applicable.

Intervention: Not applicable.

Research Design: Not applicable.

Data Collection and Analysis: The authors examine the basic causal statements from the approach to impact evaluation commonly used by The World Bank and from Buddhist philosophy. Second, they examine the statistical assumptions on which impact evaluation is often based and propose alternative Buddhist principles. Lastly, they speculate what impact evaluation might look like using the alternative principles that were identified.

Findings: There is no such thing as impact in and of itself. Rather, a combination of conditions comes together in a certain way, at a certain time, and we call it an impact. Impact is, therefore, the result of conditionality (Salzberg, & Goldstein, 2001). Evaluation that examined the conditionality of impact would be in a position to make statements about patterns of relationships. Instead of experimental and quasi-experimental approaches, the Insight Evaluation approach (Russon and Russon, 2011) might be more appropriate.

Keywords: *Eastern philosophy; programme planning; programme evaluation.*

Over the past six years, we have published a trilogy of articles relating Eastern philosophy to evaluation. In the first article (Russon, 2008), we expounded an Eastern paradigm of evaluation. In the second (Russon & Russon, 2009), we proposed a new approach to evaluation that integrates Insight Meditation techniques. In the third (Russon & Russon, 2010), we explained how we have adapted the ancient Zen practice of kōans as a poetic technology for evaluation training.

In addition to the trilogy, we have published a couple of one-off articles that attempt to relate Eastern philosophy to contemporary programme planning and evaluation. In the fourth article (Russon, 2013), we explored how the ancient Chinese tome, the *Book of Changes*, might influence the way in which evaluators think about Theories of Change. In the fifth article, we compared and contrasted the principles from the *Bhagavad-Gita* with contemporary guidance on Results-based Management.

In this, the sixth article, we propose to examine impact evaluation through the lens of Eastern Philosophy. First, we will examine the basic causal statements from the approach to impact evaluation commonly used by The World Bank and from Buddhist philosophy. Second, we examine the statistical assumptions on which impact evaluation is often based and propose alternative Buddhist principles. Lastly, we speculate what impact evaluation might look like using the alternative principles that were identified.

Impact Evaluation—A Causal Inference Problem

According to Gertler et. al. (2010), impact evaluation is essentially a matter of establishing causal inference. West & Thoemmes (2010) have stated that, in the social sciences, there have historically been two approaches to causal inference: that of Donald Campbell and that of Donald Rubin.

Campbell's approach to causal inference is widely used in psychology and education. It is very familiar to us evaluators who gained competencies in the context of educational evaluation. Campbell focused on the identification of threats to validity and on the inclusion of design features that could prevent those threats from occurring (West & Thoemmes, 2010).

Rubin's approach to causal inference is widely used in economics, statistics, medicine and public health. Rubin focused on the precise specification of both the possible outcomes for each project beneficiary and the assumptions that are mathematically sufficient to estimate the causal effect (West & Thoemmes, 2010).

A cursory review shows that much of the literature on impact evaluation, particularly that published by The World Bank, appears to be based on Rubin's approach to causal inference. The list includes many fine publications such as the *Handbook on Impact Evaluation: Quantitative Methods and Practice* by Shahidur et. al. and more.

Basic Causal Statements

According to Rubin's model (Holland, 1986), the effect of the cause t on u (unit from population U) as measured by Y and relative to cause c is the difference between $Y_t(u)$ and $Y_c(u)$. In the model, this is represented by the algebraic difference

$$Y_t(u) - Y_c(u).$$

The expression found above is the way that the model for causal difference expresses the most basic of all statements. It says that treatment t causes the effect $Y_t(u) - Y_c(u)$ on unit U (relative to treatment c) or more simply that

$$t \text{ causes the effect } Y_t(u) - Y_c(u).$$

The Buddhist basic causal statement is contained in the Dharma of *paticca samuppãda* (Macey, 1991). In his writings, the Buddha presented causality as a function of relationships—of the interaction of multiple factors where cause and effect cannot be categorically isolated or uni-directionally traced (Bukkyō Dendō Kyōkai, 1966).

As such, the *paticca samuppãda* would be at issue with the notion of t as the cause of the effect $Y_t(u) - Y_c(u)$. Applying the logic of the Dharma, this would require one to assume that t was a first cause—an Unmoved Mover postulated by Aristotle and often thought of as being God (Macy, 1991).

Alternatively, it would require one to try and trace cause backward *ad infinitum*. If t was the cause of the effect $Y_t(u) - Y_c(u)$; what was the cause of t. And, what was the cause of the cause's cause, etc. (Macy, 1991).

Assumptions

According to Holland (1986), Rubin's approach to causal inference is based on a number of untestable assumptions. In the next section, we

will examine these assumptions and compare and contrast them with alternative principles that are based on early Buddhist writings.

Temporal Stability

The first assumption, *temporal stability*, asserts that the effect's response to the cause is constant over time. This assumption requires two conditions to be met: (a) the value of $Y_c(u)$ does not depend on *when* the sequence "apply *c* to *u* then measure *Y* on *u*" occurs; and, (b) the value of $Y_t(u)$ is not affected by the prior exposure of *u* to the sequence in (a).

According to Holland (1986), when these two conditions are met it is a simple matter to measure $Y_t(u)$ and $Y_c(u)$ by sequential exposure of *u* to *c* then *t*, measuring *Y* after each exposure.

The Rubin model may not depend on when *t* or *c* are applied to *u*. However, it does depend on a linear temporal sequence— *t* and *c* would always be applied to *u* before the effect Y could be measured. This is an assumption with which the *paticca samuppãda* would be at issue.

According to the Dharma, cause and effect co-arise together. In various translations this is alternately expressed as: "dependent co-arising," "dependent co-origination," "conditioned genesis," or "conditional co-production" (Macy, 1991). All these translations convey the notion that cause and effect are cotemporaneous.

Causal Transience

According to Holland (1986), the second assumption, *causal transience*, asserts that the response of one treatment is not affected by prior exposure of the unit to another treatment. In other words, that the effect of the cause *c* and the measurement process that results in $Y_c(u)$ is transient and does not change *u* enough to affect $Y_t(u)$ measured later.

The *paticca samuppãda* is strongly linked to the principle of *anatta* (no fixed nature, essence or self). A corollary of this principle is that there is nothing inherently real about the properties of an object that is measured. In fact, measuring the properties of an object is what brings them into existence. The implication of this is that it is the measurement process that actually creates $Y_c(u)$ and $Y_t(u)$.

In addition, the observer cannot be separated from the measurement process. In some sense, measurement of $Y_c(u)$ and $Y_t(u)$ could be thought of as interaction with the mind of the observer. Think Heisenberg Uncertainty Principle[1].

Unit Homogeniety

According to Holland (1986), *unit homogeneity* assumes that $Y_t(u_1) = Y_t(u_2)$ and $Y_c(u_1) = Y_c(u_2)$ for two units u_1 and u_2. The causal effect of *t* is taken to be the value of $Y_t(u_1) - Y_c(u_2)$. In other words, units are homogeneous with respect to the treatment and response.

If one assumes a direct bivariate relationship between cause *t* and effect *Y*, the assumption of unit homogeneity, may be tenable. However, the *paticca samuppãda* teaches that the world has an interdependent structure in which every factor is, directly or indirectly, linked to every other factor. Such interdependence would create infinite variability in *u*. This would probably confound the assumption of unit homogeneity.

Independence

According to Holland (1986), when units are assigned at random either to cause *t* or to cause *c*, certain physical randomization processes are carried out so that the determination of which cause (*t* or *c*) *u* is exposed to is regarded as statistically independent of all other variables, including Y_t and Y_c.

The *paticca samuppãda* conceives of causality as being recursive (i.e. not uni-directional). In the model of causal differences expressed above, that which was originally considered to be a cause would come to be considered as an effect, and that which was originally considered to be an effect would come to be considered as a cause.

The implication of this is that the *paticca samuppãda* would be at issue with the notion that the determination of which cause (*t* or *c*) *u* is exposed to is regarded as independent of all other variables, including Y_t and Y_c. In a reality that is structured interdependently, *Y*, the response variable to measure the effect, would, in fact, influence S, the variable that indicates the cause to which each unit is exposed.

[1] According to Jeffry Grupp, one of the lessons of Quantum Mechanics is that one cannot measure something without participating in its existence.

Constant Effect

According to Holland (1986), the assumption of *constant effect* asserts that the effect of *t* on every unit is the same, and under this assumption we have the equation

$$T = Y_t(u) - Y_c(u), \text{ for all } u \text{ in } U.$$

Hence, under the assumption of constant effect, *T* is the average causal effect for every unit in *U*.

The *paticca samuppãda* is also strongly linked to the principle of *anicca* (impermanence). According to this principle everything in the world, including causal effects, arises, dwells in a state of constant flux for a period of time, and then passes away.

Because of the impermanence of effects, the variability in $Y_t(u) - Y_c(u)$, might be so large over U (the population) that the average causal effect does not represent the causal effect of a specific unit, u_o. If u_o is the unit of interest, then *T* may be irrelevant, no matter how carefully it is estimated.

Impact Evaluation Based on Buddhist Principles

In the previous section of this article, we examined Buddhist principles as alternatives to the econometric assumptions that often underpin impact evaluation. If one were to conduct impact evaluation using the above alternative principles, what would it look like?

Impact evaluation based on Buddhist principles would lead to the conclusion that there is no such thing as impact, in and of itself. Rather, a combination of conditions comes together in a certain way at a certain time, and we call it an impact. Impact is, therefore, the result of conditionality (Salzberg, & Goldstein, 2001).

Evaluation that examined the conditionality of impact would be in a position to make statements about patterns of relationships. Instead of experimental and quasi-experimental approaches, Insight Evaluation (Russon and Russon, 2011) might be an appropriate approach.

Insight Evaluation uses contemplative technology to collect the information needed to answer questions related to the conditionality of impact. Insight Evaluation uses two types of attentional strategies: concentration and mindfulness.

Concentration involves refining the ability of the mind to remain steady on the object of inquiry—a focusing of our normally scattered energy. Mindfulness builds upon concentration by stressing the ability to remain attentive to the constant changes in the impact (Epstein, 2007).

The Insight Evaluator directs her attention to the aspects of the impact that are predominant in her awareness. This would include observing physical sensations, sounds, thoughts, images, and emotional responses. The observations should be made equally, fully and impartially, without judgment, attachment, or aversion (Kutz, Borysenko, and Benson, as cited in Steele, 1995).

As the Insight Evaluator reacts to her observations, she also focuses attention on her own biases, positions, beliefs, identifications, attitudes and assumptions that give rise to her reactions (Almaas, 2002). In this manner the evaluator, the object of inquiry, and the act of observation itself are retrospectively analysed as an integrated whole.

Through this holistic approach, the Insight Evaluator becomes aware of the content of perception, thoughts, and emotions. However, perhaps of greater value, she also begins to recognize patterns and habits that dictate their formation and dissolution. (Kutz, Borysenko, and Benson, as citied in Steele, 1995). This is important evaluation information.

The juxtaposition between impartial observation and Buddhism's ethical imperative may seem like a paradox. Mindfulness does require a suspension of judgement of right and wrong. However, it is also important to acknowledge that acting in an unethical manner is a root cause of suffering. It is an inescapable corollary of the Law of Karma.

The Law of Karma refers to the universal law of cause and effect. It reflects the notion that every action leads to a result that reflects the nature of that action. Wholesome acts lead to wholesome results and vice-versa (Salzberg & Goldstein, 2001). In some sense, the role of evaluation may be thought of as helping the object of inquiry to understand its Karma.

References

Bukkyō Dendō Kyōkai. (1966). The Teaching of Buddha. Tokyo: Bukkyō Dendō Kyōkai

Epstein, M. (2007). Psychotherapy without the self. New Haven, CT: Yale University Press.

Gertler, P., Martinez, S., Premand, P., Rawlings, L. & Vermeersch, C. (2011) Impact evaluation in practice. Washington, D.C.: The World Bank.

Grupp, J. (2006). http://www.youtube.com/watch?v=tO-U5i3dc4k Accessed 14 Feb, 2014.

Holland, P. (1986). Statistics and Causal Inference. Journal of the American Statistical Association 81.396 pp. 945-960.

Macy, J. (1991). Mutual causality in Buddhism and General Systems Theory: The Dharma of natural systems. New York: State University of New York Press.

Russon, C. (2013). *Bhagavad-gita*: History's first manual on Results-based Management. Journal of Multidisciplinary Evaluation. 9.19.

Russon, C. & Russon, K. (2010). The Use of Kōans for Insight Evaluation Approach Training. Journal of Multidisciplinary Evaluation. 6.14.

Russon, C. & Russon, K. (2010). How the *I Ching* or *Book of Changes* can Inform Western Notions of Theory of Change. Journal of Multidisciplinary Evaluation. 6.13.

Russon, C. & Russon, K. (2009). The Insight Evaluation Approach. Journal of Multidisciplinary Evaluation. 6.12.

Russon, C. (2008). An Eastern Paradigm of Evaluation. Journal of Multidisciplinary Evaluation, 5.10.

Salzberg, S., & Goldstein, J. (2001). Insight meditation. Boulder, CO: Sounds True.

Shahidur, K., Koolwal, G. & Samad, H. (2010). Handbook on impact evaluation : quantitative methods and practice. Washington, D.C.: The World Bank.

Steele, R. (1995). An introduction to Vipassana meditation. Retrieved June 1, 2009, from http://www.lifetransitiontherapy.com/intromeditation.html

West, S. & Thoemmes, F. (2010). Campbell's and Rubin's perspectives on causal inference. Psychological Methods. 15(1):18-37.