

BMPF 7005:
Undertaking Research in the Workplace

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Critically evaluate a range of methodological approaches, research designs, and research methods appropriate to gather data from complex work-based settings, with due consideration to research ethics and issues of insider research.

I. UNDERSTANDING RESEARCH PARADIGMS AND PHILOSOPHIES

The concept of 'research' refers to systematically gathering information (Merriam and Tisdell, 2016) to answer questions in which the approach to answering those questions is based on paradigms, philosophical assumptions, and distinct methods or procedures (Alele and Malau-Aduli, 2023). Paradigms refer to the fundamental set of beliefs that guide and define the worldview of the researchers (Lincoln et al., 2011; Alele and Malau-Aduli, 2023). It guides the researcher when deciding which research strategy, formulation of problems, data collection, processing and analysis to use in his or her research to obtain new, reliable knowledge about the research object (Žukauskas et al., 2018; Tamminen and Pouche, 2020). It consists of four philosophical elements they are ontology, epistemology, axiology and methodology (Alele and Malau-Aduli, 2023)

Ontology refers to the philosophical study of being (Simons, 2015). It studies the essence of phenomena and the nature of reality or existence (Guba and Lincoln, 1994; Gray, 2004; Morgan, 2007). It studies the kinds and structures of objects, properties, events, processes and the relationship between different entities (Smith, 2012; Tsang, 2016). While ontology focuses on what makes reality, epistemology focuses on what we can know about reality (Lee and Lings, 2008). Epistemology deals with acquiring, formulating and justifying how to know (Tsang, 2016). Epistemology is the philosophical study of understanding human knowledge's nature, origin, and limits (Stroll and Martinich, 2023) and determining which knowledge is valid, legitimate and adequate (Gray, 2004). The researcher's ontological position affects their epistemological perspective (Tsang, 2016). Together, they help the researchers to choose and justify which design and methods of their research, such as the kind of evidence that needs to be gathered, from where, as well as how they are going to be interpreted (Easterby-Smith et al., 1991; Tsang, 2016)

Methodology refers to the study design, methods, and procedures employed in a well-planned investigation to find answers (Alele and Malau-Aduli, 2023). Research Methodologies include quantitative research, qualitative research and mixed methods research. Quantitative research tests or verifies objective theories (Cai, 2018) by examining the

relationship among variables (Creswell, 2014). Variables involved are measurable, in which the data has numeral characteristics and can be statistically analysed (Creswell, 2014; Buljan, 2023). Qualitative research is a way of learning about social reality with approaches that aim to explore and understand the meaning people ascribe to activities, situations, events, artefacts and social phenomena. (Creswell, 2014; Leavy, 2020).

In contrast to quantitative research, qualitative research uses open-ended data, such as those taken from unstructured, in-depth interviews, focus groups, and observations (Alasuutari, Bickman and Brannen, 2008; Creswell, 2014). The mixed method is an approach that combines qualitative and quantitative research, data, and strategies in a single study (Creswell, 2014; Cai, 2018). It may encompass both theoretical frameworks and philosophical assumptions (Creswell, 2014). By incorporating various perspectives into the research, there is a greater potential for achieving a deeper comprehension in comparison to utilising just one method (Schoonenboom, 2023). Further explanations regarding their designs and methods will be discussed later in this paper.

I.1. Positivist paradigm

Positivism is a philosophy which only accepts things that can be seen or proved in an objective way (Žukauskas, Vveinhardt and Andriukaitienė, 2018; *Collins English Dictionary*, 2005) Its principle is that science is the only valid knowledge and facts are the only possible object of knowledge (Pawlikowski, Rico and Sell, 2018). Positivists rely on the data of experience and exclude metaphysical speculations (Pawlikowski, Rico and Sell, 2018; Feigl, 2023). Positivists have ontological assumptions for the existence of an objective reality with causality conceived as a constant conjunction of events (Tsang, 2016) that is observable, stable, and measurable (Park, Konge, and Artino, 2020) by unbiased and value-free researchers (Tsang, 2016). As such, its epistemological assumption is that knowledge must be gained through objective observation and measurement (Park, Konge, and Artino, 2020; Alele and Malau-Aduli, 2023) and include establishing theories (Merriam and Tisdell, 2016). Its axiological assumption is that researchers are value-free and consider individual subjectivity unimportant (Park, Konge and Artino, 2020). Given that perspective, its methodological assumption is that positivist researchers assumed to be unbiased (Tsang, 2016) and have the tendency to use quantitative approaches, such as surveys, experiments and quasi-experiments and analysis of archival data, and the results from the experiments are used to confirm or refine theories (Tsang, 2016; Park, Konge and Artino, 2020).

I.2. Interpretive paradigm

In contrast with positivism, interpretivism values subjective experience (Buriro, Ednut and Khatoon, 2020). Interpretivists believe that to understand this world, one must interpret it (Schwandt, 1998; Dudovskiy, 2024). It is often linked with constructivism, which values social processes like interactions and relationships in order to understand reality and their meaning (Buriro, Ednut and Khatoon, 2020). In this paradigm, individuals seek an understanding of the world in which they live and work (Creswell, 2014; Wang, 2015) thus, individuals actively learn and construct knowledge rather than passively receive them (Glaserfeld, 1989).

The interpretive paradigm has the ontological assumption that there are subjective, multiple realities and that they are socially constructed (Lincoln and Guba, 2016; Buriro, Ednut and Khatoon, 2020). Its epistemological assumption is that knowledge is gained subjectively from individuals' interactions, experiences, views and understandings (Creswell, 2014). Its axiological assumption is that the researcher's subjective values and intuition are essential and play a role in the data interpretation (Creswell, 2014). These assumptions lead to the methodological assumptions that researchers with these paradigms use qualitative research methods such as phenomenology, ethnography, and case studies with more open-ended questions to access participants' views and subjective experiences (Creswell, 2014).

I.3. Pragmatism

Pragmatists prioritise facts and choose research philosophy based on the problem. (Žukauskas, Vveinhardt and Andriukaitienė, 2018). Unlike positivists and interpretivists/constructivists, they don't see the world as an absolute unity and are not committed to one system of philosophy and reality (Creswell, 2014; Simpson, 2018). Pragmatism is value-free (Hammond and Wellington, 2020) and involves operational decisions that are based on practicalities under the principle of "what will work best" in finding answers to research questions (Maarouf, 2019; Hammond and Wellington, 2020) according to what the situation demands (Simpson, 2018). Pragmatism is applicable to mixed-method research, where researchers have the flexibility to choose the methods, techniques, and procedures of research that meet their needs and purposes (Creswell, 2014).

II. RESEARCH DESIGN AND METHODS

Research designs are specific types of inquiry within qualitative, quantitative, and mixed methods approaches that provide direction for research procedures (Creswell, 2014). It is the plan for answering the research question or hypothesis (Sousa et al., 2007). Meanwhile, research methods are the techniques and procedures to collect, analyse and interpret data in order to answer research questions or test research hypotheses (Creswell, 2014; Sreekumar, 2023).

II.1. Quantitative Research Designs and Methods

Quantitative research involves a set of methods that aim to study social phenomena in a systematic manner using statistical or numerical data, thus involving measuring the phenomena (Watson, 2015). Its research design primarily uses deductive reasoning (Sousa, Driessnack and Mendes, 2007; Sreekumar, 2023). In deductive reasoning, the researcher starts with established theories or hypotheses and then gathers evidence to assess, test or prove them (Sreekumar, 2023; Williamson, Burstein and McKemmish, 2002). As mentioned in the previous section, positivists often use this approach (Williamson, Burstein and McKemmish, 2002; Tsang, 2016; Park, Konge and Artino, 2020).

In quantitative research, the primary objective is to evaluate and measure the relationships between different variables by assigning numerical values to them. (Creswell, 2014) and is generally classified into experimental and non-experimental designs (Williamson, Burstein and McKemmish, 2002). Experimental design involves manipulating independent variables through random assignment and seeing their impact on the dependent variable (Watson, 2015). In comparison, non-experimental design relies solely on observation without any manipulation or randomisation (Williamson, Burstein and McKemmish, 2002).

Survey

One example of a data collection method in quantitative research is the survey (Denscombe, 2003). The word survey refers to the act of obtaining data for mapping to have a comprehensive and detailed view (Denscombe, 2003). This method can be helpful in gathering comprehensive information about knowledge, attitudes, beliefs, behaviours, and practices (Brasel, Haider and Haukoos, 2020). A comprehensive survey should clearly describe the research question, target population, study sample, survey development, validity and reliability measures, sample size calculation, survey administration, data analysis methods, results, and interpretation, as they would ensure scientific rigour and accuracy (Bryson, Turgeon and Choi,

2012). As one of the tools to conduct this method, Internet-based surveys could be beneficial and help simplify the research process. This is because it can reach more respondents through mass email, as well as its sophistication of logic and interactional information systems, which may maintain interest among respondents (Shropshire, Hawdon and Witte, 2009; Oppenheimer *et al.*, 2011). However, since internet-based surveys lack verbal communication and guidance, it is essential to pay detailed attention to the principles of conducting surveys, such as wording clarity of survey questions and procedures (Oppenheimer *et al.*, 2011).

Quantitative Research Sampling

In quantitative research, probability sampling is one of the most popular methods (Berg, 2002). The concept of probability sampling is based on the notion that a sample can be selected that will mathematically represent subgroups of some larger population (Senese, 1998, cited in Berg, 2002). Probability sampling includes simple random sampling, systematic random sampling and stratified random sampling (Berg, 2002).

Simple random sampling involves the researcher taking samples randomly, often using a coin toss, throwing dice or a computer program, which gives each member of the population an equal chance of being selected (Berg, 2002; Mishra and Alok, 2017; Buljan, 2023); this ensures that the sample is representative of the entire population, making it a reliable approach for drawing conclusions and making inferences about the population as a whole. In systematic random sampling, the researcher selects members of the population at regular intervals (Berg, 2002). In stratified random sampling, the population are divided into homogenous subgroups, called strata, and the researcher performs random sampling in each stratum. (Berg, 2002; Mishra and Alok, 2017; Buljan, 2023)

II.2. Qualitative Research Design and Methods

Qualitative research usually uses inductive reasoning that begins with open-ended observation and analysis, often looking for patterns and processes that explain “how and why” questions (Casebeer and Verhoef, 1997). Several examples of qualitative research designs include Narrative research, case studies, grounded theory, phenomenology, ethnography, and action research.

Narrative research is a form of qualitative research that focuses on the stories of individuals (Polkinghorne, 1995, cited in Creswell *et al.*, 2007). The procedures involve studying one or two individuals, collecting their stories (field text), reporting individual experiences, and

chronologically ordering the meaning of those experiences (Creswell *et al.*, 2007). Examples of narrative studies are biographies and autobiographies (Creswell *et al.*, 2007).

A case study is a research approach that is used to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context (Crowe *et al.*, 2011) in order to present and represent reality and to learn from that case and contribute to action and intervention (Cohen, Manion and Morrison, 2007). In contrast with narrative research that focuses on the story of the individual subject, a case study focuses on the issues, which may involve an individual, multiple individuals, a program, or an activity (Crowe *et al.*, 2011) using detailed data from wide data sources (Cohen, Manion and Morrison, 2007).

According to Crow *et al.* (2011), there are several potential pitfalls when undertaking case study research. They include the potential of selecting the wrong case(s), resulting in a lack of theoretical generalisations, the potential of collecting large volumes of data that are irrelevant to the case, and a lack of rigour. However, these pitfalls can be mitigated by developing in-depth knowledge of theoretical and empirical literature, staying focused on research questions when collecting data, and applying triangulation, respondent variation, theoretical sampling, and transparency (Crow *et al.*, 2011).

Grounded theory is a type of qualitative research approach that aims to develop a theory without any particular commitment to specific kinds of data, lines of research, or theoretical interest (Strauss, A. L. 1987 cited in Bell and Waters, 2018) by analysing the viewpoints of a significant number of participants, which explains a process, action, or interaction (Strauss & Corbin, 1998, cited in Creswell *et al.*, 2007). In this approach, the theory developed usually addresses everyday situations, such as the coping mechanism of returning adult students (Merriam and Tisdell, 2016). Ground theory is helpful to address questions related to processes, such as how things change over time (Merriam and Tisdell, 2016). Data collection is done by theoretical sampling, which is a sampling of incidents, events, activities, populations, etc., directed by the evolving theory to make comparisons between them (Strauss, A. L, 1987, cited in Bell and Waters, 2018).

Phenomenology is a form of qualitative research that focuses on the study of the individual's lived experience within the world, with the goal of describing its meaning in terms of what was experienced and how it was experienced (Neubauer, Witkop and Varpio, 2019). In comparison with grounded theory, both methods collect the views of a number of participants; however, instead of abstracting their statements to construct a model or theory, phenomenologists work on participants' specific statements and experiences, such as what they have in common as they experience a phenomenon (e.g. grief, anger) (Creswell *et al.*, 2007).

There are two most common types of phenomenology: descriptive (transcendental) phenomenology and interpretive (hermeneutic) phenomenology, the comparisons of which are presented in Table 1 (Neubauer, Witkop and Varpio, 2019).

Table 1. Comparison between Descriptive vs Interpretive Phenomenology

	Descriptive/Transcendental Phenomenology	Interpretive/Hermeneutic Phenomenology
Philosophical origins	Husserl	Heidegger, Gadamer
Ontological assumptions	Reality is subjective and based on consciousness	The way a person experiences life is shaped by their own perceptions and understanding of the world around them.
Epistemological assumptions	Observer must separate him/herself from the world; Biased-free; Understand phenomena by descriptive means	Observer is part of the world; Not Biased-Free; Understand phenomena by interpretive means
Researcher's role in data collection	Bracketing researcher's subjectivity/personal opinions or biases during data collection and analysis	Simultaneously reflect on own experiences when collecting data on participants experiences.
Researcher's role in data analysis/writing	Examine various aspects of a phenomenon, categorise them into significant components, and group them into themes to create a textual summary of the phenomenon (focusing on what it is). Utilise creative thinking to construct a structural summary of the phenomenon (focusing on how it works). Integrate both descriptions to capture the essence of the phenomenon.	The process involves repeatedly capturing and writing reflections to gain a deep and complete understanding of the phenomena.

Source: Neubauer, Witkop and Varpio (2019)

Ethnography is a type of research that focuses on observing people in their natural environments and everyday activities, involving the researcher actively participating in the setting and collecting data without imposing any external interpretations (Brewer, 2004). Many methods and techniques are used, including participant observation, interview, mapping and charting, interaction analysis, the study of historical records and current public documents, the use of demographic data, etc. (Lutz 1993 cited in Bell and Waters, 2018).

Action Research is a method used for improving practice involving action, evaluation, critical reflection, and implementing changes in practice based on the evidence gathered along the way (Koshy, Koshy and Waterman, 2011). According to Denscombe (2003), action research has four characteristics:

a. Practical.

Action research focuses on addressing practical problems and challenges that emerge in real-life situations, often in occupational or organisational contexts.

b. Change.

As action research addresses practical issues and explores phenomena, change is seen as a fundamental aspect of the research process.

c. Cyclical process

Action research involves a feedback loop in which initial findings generate possibilities for change, which are then implemented and evaluated as a prelude to further investigation.

d. Participation

The involvement of practitioners in the research process is fundamental, as they play an active role instead of a passive one.

Data Collection Methods within Qualitative Research

According to Leko, Cook and Cook (2021), in qualitative research, the most common methods of data collection are as follows:

a. Interviews

Qualitative interviews are one-on-one settings and encourage participants to provide discussion in greater length and detail with the focus on the quality rather than quantity. Semi-structured and in-depth interviews are commonly used to gather information in qualitative research (Jamshed, 2014). Semi-structured, in-depth interviews pre-set open-ended questions and then ask further questions based on the participants' answers, leading to varying responses among participants (Jamshed, 2014; Leko, Cook and Cook, 2021). On the other hand, structured interviews employ standardised interview protocols, resulting in consistent answers across participants (Jamshed, 2014; Leko, Cook and Cook, 2021).

b. Focus groups

In contrast with interviews that are one-on-one, focus groups involve a group of participants who are interviewed together. In such a setting, participants respond to the researcher and engage in discussions with each other (Leko, Cook and Cook, 2021).

c. Open-ended surveys

In contrast to quantitative surveys in section II.1 above that relate to written responses using numerical ratings, open-ended surveys involve participants responding to written questions designed to elicit in-depth, descriptive responses. In this method, there is no opportunity for researchers to have customised or follow-up questions or ask clarifying questions (Leko, Cook and Cook, 2021). Open-ended queries are utilized either on their own or in conjunction with other methods of interviewing to delve deeply into subjects, gain comprehension of procedures, and pinpoint possible origins of noted correlations (Weller *et al.*, 2018).

d. Observations

Conducting observation can be approached in two common ways: participant observation and non-participant observation. As participant observers, the researcher observes participants and interacts with them; thus, the researcher's experience and actions are considered data. Compared with non-participant observers, the researcher observes participants on the sideline without interacting with them (Leko, Cook and Cook, 2021).

e. Documents and artefacts

These are the permanent products, materials, or objects related to research. Examples include texts, photographs, reports, websites, letters, emails, agendas, memos, policies, and records.

Sampling Techniques within Qualitative Research

a. Purposeful Sampling

This technique is also called judgement sampling (Berg, 2002; Etikan et al., 2015) and it involves identifying and selecting individuals or groups of individuals who are especially knowledgeable or experienced with a phenomenon of interest (Creswell and Plano Clark, 2011, cited in Palinkas *et al.*, 2015). The researcher decides what needs to be known and sets out to find people who can and are willing to provide the information. The advantage of this technique is the high quality and accuracy of data collected due to the participants chosen are very

relevant to the research question (Etikan et al., 2015). However, the researcher should also pay attention to the potential bias when selecting the participants (Etikan et al., 2015).

b. Convenience sampling

This technique is also referred to as accidental Sampling and it relies on choosing samples that are available based on practicality (Berg, 2002), such as easy accessibility, geographical proximity, availability at a given time, or their willingness to participate in the study (Etikan et al., 2015). The advantage of this technique is that it can be used to obtain preliminary information about research questions quickly and inexpensively; however, samples must be re-evaluated for appropriateness of fit for a given study (Berg, 2002).

c. Snowball sampling

This strategy involves identifying and collecting data from individuals possessing specific attributes or characteristics required for the study, and then afterwards, requesting names of other people with similar qualities whom researchers can contact to gather data (Berg, 2002). This approach is beneficial when the study involves difficult-to-reach populations or sensitive topics.

II.3. Mixed Methods

A mixed-method research design applies both qualitative and quantitative research approaches and integrates and links both strands (Creswell, 2012). This method is suitable to use when the researcher has both quantitative and qualitative data, while one type of approach alone would not be enough to address the research problems or research questions, and when the researcher would like to provide an alternative perspective in a study (Creswell, 2012). According to Creswell (2012), there are three basic designs of the mixed method approach explained as follows:

- a. Convergent Parallel Design; which involves simultaneously collecting both quantitative and qualitative data, merging the data and using the result to understand the research problem.
- b. Explanatory sequential; instead of collecting both quantitative and qualitative data at the same time, this design collects quantitative data first, and then collects qualitative data as a follow-up or elaboration to explain the quantitative result.

- c. Exploratory sequential does the other way around, it collects qualitative data first to explore a phenomenon and then collects quantitative data to explain the relationship found in the qualitative data.

In addition to this basic design, there are three advanced designs, they are the embedded design, the transformative design and the multiphase design (Creswell, 2012). However, due to the word limitation of this paper, they will not be discussed in detail.

The advantage of mixed-method research is that as it brings together different philosophies and approaches it provides stronger inference than using one approach, thus giving the researcher a better and deeper understanding of the phenomena (Wasti *et al.*, 2022). However, it takes longer to complete and is costly as it involves multiple stages of data collection and separate data analysis (Wasti *et al.*, 2022).

III. ETHICS IN RESEARCH

"Ethics" refers to the set of morality standards that differentiate between what is considered acceptable (or the 'right' thing to do) and unacceptable (bad/wrong) behaviour (Wiles, 2013; Resnik, 2020). It can also be seen as a framework for making decisions when faced with complicated problems and issues such as ethical dilemmas or moral behaviour (Wiles, 2013; Resnik, 2020). It involves behaving in a manner that shows respect and concern towards others (Mandal, Acharya and Parija, 2011). Ethics is essential in research because it promotes the integrity of the discipline and the research process, and it promotes values that are important to collaborative work, such as mutual respect, fairness, and accountability (Guillemin and Gillam, 2004; Milton, 2013; Ogunrin, Ogundiran and Adebamowo, 2013; Resnik, 2020). Ethics in research is also essential because it promotes protecting the research subjects/participants (Cohen, Manion and Morrison, 2007; Laher, Fynn and Kramer, 2019; Buljan, 2023). In addition, ethics help ensure the research's responsibility to the public, which helps to build public support for research (Resnik, 2020).

There are some principles for ethical conduct in research compiled by Žukauskas *et al.* (2018): they are honesty (in all research-related communication, including data reports, results, research methods and processes, publication status, etc.); objectivity (such as in experimental design, data analysis and interpretation, grant writing, etc.); morality/integrity (in which the researcher must comply with the promises and agreements); prudence (avoiding careless errors and omissions); transparency (disclose of methods, assumptions, results); openness (in sharing

data, ideas, tools and resources and being open to criticism and new ideas); respect for intellectual property (such as patents, copyrights, etc); confidentiality (the researcher should protect confidential information); responsible publication; responsible management; respect for colleagues; social responsibility, anti-discrimination, maintaining professional competence; legitimacy; security of people involved in the scientific research (the researcher must respect human dignity, privacy and autonomy, taking particular precaution when working with vulnerable populations).

Informed consent

There are various types of subjects that can be involved in research, such as humans, animals, and biological samples, and it is vital to show respect to all participants involved (Shamoo, 2015; Buljan, 2023). Informed consent is crucial to ensure freedom and self-determination for research subjects. (Cohen et al. 2007, Shamoo, 2015; Buljan, 2023). Informed consent is a process where individuals (research subjects) make a decision to participate in a study after being clearly informed about facts that may affect their decision (Diener and Crandall, 1978, as cited in Cohen et al., 2007, p. 71; Wiles, 2013). In the informed consent, the researcher provides statements that participants understood the information presented and what to expect from them, that they know how their data will be collected and processed and agree with it (Wiles, 2013; Buljan, 2023).

Ethics when involving children in research

Informed consent is a key ethical consideration in research involving children (Davies, 2008). According to Wiles (2013), based on various guidelines, parental permission should generally be sought to protect both the children and the researcher. In addition to parental consent, from a certain age, which may be different from one country to another, the children and young people themselves should also give written assent to participate in the research process, and parental consent should not override the child's consent (Wiles, 2013; Buljan, 2023). If a child can understand the potential outcomes of participating in a research study, they are considered capable of deciding whether or not to take part (Wiles 2013). In the UK, Criminal Records Bureau (CRB) checks are also necessary for researchers working with children (Wiles, 2013).

According to Wiles (2013), many researchers believe it is possible to explain research in ways that most participants, including children, can understand. It is essential that information in

the informed consent is presented in a user (child) friendly way, which involves keeping the text minimum, adjusting the size of the text and layout, using graphics, comic strips, and video, and the choice of language that is suitable for the age of the children participating in the research. (Wiles, 2013; Buljan, 2023). The researcher should use language that frames their participation as always negotiable and provide some space to express how they choose to engage in the research project, such as outlining their expectations or desires about the project (Wiles, 2013). Since informed consent and assent documentation contain personal data, they should be stored in a safe place with restricted access and should not be combined with other research data (Buljan, 2023).

Upon the participant's request, researchers should maintain confidentiality, which means protecting and not disclosing identifiable information collected during the research process or not being used at all (Wiles, 2013). The primary way for researchers to avoid accidentally breaking confidentiality is through anonymisation by using pseudonyms (Wiles, 2013). The dilemmas sometimes occur, especially on sensitive issues involving the researchers having to choose between protecting privacy and the public's legitimate right to know (Cohen et al., 2007).

IV. INSIDER RESEARCH

Insider research is when a researcher is part of the group being studied and has prior knowledge of the organization or community being studied. (Merton, 1972, cited in Hellawell, 2006, p.484; Greene, 2014) Due to their membership in the communities under study, Insider researchers have prior knowledge about the research environment and participants. This enhances their understanding of the participants and promotes a comfortable and open environment for communication. This familiarity encourages participants to share more information (Greene, 2014). However, on the other side, participants may also perceive the insider researcher as too involved in the situation or, if he/she is considered socially distant, which may reduce participants' trust (Greene, 2014). Greater familiarity and access could also affect the inside researcher's perceptions and ability to engage critically with the data, jeopardising his/her objectivity (Drake, 2010, cited in Greene, 2014).

Greene (2014) suggests several techniques to mitigate problems related to insider research. Some of them include maintaining journals and field logs, methodological notes, findings and reports to develop and maintain a good audit trail. In addition, peer debriefing can also be pursued, where the researchers share findings and elements of the research with peers

or colleagues to stimulate the researchers to think critically. He also mentioned that insider researchers must be open to intensive scrutiny and be challenged continuously. Van Heugten (2004) suggested that insider researchers should maintain a "stream of consciousness writing" and engage in in-depth self-interviewing and conversations with others to create distance and avoid potential bias.

V. CONCLUSION

This study has allowed me to be critically aware of the range of methodological approaches, research designs and methods available for me to conduct my own research in my workplace. As a singing teacher who works primarily with children and young adult students, an example of potential research opportunities in my workplace would be assessing the impact of vocal exercise on my students' confidence and performance. I could use an explanatory sequential design of the mixed-methods approach by comparing the students' performance matrix before and after a series of vocal exercises as the quantitative components and conduct interviews or focus groups with my students to explore their perceptions of changes in their confidence and self-esteem after those vocal exercises. As I will be working with children, I should be aware of the ethical conduct required. As a singer-student myself who is still regularly seeing a voice teacher and participating in masterclasses, I have to be aware of my own biases to make sure they will not affect my data-collecting process with my own students.

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