In the Labyrinth of Research: Critiquing Research Studies Conducted in Contrasting Paradigms

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Abstract—With the growing diversity of ideas related to complex research paradigms, multiple methodologies, and emerging theoretical frameworks underpinning various research studies, research appears an increasingly difficult terrain. The seemingly complex nature of research is not only daunting for the fledglings, but also challenging for more experienced researchers. The current paper is an attempt to offer reader-friendly guidance for a deep and critical reading of research studies conducted in major research paradigms. In part one, the paper presents brief definitions of major research paradigms and relevant key terminology, which is, in part two, followed by fairly detailed critiques of two research studies conducted in contrasting paradigms.

Index Terms—research, paradigms, critique, methodology, educational, research, studies, motivation, ELT, TESOL

I. INTRODUCTION

For the fledglings in the field of educational and social research, and sometimes even for experienced researchers, the vast array of research paradigms and approaches is no less than a bewildering labyrinth (Hammersley, 2012). More often than not, the growing diversity of ideas related to complex research paradigms, multiple methodologies, and emerging theoretical frameworks underpinning research studies, conducted by researchers from various schools of thought, baffles less experienced researchers. As a result, the philosophical underpinnings of research studies, which are so vital for deep understanding of the outcome of any research endeavour, are overlooked or disregarded. Hence, the current paper is an attempt to offer some exemplars of deep and critical reading of research studies conducted in contrasting paradigms. In Section II, for basic background knowledge, the paper offers a brief overview of major research paradigms and related key terminology (also see appendix 1); whereas, in Section III, detailed critiques of two major research studies conducted in contrasting paradigms are presented.

II. OVERVIEW OF RESEARCH PARADIGMS AND KEY TERMINOLOGY

(This section is adapted from my previous work: For a detailed paper on research paradigms and key research terminology see Hussain et al, 2013)

A. Interpretive Paradigm

The interpretive research seeks to understand values, beliefs and meanings of social phenomena and thereby extracts Verstehen or an empathetic understanding of human social activities and experiences (Smith & Heshsius, 1986). Interpretivists believe in the inseparability of understanding from interpretation. They see all social research as interpretive because all such research is guided by the researcher’s desire to understand (and interpret) social reality. Interpretive paradigm assumes that there are no facts, only interpretations (Bhattacharya, 2008). Therefore, it aims to explore individuals’ perceptions, share their meanings and develop insights about the observed cases (Bryman, 2008; Grix, 2010).

B. Positivist Paradigm

Positivism has been the most dominant paradigm of last century. It epitomizes the ‘dualism’ concept of mind and matter as separate entities. It comprises theories that view reality as independent of the observer. It also excludes all non-empirical concerns from its preview (Cohen et al. 2007; Grix, 2010). Positivist researchers assume that the world is stable and organized and their job is to measure data, process information and propose the most suitable solution to the identified problems. They also believe that there is only one universally acknowledged and best solution to every problem.

C. Critical Paradigm

Critical research aims at emancipating people by transforming their social, political, and cultural contexts (Alwan, 2007). Researchers working in this paradigm desire for a change that shakes the social institutions and power structures, and thereby leads to equality and justice in society (Carspecken, 2008; Crotty, 2003). They challenge the existing social order and cultural practices in favour of the underprivileged, and they often take an activist stance – with action as a goal of research (Habermas, 1984) – that can be both confrontational and interventionist. In practice, the researchers’
roles are to be transformative intellectuals who liberate people from their historical, mental, emotional and social situations (Crotty, 2003; Guba & Lincoln, 1994). Critical paradigm considers reality as tangible and composed of historically situated structures (Guba and Lincoln, 1994). The epistemological stance of critical paradigm is subjectivist (Crotty, 2003; Guba & Lincoln, 1994). This paradigm claims that knowledge is derived from social context where values are established and encouraged, and human perception is value-laden and based on prejudice.

D. Ontology and Epistemology

According to Cohen et al (2007, p.7), the ontological assumptions constitute the first set of assumptions in research ‘which concern the very nature or essence of the social phenomena being investigated’ and the epistemological assumptions consist of the second set of assumptions and concern ‘the very base of knowledge - its nature and forms, how it can be acquired and how it can be communicated to human beings’. In a nutshell, Ontology defines nature of reality and what is true, and Epistemology comprises theory of knowledge and ways of finding out what is true (Ernest, 1994).

E. Methodology and Methods

Methodology is the philosophy underlying the procedures and principles in a particular field of inquiry (Crotty, 2003). It refers to general principles which underscore how I investigate the social world and how I demonstrate that the knowledge generated is valid. Methodology depends on ontological and epistemological assumptions about the nature of reality and the best ways of gaining access to that reality. There are differences based on methodological characteristics, procedures and techniques. These differences affect the way each approach treats data and the data collection procedures (Cohen et al., 2007). On the other hand, research methods refer to more practical issues of choosing an appropriate research design to answer a research question, and then designing and adapting instruments to generate data (Cohen et al. 2007). In other words, research methods are the ‘techniques or procedures used to [collect,] collate and analyze data’ (Blaikie, 2000, p. 8, as quoted in Grix, 2010).

III. CRITIQUES OF RESEARCH STUDIES CONDUCTED IN CONTRASTING PARADIGMS

In this section, I have presented detailed critiques of two major research studies in the field of TESOL.

A. Study 1: A Critique of a Research Conducted in the Interpretive Paradigm


A). Paradigmatic Nature of the Study

This research study is conducted in the domain of interpretive research, which is highlighted at different places in the research report: the following quotes, ‘by generating a combination of quantitative and qualitative data, I hope to be able to uncover … learners own interpretations of their experiences’, ‘the sociocultural context of this study’, ‘I attempt to take a reflexive stance’ (Lamb, 2004, p. 7), ‘an ethnographer researcher’ (Lamb, 2004, p. 12), and the researcher’s use of first person throughout the research report, amply testify that this study is an example of interpretive research.

B). Ontology

The researcher, of this study, believed that reality was multi-layered and complex (Cohen et al, 2007) and a single phenomenon had multiple interpretations. That’s why; he considered interpretive approach more suitable for the phenomena which were ‘context-dependent’ (Lamb, 2004, p. 7) with a belief that individual behavior was determined by the experience gained out of one’s direct interaction with the phenomena. It ruled out any kind of objective external reality (Dash, 2005).

C). Epistemology

The epistemology of the researcher was derived from the interpretive tradition. He viewed knowledge as subjective and sought to find out how individuals interpret phenomena (Glesne & Peshkin, 1992 cited in Alwan, 2007).

The researcher says, ‘I hope to be able to uncover … learners own interpretations of their experiences’ (Lamb, 2004, p. 7), which shows that the researcher believes in the subjectivity of knowledge and the multiple layers of interpretation (Bryman, 2008). Therefore, the researcher has to be empathetic to the different layers of interpretation so as to successfully identify with feelings, motives and thoughts of individuals participating in the research.

D). Abstract

The abstract gives a brief summary of the whole research study. First, it succinctly states the objectives, research question, and the methods used for data collection. Then, it gives slightly elaborate details of the research findings, its implications and conclusion. The main thesis of the study is well worded in the abstract, which highlights the fact that English is losing its association with the English culture and is fast becoming a global language. The researcher was indeed successful in crafting a comprehensive abstract of this research report.

E). Introduction

This research study was conducted on ‘the language learning attitudes and motivation of first-year pupils in an urban junior high school in a provincial capital on the Indonesian island of Sumatra’ (Lamb, 2004, p. 4). The researcher had worked at the research site for several years. The school was located in an area of town where government officials and
academics lived, and it fell into the category of a well-resourced, high achieving state school. The study was delimited to the school mentioned above. The sample comprised 219 first year students. The researcher gathered information on the given topic through a questionnaire, interviews, class observations, and meetings with the teachers and students who were engaged in the process of teaching/learning English at the Indonesian school.

**F). Literature Review**

In this research report, the researcher has not used a separate heading for literature review rather he has merged it with the introduction. Prima facie, the literature review seems a bit brief, but it is quite concise and to-the-point. The researcher has, in fact, given more space to the discussion of results and their implications. He has furnished an excellent overview of the available literature in the relevant areas. The literature review is quite comprehensive and well-focused with 28 references in this section. The reference list catalogues 43 citations in total at the end.

**G). Research Questions**

The researcher has not stated the research questions or problem statement very explicitly. Instead, he has explained in ‘The study’ (p. 5) section the nature and aims of the research:

1- He investigated the language learning attitudes and motivation of first year pupils in an urban high school in Indonesia. He also aimed at exploring the validity of the theory propounded by Gardener in 1950’s regarding integrative motivation.

2- In a longitudinal study, he aimed to track the changes in motivation and identify factors related to those changes over a period of two years.

3- He wanted to explore the relationship between the learners’ words and actions in terms of motivation inside and outside the classroom.

**H). Methodology and Collection of Data**

In line with interpretive paradigm the researcher has employed a mixed method approach for a two-year longitudinal study. He has used both quantitative and qualitative research tools for data collection, which include a questionnaire survey of almost 219 first year students, two observation of and semi structured interviews with a 'focal group' of 12 individual learners, and interviews with eight English teachers. For the questionnaire survey, he has used a three point Likert scale to focus on each of the following issues: the experience of learning English, the importance of English, liking for learning English and favorite activities in the class.

These data collection tools have widened the breadth and scope of the research because in questionnaires, sometimes, the questions are not properly communicated to the respondents, and they do not capture the full range of responses, hence, distorting the actual findings of the research. Whereas, interview sessions with learners, aiming at their goals and role models, may help understand the true import of their motivation to learn English and also deepen the overall understanding gained through results of questionnaires. Therefore, a mixed model approach may enhance reliability of research and dispel doubts in the mind of a researcher.

**I). Results and Discussion**

The results of the research study question the nature of ‘integrativeness’. Most of the students involved in this research showed a keen interest in learning the English language as they perceived it a major source of success in their coming years. Their motivation primarily had an instrumental orientation i.e. to be able to use English in their jobs, careers, business activities and technological developments.

The results of the study strongly support the contention (contrary to Gardner’s contention) that the ‘term [integrative motivation] may not so much be related to any actual, or metaphorical, integration into an L2 community as to some more basic identification process within the individual’s self-concept’ (Dornyey & Csizér, 2002, p. 454, cited in Lamb, 2004). The results also question the role of integrative motivation in individual’s long term achievement in language. Hence, the concept whether learners have a favorable attitude towards the English speaking culture may also go out of favour with the emergence of English as an international language. Moreover, the findings throw light on the issue that integrative and instrumental motivational orientations are difficult to be distinguished as separate concepts as different personal, social, and educational activities and aspirations are associated with each other and with English as an integral part of the globalization process. In sum, the research concludes that needs of English language will not remain uniform in the coming years, and it may become important to gain the status of a ‘world citizen’ via command on English language. The researcher has explained the whole process of data analysis quite well. The documented results are well-organized, neatly sectioned and elaborately reported.

**J). Implications**

Several important findings of this study can be used for improvements in EFL/ ESL and further research in TESOL. Most important are the findings emphasizing that study materials and courses for English should be more embedded and contextualized in the respective cultures of the learners, rather than focusing on the native English culture. Another implication is about the long term goal of English language teaching, where a focus should be on teaching English as an additional language, in order to enable people ‘to express their identity and make their voices heard’ globally (Warschauer, 2000, p. 530 cited in Lamb, 2004).

**K). Conclusion**

The research report is well organized in the sense that after giving an introduction to the topic, with literature review embedded in the introduction, it progresses towards data collection, followed by data analysis, evaluation and
discussion of the data. Several implications of the research along with recommendations are given at the end of the research, which offer guidance to future researchers interested in research on ESL/EFL motivational orientations.

B. Study 2: A Critique of a Research Study Conducted in the Positivist Paradigm


A). Paradigmatic Nature of the Study

This research study is conducted within the ambit of positivist paradigm, which will be highlighted through the analysis of its content. As a matter of fact, the following quotes from the study reflect the choice of paradigm for this research: ‘intuitive appeal without empirical evidence was not enough to justify strong claims’; ‘motivational strategies be considered merely as hypotheses to be tested’; ‘the current research aims to fill the gap by providing empirical data’; ‘I set out to examine empirically...with the intention of producing generalizable results...’ (Guilloteaux & Dornyei, 2008, p. 56, 57, 58; and ‘the inclusion of ... objective observable data’ (Guilloteaux & Dornyei, 2008, p. 72)

B). Ontology

The researchers, in this study, endeavored to discover the generalizable motivational features through a research comprising a fairly large sample of students. As Merriam (1991) argues that the positivist worldview assumes ‘a single, objective reality—the world out there—’that I can observe, know and measure’ (p. 44), this study is based on realist ontology which also views reality as an external objective phenomenon, existing independently of human consciousness (Guba & Lincoln, 2000).

C). Epistemology

The epistemology of the researchers is clearly in line with the positivist paradigm. As objectivist epistemology relies on inquiry that is based on research questions or hypotheses, which are stated and evaluated by empirical testing, the researchers want to collect empirical data for gaining an objective understanding of teachers’ motivational strategies and student motivation.

D). Abstract

The researchers have written a very concise abstract of their research report, which provides a comprehensive overview of the research study. It briefly describes the objectives, hypotheses tested, research sample, the methods used for data collection, findings of the research and its conclusion. The focus of this study was made clear by pointing out at the outset that literature on motivational strategies ‘has little empirical evidence’, and the purpose of their study was to examine the link between teachers’ motivational practices and students’ language learning motivation and inform the research questions through empirical data.

E). Introduction

The introduction underscores the importance of motivation in language education. The researchers consider motivation as the mainstay in the language learning process. For them, even the most brilliant learners cannot achieve long-term goal without enough motivation. The importance of motivation is no less than a suitable curriculum and good teaching practices. The introduction gives a clear idea of what this research is all about.

As a norm, the introductions in quantitative studies are written in the third person to reflect an impersonal tone, objectivity and distance between the researcher and the subject (Creswell, 2003). However, the researchers here have written this research report in the first person, ‘we’, which may be considered against the norms of a study that aims to utilize empirical data and generalize the results.

F). Literature Review

The researchers have merged the literature review with the introduction instead of giving it under a separate heading. They have furnished a short overview of the available relevant literature, which seems quite brief with only 13 references in this section, out of which 5 belong to one of the researchers himself. This is mainly due to lack of research in this area (only two relevant studies) and the researchers’ preference for empirical research. As the purpose of literature review is to not only examine the body of relevant literature, but also offer guidelines for future research (Webster & Watson, 2002), this study has done an appreciable job by highlighting an important dimension of L 2 motivation, hitherto paid little attention in the field.

G). Methodology and Collection of Data

This research is mainly grounded in the quantitative research methods which utilize extensive numerical data to test the hypotheses or inform the research questions. Positivist researchers employ the principles of demonstration, verification and causal links between the bits of information used (Dash, 2005). This study entails a correlational research design where an important aim of data collection is to determine whether, and to what degree, a relationship exists between two or more variables (Gay, 1995). Hence, the study design seems a good choice as there is a need to discover or clarify relationships in the research context.

The researchers have used three specially designed instruments: a questionnaire to measure the situation-specific motivational behaviours of 1381 students, a ‘highly structured observation scheme’ called the Motivation Orientation of Language Teaching (MOLT) to assess 27 language teachers’ motivational teaching practices, and a post-lesson teacher evaluation scale for a posthoc evaluation of teachers’ behaviour. A quantitative approach to data analysis has been utilized, and inferential statistical procedures are used to inform the research questions. The research explores
relationships that exist among variables, mainly teachers’ motivational strategies and their effect on EFL learners’ motivational behaviours. The researchers have taken a large sample with the intention to produce statistically significant results. The demographic details of the target group (27 Korean teachers and 1,381 students in 40 classes) are provided. The research design of the study, with its aim to acquire generalizable results, seems suitable in this context. Moreover, the data collection procedures are explained in great detail.

H). Data analysis and Results

Like normative quantitative studies, the results of this study are supposed to be generalised. The researchers have expertly used statistical procedures for data analysis. They entered the numeric data into an SPSS data file for further processing of the results. Undoubtedly, the study is important in its scope and use of quantitative methods of assessing the practice and impact of using motivational strategies. Nevertheless, it is difficult to gain an objective understanding of motivational strategies and behaviours by using only the quantitative data, as the statistical figures need to be textually interpreted by the researchers. The study is substantial in a way that it tests two hypotheses: the association between the teacher’s motivational strategies and the students’ motivational behaviours, and that students’ opinion about the language course has an impact on their attitude towards learning tasks.

The researchers admit it is not possible to establish causal links in a correlational study, therefore, a claim, that teachers’ motivational practices increased students’ motivation, cannot be conveniently made. However, an alternative explanation can be given: a demotivated student can demotivate a teacher and vice versa.

The findings of this study furnish some fresh ideas for future planning in the field of English language teaching. First, it offers empirical evidence suggesting that teachers’ consciousness of different motivational strategies must be raised, and it should be used as an instructional tool in order to strengthen the teaching and learning process. Second, it provides an observation instrument to be utilized for teachers’ motivational training modules. Third, it brings home the fact that language teaching in a motivating manner is a possibility. Finally, it suggests that teachers’ motivational strategies can make language learning more stimulating and enjoyable for learners.

This study seems to answer the research questions raised in this regard. On top of that, it highlights four important areas for further investigation in language learning motivation.

I). Limitations of the Study

‘Perfection is not of this world’, and there is always room for further improvement and growth. No matter how carefully crafted a research design may be, there is always a likelihood of some imperfections and limitations. The study under discussion also has certain limitations: first, any conclusions drawn on the basis of inference from the data could be misleading and erroneous. Second, the researchers might have neglected some ethical principles as there is no detail of any ethical considerations as regards the students, although there is a mention of the teachers’ agreement and the schools principals’ permission.

J). Conclusion

This was an important research project in the area of language learning motivation. It was indeed well-planned and well-written. The reporting of the data got a bit complex due to the use of statistical procedures, which could be somewhat difficult for a novice researcher to comprehend. Overall, it was executed with finesse paving way for further research in the field of L2 motivation. Therefore, this research should be considered a significant contribution to the body of knowledge on L2 motivation.

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## Appendix. Characteristics of Research Paradigms (Gephart, 1999)

<table>
<thead>
<tr>
<th>POSITIVISM</th>
<th>INTERPRETIVISM</th>
<th>CRITICAL THEORY</th>
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<tbody>
<tr>
<td><strong>ASSUMPTIONS</strong></td>
<td>Objective world which science can ‘mirror’ with privileged knowledge</td>
<td>Inter-subjective world which science can represent with concepts of concepts of actors; social construction of reality</td>
</tr>
<tr>
<td><strong>KEY FOCUS or IDEAS</strong></td>
<td>Search for contextual and organizational variables which cause organizational actions</td>
<td>Search for patterns of meaning</td>
</tr>
<tr>
<td><strong>KEY THEORIES IN PARADIGM</strong></td>
<td>Contingency theory; systems theory; population ecology; transaction cost economics of organizing; dustbowl empiricism</td>
<td>Symbolic interaction; ethnography; phenomenology; hermeneutics</td>
</tr>
<tr>
<td><strong>KEY FIGURES</strong></td>
<td>Lorsch and Lawrence; Hannan and Freeman; Oliver Williamson</td>
<td>Goffman; Garfinkel, Schutz; Van Maanen, David Silverman</td>
</tr>
<tr>
<td><strong>GOAL OF PARADIGM</strong></td>
<td>Uncover truth and facts as causally specified relations among variables</td>
<td>Describe meanings, understand members' definitions of the situation, examine how objective realities are produced</td>
</tr>
<tr>
<td><strong>NATURE OF KNOWLEDGE or FORM OF THEORY</strong></td>
<td>Verified hypotheses involving valid, reliable and precisely measured variables</td>
<td>Abstract descriptions of meanings and member’s definitions of situations produced in natural contexts</td>
</tr>
<tr>
<td><strong>CRITERIA FOR ASSESSING RESEARCH</strong></td>
<td>Prediction=Explanation, Rigor; internal &amp; external validity, reliability</td>
<td>Trustworthiness, Authenticity</td>
</tr>
<tr>
<td><strong>UNIT OF ANALYSIS</strong></td>
<td>The variable</td>
<td>Meaning; symbolic act</td>
</tr>
<tr>
<td><strong>RESEARCH METHODS and TYPE(S) OF ANALYSIS</strong></td>
<td>Experiments; questionnaires; secondary data analysis; quantitatively coded documents</td>
<td>Ethnography; participant observation; interviews; conversational analysis; grounded theory development</td>
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### References


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