RETHINKING EDUCATION RESEARCH METHODOLOGIES – DOMINANCE OF WESTERN PERSPECTIVES?

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Abstract:
This paper examines the different approaches and methods in comparative education research. It begins with a broad overview of the influences of Western philosophies and how Western education researchers approach social situations. Its differences with Chinese philosophies were highlighted with the concept of *dao* and *Confucianism*. More than just an epistemological discussion, this paper argues that Western researchers' biasness towards Asian researchers may be due to their failure or lack of experience in making the connections with Asian social systems. It attempts to provide some plausible explanations of the prevalence of biasness by peer reviewers of Western journals.

Keywords: Education research, bias, Western perspective, Chinese tradition

Introduction

The plurality of research methodologies has given rise to many conflicts between Western and Eastern researchers. There is a considerable amount of efforts taken by researchers to apply the Western research approach to Eastern culture and traditions. The approach may not be effective as there are cultural differences between Western and Eastern societies. Researchers should develop cultural competent research methodologies which are specific and valued by the cultures in which they operate.

Cultural competency is the core of many research programs. Researchers on Asian culture should not blindly accept those methodologies that are considered to be in compliance with Western standards as they may not fully answer the research questions according to the standards of the Eastern culture. Asian researchers should be encouraged to challenge, rethink, and redevelop accepted forms of Western knowledge

and theories within the local environment. The epistemological landscape in research is diverse and complex, Researchers should be aware of the different research approaches and that there is no one standard methodology that is superior over the other as each approach has its limitations and are pertinent to the local culture.

Literature Review

TerreBlanche and Durrheim (1999) noted that the research process has three major dimensions: *epistemology*, *ontology* and *methodology*. Epistemological and ontological approaches refer to a person's perspective of the world. He could have either of the two possible perspectives: *objectivistic* or *constructivist*. His perception of the world may change depending on the situation. The research paradigm inherently reflect the researchers' beliefs and views of the world he lives in (Lather, 1986)

The two common epistemological philosophies adopted for social research are interpretivism and positivism (Galliers, 1991). The researcher's choice of research methods will depend on his experience and his perspective of the social world.

Interpretivists believe that reality is socially constructed and that knowledge is derived from a variety of routes (Willis, 1995). Walsham (1995) argued that there are no correct or incorrect theories. *Knowledge* and *meaning* are results of interpretation (Gephart, 1999). Denzin (2010) noted that research efforts should be concerned with revealing multiple realities as opposed to searching for one objective reality. Interpretivist paradigm stresses the collection of information and interpreting the information collected. It is concerned with understanding the world through the subjective experiences of the researcher.

Interpretivism consists of two major philosophical branches: *hermeneutics* and *phenomenology* (Boland, 1985). Hermeneutics is a branch of interpretive philosophy which stressed that all human understanding is achieved by considering the interdependent meaning of parts and the whole they form (Klein and Myers, 1999). Phenomenology focuses on individual experiences, beliefs and perceptions. It is concerned with the study of *conscious experiences*. Smith et al. (2009) defined phenomenology as an approach to the study of experience and thinking in terms of the things that matter to our lives. Phenomenological research methods are widely used in qualitative studies where the researcher seeks to understand the subjects' experiences, behaviours and emotions.

Positivism is based on the ideas of French philosopher, August Comte. He emphasized that observation and reason are the best means of understanding human behavior. Positivists believe that knowledge is objective and quantifiable. Objective

reality is independent of the observer and that using the right research methods; the researcher can accurately capture that reality. They are interested in uncovering the truth through empirical means (Henning, Van Rensburg and Smith, 2004). Positivism regards humans as passive, controlled and determined by the external environment.

In Buddhism, the Three Universal Truths and the Four Noble Truths serve as the guiding principles for all Buddhist to follow. The first of the Three Universal Truths stressed that everything in life is impermanent and ever changing. The second universal truth is that since everything is changing, life based on possessions of things does not make one happy. The third truth explained that continuous changes are due to the law of cause and effect.

Positivism has evolved and given rise to post-positivism. Post-positivists such as Patton (2002) reiterated that interpretations should be derived directly from data observed and collected. The limitation of post-positivism is that it assumes the researcher is able to observe and document reality objectively. This is a challenging task as the research process is influenced by the researcher's own cognitive predilections or past experiences.

Dutch sociologist, Geert Hofstede, recognized the importance of understanding a culture before working with it. Hofstede (2001) developed the Five Major Cultural Dimensions Model to study how values in the workplace are influenced by culture. His first construct of Power Distance Index (PDI) noted that all societies are unequal. Inequality and power are perceived from the followers. A high index indicates that hierarchy is clearly established while a low index indicates that people question authority. His findings showed that the PDI shows very high scores for Asian countries.

Buddhism advocates the practice of meditation as the means to transforming the mind. Buddhists look within themselves for truth and understanding of Buddha's teachings, Practitioners seek to cultivate the acceptance of everything so that there is no discrimination or internal struggle (Trungpa, 1996). In "The Four Noble Truths", the third truth of cessation deals with the possibility of giving up struggles to hold on to self-ego. In the fourth truth, known as "The Path", one has to learn to let go of the fixed sense of self-ego and self-centred constructions of others.

Biasness

There are three main types of cognitive bias: *prestige bias*, *conformity bias and confirmation bias*. Bias is an intrinsic part of human nature and reviewers are not immune to exhibiting some form of biasness when reviewing peer papers. In other words, the process of rejecting a peer paper may be due to bias rather than unsuitable submissions.

Prestige Bias - Prestige bias occurs when learners prefer to imitate models that are seen as having more prestige (Heinrich and Gil-White, 2001). It essentially capitalizes on existing knowledge about who is worth mentioning. Richerson and Boyd (2005) noted that there are crucial differences between generic and cultural transmissions.

Buss and Duntley (2006) noted that individuals ascend up the social hierarchy and attain influence by using manipulative and coercive means to increase his status or power. Other studies stressed that social hierarchy is determined entirely by social competence (Anderson and Kilduff, 2009). Cheng, et. al (2013) demonstrated that both dominance and prestige are viable strategies for ascending the social hierarchy.

Conformity Bias - Conformity bias notes that people conform strongly to behavioral norms. It is responsible for maintaining the differences between different cultures (Boyd and Richerson, 2005). Conformity may take either of two forms. When people rely on others to determine what is correct, it is referred as informational conformity. When they adjust their behaviors to fit in with the majority, it is known as normative conformity (Claidiere & Whiten, 2012). Social conformity serves as a buffer protecting individuals from negative pressures when outcomes become bad (Yu & Sun, 2013). Scientific dishonesty is common in the research community, in situations where authors deliberately comply to referees' instructions to get their papers published (Shibayama and Baba, 2016). The negative implication of dishonest publications is that it compromises the scientific knowledge base and deters the admission of new knowledge and findings.

Confirmation Bias - Confirmation bias or confirmatory bias occurs when people interpret or favour information that confirms their own beliefs, assumptions and preconceptions while giving less favourable consideration to alternative reasoning. This bias can lead to ignorance of new intellectual challenges or even discredit alternative learning solutions to a particular situation. As a result, literatures which may be methodologically sound may not be published as reviewers are prejudiced against the author with exhibit different research perspectives. People who support or oppose a particular issue will seek information that supports their beliefs and also interpret situations in a way that upholds their existing ideas. The negative implication of confirmatory bias in journal publications is quite serious and warrants further studies. Academicians often encounter cognitive bias in peer review processes from reviewers who may not share the same research philosophies as the reviewers. The lack of publication opportunities may deter a researcher's career advancement (Dixon, 1973). Mahoney (1977) found that reviewers were strongly biased against manuscripts that had results contrary to their theoretical perspectives. Confirmation bias challenges the impartiality of reviewers as they may evaluate submitted manuscripts based on their

own theoretical and methodological preferences rather than the content of the literature (Lacey, 1999; Lee, 2009).

A number of related situations may spring to the forefront of the reviewers mind when doing a peer review. He may rely on previous information or events in making a judgment rather than focusing on the new event. This type of mental shortcut, known as availability heuristic, refers to a tendency to form a judgement on what readily comes to mind (Baumeister and Bushman, 2008).

When people with different views interpret information in a biased manner, their views and opinions move even further apart. This leads to biased assimilation and attitude polarization. Highly opinionated people are likely to examine empirical evidence in a biased manner. Researchers lacking in cross cultural experience often invalidate the results of researchers from another culture as they try to seek equivalence of familiar methodologies in the other cultures without fully understanding the context of the research problem.

The emic (culturally specific) approach investigates how behavior of people is determined by local customs, meaning and beliefs (Kottak, 2006; Ager and Loughry, 2004). Behavior is described in terms of cultural specificity and with internal criteria. The strength of the emic approach is that it allows the researcher to appreciate the uniqueness of the context being studied, in respect of the local cultures and beliefs.

On the other hand, the etic (culturally universal) approach describes culture in a way that is general and non-structural. The etic approach attempts to apply theories, perspectives and beliefs from outside of the setting being studied. The limitations of the etic approach are that it precludes the researcher to new approaches and concepts if he follows this approach blindly. Proponents of the etic approach appreciate the comparison across context and culture (Morris et.al, 1999).

Researchers need to possess two types of skills to be successful – theoretical and methodological skills. Theoretical skills are built up through years of experience, observation and reflection. These tacit skills cannot be taught but learned. On the other hand, methodological skills are relatively standard and relatively easily acquired through an academic programme.

Collectivism favours members of one's in-group and disfavours one's out-group (Leung & Stephan, 2001). East Asians seek to maintain harmony by resolving conflicts through compromises (Nisbett et al. 2001). The hallmark of Confucianism is a balance between externalism and internalism, filial piety, grace and public service. Confucius uses rhetoric such as analogy and aphorism to relate his views. These methods may not be fully understood by Western thinkers who rely on deductive reasoning.

The Mahayana school of Buddhism stresses following Buddha's example of going out to the world and doing good. Mahayana Buddhism encourages everyone to embark on *Bodhisattvas*. The term essentially refers to someone on the path to Awakening and calls on Buddhists to enlighten themselves as well as enlightening others.

Daoism, another Chinese philosophical and religious tradition, focuses on the relationship between humanity and ever-changing cosmos; health and longevity; and the concept of wu wei (non-action). Daoist ideas and teachings were recorded in texts such as Daodejing, Zhuangzhi and Huainanzi. Dao is regarded as the metaphysical source of all that exists throughout the universe and across three temporalities: the past, the present and the future.

A comparative study of educational research by Zhao et al (2008) found that Chinese researchers focus more on macro issues that have greater implications on the education reform and policies of China. American professor, on the contrary, are more interested in micro issues. The differences may be partly due to the epistemological differences between the two countries. Traditionally, Chinese focus on more on holistic issues while Americans are more inclined towards analytical tradition (Nisbett, 2003). Chinese researchers are more likely to conduct qualitative studies than quantitative research. This is not surprising as Chinese epistemological teachings are based on a holistic world view and relational in all aspects (Rosker, 2012). Chinese believe that the external world is orderly structured and the human mind is structured in accordance to the cosmic order. Metaphysics is a central concept of Chinese philosophy and its origin could be traced back to Book of Change (Yijing). Many Western researchers argued that metaphysics is purely speculative, not empirically based and not verifiable. Chinese philosophers labeled the ultimate reality as Dao (the "way") and regarded the fundamental operating principle of the world as the balancing of forces known as Yin-Yang. Yu and Xu (2009) argued that the Chinese philosophy of Dao is "metaphysics of ethics" and stresses on morality and emotion but ignored reason.

Discussion

If research methodology is not aligned with the culture, the effectiveness of the new strategy is questionable. Western researchers have to be aware that applying Western models or methodologies without taking into consideration their experiences in the culture will only lead to research bias, a bias produced by cultural dependency rather than the research methodology itself. Western research methodologies are social constructs and developed according to the interests and tastes of the researchers in the West. The problem of social construction has become evident in different constructions

of culture and arises from the historical dominance of Western perspectives in the field of social sciences. This lack of diverse and non-Western perspectives tends to develop scholars who are narrow in their perspectives of other cultures. Universities in the West need to have a pool of academicians which are able to reflect the diversity of experiences in other cultures. One probable reason could be that the acceptance of authoritative structure in Asian countries as reflected in the high Power Distance Index as found in Hofstede studies. The perception that Western research methodology is the standard or norm for social research studies has coerced many researchers to align themselves to Western methods instead of embracing alternative but more culturally relevant research methods.

Western and Eastern philosophers perceive the world quite differently. Western philosophers thoughts were largely analytical, focusing on formal logic. Chinese thoughts, on the other hand, were holistic, seeking to understand the relationships among objects and events in the field. They are more likely to propose "middle way" solutions between contradictory propositions. While ancient Western philosophers see stability in the world, Chinese scholars saw *change*, in line with yin and yang of the Dao.

Asian researchers should challenge, rethink and redevelop accepted forms of Western knowledge that are broadly located within social sciences and reexamine their applicability to Eastern cultural context. The issue of methodological commensurability involves comparison of traditions and cultures. The imposition of one's values and beliefs onto others will likely result in *ethnocentrism* and conflicts. Ethnocentrism is prevalent in peer reviews as reviewers often prematurely judge other researchers in relation to their own culture, language and beliefs (Kuzban et al. 2001). It hinders cooperation and communication with other groups and presents a myopic view of one's beliefs. Alford et al. (2005) suggested that a number of political beliefs and behaviors may be influenced by heritable tendencies that are results from evolution. The human mind is predisposed to think and react in a certain way (Brown, 2004; Wrangham 2004).

Critics of ethnocentrism support the concept of *cultural relativism* which stress that all norms, beliefs and values are dependent on their cultural context and should be treated as such. It is of the author's view that no culture is superior over the other culture when comparing systems of morality, law, politics, etc. The behavior of one culture should not be judged by the standards of another culture. Relativists believe that all truth is relative and that there are no absolute truths. Conflicts will be minimized when one respect the values and standards of a different culture. Researchers should recognize that they do not fully understand the other cultures and that they may be assuming something that is out of context when conducting research studies of different cultures. In Buddhism, a verse from the Goddess of Mercy Mantra

"Gods in Heaven, Gods on Earth, humans apart from disaster, disaster apart from bodies, all *misfortune* turn into dust". A broad interpretation *of "misfortune"* could be *"worries"*. Applying this broad Buddhist concept to research methodology, researchers who fail to comprehend new thoughts and fail to see through new ideas will have difficulties comprehending new perspectives of social situations. Different thoughts or actions may create different learning outcomes. The development of wisdom and the nurturing of the mind form the philosophical basis of Buddhism perspective on education. The possibility of self-transformation through mental development will enable one to have a better understanding of the true nature of reality.

Because prestige bias is cultural specific, a generalization across other cultures leads to discriminatory assessments about the latter's learning strategies. Practitioners of Western cultural systems often attempt to subvert the learning models of other cultures. The differences between Western and Eastern learning models could be traced to philosophical differences of the West and East. Prestige and dominance are highly intertwined. The association with a dominant culture makes a practitioner feels that he is in a prestigious position. Likewise, the association with a prestigious environment promotes the feeling of dominance over others. Such interlocking behaviours often give rise to self-perceived superiority over others and forms the core of human hierarchical relationships. This relationship is illustrated in Figure 1.
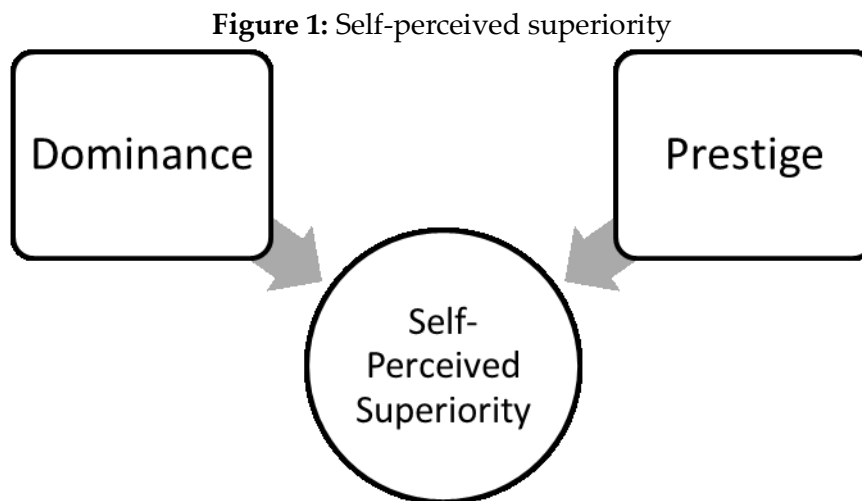
Figure 1: Self-perceived superiority

Individuals ascend up the social hierarchy and attain influence by using manipulative and coercive means to increase his status or power (Buss and Duntley, 2006). Other studies stressed that social hierarchy is determined entirely by social competence (Anderson and Kilduff, 2009). Cheng, et al (2013) demonstrated that both dominance and prestige are viable strategies for ascending the social hierarchy. This perception has

prompted some Eastern scholars to rethink the adaptability of Western research methodologies to Asian cultures.

What things are prestigious are often determined by the culture, social class or group membership. It is, thus, not too surprising to expect that that most academicians in the East will have their works published in journals from the East. The degree or extent of how much biases in peer review is difficult to quantify as there are inconsistencies in peer assessments between countries or types of journals. As peer reviewers are often contemporaries or competitors of the researcher, there is a high possibility that they tend to give less favourable results to the author due to selfish reasons. In reality, competition for research funding is a powerful tool to discredit a peer's research paper.

Figure 2 below shows the heuristics of peer reviewers as two opposing forces within an individual. At one end, the "ideal self" seeks to be an ideal person demonstrating the characteristics of objectivity and non-biasness. At the other end, the "real self" is an individual with entrenched beliefs, selfish motives, insecure and fearing competition. This cognitive dissonance within an individual has a powerful influence on the individual's behavior and actions. To release the tension, the individual may justify his behavior by either focusing on more supportive beliefs that outweigh the dissonant behavior or reduce the importance of the conflicting belief (Festinger, 1964). Applying the theory of cognitive dissonance to peer reviewers, we can speculate that some reviewers attempt to justify their actions by decreasing the importance of the dissonant cognition (that there is no ideal self in a person).

Figure 2: Heuristics of Reviewer
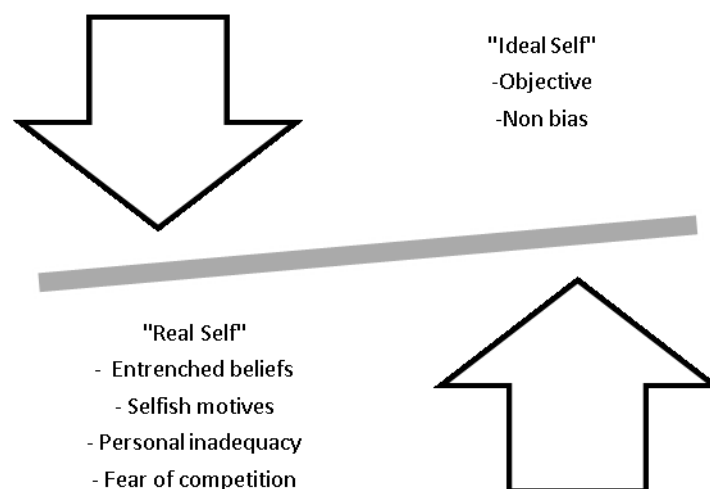
Conclusion

Western researchers have often criticized that Confucianism fails to provide the rights of individuals that may have conflict with the community. They argued that Eastern cultures suppress dissenters who attempt to highlight power abuses by authorities. In a broader sense, this seems contradictory as some Western researchers seek to impose their beliefs on Asian researchers in peer review articles. They seek to ignore or downplay alternative views and opinions of Asian researchers indicating faults in their research methodologies. These incidents highlighted the myopic views of some Western researchers who do not fully understand the background of the Asian culture. The Analects of Confucius maintained that "in teachings, there should be no distinction of classes". Similarly, there should be no distinction in terms of superiority or inferiority as far as knowledge, culture, experiences and beliefs are concerned. Each culture emphasizes different values and there should be no judgment of superiority. On one hand, some Western researchers advocate the rights of dissenters to voice their views, but on the other hand, they fail to acknowledge that there are differences in their philosophical views with Asian researchers. Comparative philosophy focuses on understanding of historical developments, similarities and dissimilarities between different cultures or ethnic groups. Different social systems will adopt different approaches and methodologies to the subject of study. Rather than viewing Asian researchers from a Western perspective, Western and Eastern researchers should learn from each other and jointly collaborate on research studies or topics of philosophical significance. This conclusion is anecdotal rather than empirical as any comparative research on this topic will likely be mired with biasness of the researchers. The cultural complexities across borders makes it an even more challenging tasks to conduct education research objectively for the research design and methodologies in themselves will display elements of biasness due to the predilections, beliefs and experiences of the researchers.

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