

Title: A critical evaluation of research methodologies, paradigms and methods that may be suitable for research into Music Performance Anxiety

By - Syntyche Bishop

2332535

Professional Practice (Voice Pedagogy)

Module 2

University of Wales Trinity St. David

31/01/2025

Word count - 3985

Table of Contents

Introduction	1
Research Philosophies	1
Axiology	1
Ontology	2
Epistemology	2
Research Paradigms.....	3
Quantitative Research.....	3
Positivist Paradigm.....	3
Qualitative Research.....	4
Constructivist/Interpretivist Paradigm	4
Research Methodologies	5
Phenomenology	5
Case Study	6
Action Research.....	6
Ethical Considerations	7
Insider Research.....	8
Conclusion	9
References	10

Introduction

Bishop's School of Performing Arts is a specialized institution focused on performance-based education, providing individuals of all ages the opportunity to refine their skills across various performing arts disciplines, while cultivating self-confidence and personal growth. As a vocal and performance coach at the institution, I have observed that some vocalists experience heightened anxiety when singing in groups or performing publicly. Salmon (1990) defines music performance anxiety (MPA) as the persistent and distressing apprehension, or a decline in performance ability, that occurs in public settings, disproportionate to an individual's musical aptitude, training, and preparation. These observations have sparked my interest in conducting future research to explore potential causes of this phenomenon.

Research is a fundamental tool across scientific disciplines, driving the advancement of knowledge (Marcyk et al., 2010). In this paper, I aim to deepen my understanding of research methodologies and designs as they pertain to the study of MPA within the classroom context.

This paper will explore diverse approaches to investigating Music Performance Anxiety (MPA) within the classroom context. The discussion begins with an examination of the philosophical foundations of axiology, ontology, and epistemology, providing a theoretical basis for the study of this topic. This is followed by a comparative analysis of two research paradigms, evaluating their strengths and limitations to determine which is better suited to the study of MPA. The paper then specifically evaluates three research methodologies and associated methods of data collection, demonstrating their suitability within the selected paradigms. Finally, careful consideration is given to ethical implications and the challenges associated with insider research.

Research Philosophies

A research philosophy encompasses fundamental beliefs that shape the approach to designing and conducting a study, with each philosophy providing distinct perspectives on understanding scientific inquiry (Tamminen and Poucher, 2020). Tamminen and Poucher (2020) further state that research philosophies reflect a worldview that outlines an individual's understanding of the nature of reality, their role within it, and the potential relationships they can have with the world and its components. Essentially, it influences the way researchers approach and conduct research, including the methods used and the types of questions asked. It's the foundation that guides their perspective on how to investigate and make sense of the topic they are studying. Ajay (2021) states that axiology, ontology and epistemology are often implicit assumptions about values, society and knowledge that underpin our preferred research approaches. The following section will discuss these assumptions.

Axiology

According to "The or Briefings People and Organisational Research" (hereafter TOBPOR), (2024), axiology, originated from the Greek terms "axios" (meaning value) and "logos" (meaning study), referred to the philosophical study of values. TOBPOR (2024) further explained that it involves analysing what holds value and the reasons behind it, examining the nature of values, their ranking, and their connection to individuals, societies, and cultures.

Axiology is important to research because it examines the role of values in the research process, influencing both the researcher and the research outcomes. Specifically, it addresses questions about what is considered valuable, ethical, and meaningful in each study.

Axiology offers a framework to reconcile the divide between viewing values as either objective or subjective concepts (Edelheim et al., 2022). This is important because axiology provides a structured foundation for understanding and teaching values, which are central to human decision-making and behaviour.

Axiology philosophy may not be ideal for research on MPA because although axiology does influence ethical considerations and the researcher's reflexivity, it is less critical for determining methodological choices for this topic.

Ontology

Grix (2004) states that ontology and epistemology in research are like the foundation of a house; they provide the essential base upon which the entire structure is built. I agree with this statement, as throughout this research paper I have recognized the significance of employing both ontology and epistemology as foundational frameworks for selecting appropriate methodologies, particularly in the context of researching MPA.

Richards (2003) emphasizes ontology as the assumptions about what exists, while Snape and Spencer (2003) expand on this by considering both the nature of the world and our capacity to understand it. Ormston et al. (2014) builds on these ideas by exploring whether social reality exists independently of human perception and whether it is singular or context dependent. Together, these perspectives align in their focus on the essence of reality and the ways it is perceived or constructed, highlighting the core role of ontology in shaping how research approaches and interprets the world. In essence, ontology deals with our reality in which we exist, and our reality can be either objective or subjective.

Epistemology

In research, knowledge is acquired and understood through systematic processes that depend on the philosophical framework, methodologies, and methods chosen. It involves knowledge and, necessarily, it embodies a certain understanding of what that knowledge entails (Al-Saadi 2014). Al-Saadi (2014) further explains that epistemology deals with the 'nature' of knowledge, its possibility (what knowledge is possible and can be attempted and what is not), its scope and legitimacy. To further explain about the philosophy of epistemology, I cite Cohen et al., (2007) who explains that epistemology deals with the fundamental assumptions about the nature and structure of knowledge, including how it is obtained and shared with others. Epistemology is essential for this research as it focuses on the nature, sources, and limitations of knowledge, providing a framework to understand how knowledge about MPA can be acquired, interpreted, and validated.

Key elements influencing knowledge acquisition and understanding would include philosophical worldviews, research methodologies and methods. Rehman and Alharthi (2016) state "Epistemology and methodology are driven by ontological beliefs," which again prove how ontology and epistemology work together for the foundation of this research paper. Epistemology explores the connection between knowledge and the researcher during the process of discovery, while an individual's ontological beliefs influence how objective the relationship is between the researcher and what can be known (Rehman and Alharthi, 2016).

In essence, the statement highlights that a researcher's philosophical stance (ontology) will determine how they perceive their role in relation to what they are studying (epistemology).

Research Paradigms

The evolution of human thought and the diverse methods of interpreting and explaining phenomena in the world have led to the emergence of numerous philosophical paradigms (Adom et al., 2016). Adom et al., (2016) further stated, the two foundational theories, commonly known as the "traditional philosophical paradigms," positivism and interpretivism, have paved the way for the development of various other philosophical paradigms (Adom et al., 2016). Bryant (1975, cited Kuhn) as he described a paradigm as a framework of concepts, assumptions, fundamental principles, established methods, and shared commitments specific to a discipline or specialty, which may not always be interconnected and often require individual clarification.

A great analogy used to describe paradigms by Killam (2013) is that a paradigm is like a lens that shapes how researchers view the world, influencing their perceptions and guiding every aspect of their work. This section examines the fundamental differences between quantitative and qualitative research, emphasizing the positivist paradigm associated with the quantitative approach and the interpretivist and constructivist paradigms associated with qualitative research. The discussion will explore their philosophical foundations, methodological strengths and limitations, and their applicability to work-based research.

Quantitative Research

Sukamolson (2007) states, quantitative research involves representing and analysing observations numerically to describe and explain the phenomena they reflect. This approach to research can be described as a form of social research that utilizes empirical methods and produces empirical statements (Cohen 1980).

Quantitative research is commonly used in areas like modeling vocal communication of emotion, covering encoding (expression), transmission, and decoding (perception) of vocal emotion (Scherer, 2003). It is also applied in studying the impact of acoustic modifications on recognizing familiar voices with isolated vowels (Lavner et al., 2000).

Positivist Paradigm

One research paradigm associated with quantitative research is that of positivism. Positivism is a philosophical approach that gained prominence in the early 19th century, largely due to the contributions of French philosopher Auguste Comte (Richards, 2003). According to Rehman and Alharthi (2016), positivism holds that reality exists independently of human perception, is not shaped by our senses, and operates according to unchanging laws. As Rehman and Alharthi (2016, cited Hutchingson, 1988, p.53) states, Positivists perceive the world as existing independently and in a fixed state, ready to be studied. This means that positivists perceive the world as an objective reality that exists independently of human perception or interpretation. They believe that this reality can be studied and understood as it is, in a relatively unchanging and stable state, using observation, measurement, and scientific methods.

A positivist approach to MPA, might focus on physiological responses such as changes in heart rate. Berntson et al. (1997) discuss heart rate variability and quantitative assessment

methods, while Birn et al. (2006) explore fluctuations related to respiratory variations versus those linked to neuronal activity in fMRI.

Although a positivist approach enables objective, replicable, and quantifiable findings—making it valuable for identifying generalizable patterns and causal relationships—it risks oversimplifying complex human experiences such as MPA. By prioritizing measurable variables, this approach may overlook the subjective, contextual, and interpretive dimensions essential to understanding MPA. As such, for the topic of MPA, a qualitative approach is better suited as the insights required are best sourced from participants' personal experiences.

Qualitative Research

On the other hand, qualitative research emphasizes exploring a research question through a human-centred or interpretive perspective (Pathak et al., 2013). Interpretive researchers use methods that produce qualitative data, with limited reliance on numerical data, even if it is occasionally included (Rehman and Alharthi, 2016). Examples of qualitative data collection methods include open-ended interviews with varying levels of structure (such as standardized open-ended interviews, semi-structured interviews, and informal conversational interviews), as well as observations, field notes, personal notes, and document analysis (Rehman and Alharthi, 2016).

In a qualitative research example, Tahirbegi (2022) explored higher music education students' MPA experiences and coping strategies via self-regulated learning, and perceptions of institutional support through semi-structured interviews.

Every research methodology has its benefits and limitations, and qualitative is no different. Qualitative data is rich in detail and context, with interpretations closely tied to the source. Its validity relies on the study's reasoning rather than statistical tests, making findings context-specific and limiting generalizability (Libarkin & Kurdziel, 2002).

Constructivist/Interpretivist Paradigm

Interpretivism and constructivism are key paradigms in social science research that focus on the subjective interpretation of human behaviour and the idea that reality is socially constructed (William, 2024). Hollinshead (2006) acknowledges that they also emphasize the importance of recognizing the varied and evolving realities across different social and cultural contexts. The terms constructivist, constructivism, interpretivist, and interpretivism are commonly used in the vocabulary of social science methodologists and philosophers (Schwandt, 1994). Schwandt (1994) went on to say that their specific meanings are influenced by the intentions of those who use them. Hereafter, I will use the term constructivist and interpretivist interchangeably.

A constructivist or interpretivist holds that understanding the world of meaning requires interpretation (Schwandt, 1994). Interpretivism recognizes subjectivity in research, emphasizing the exploration of individuals' unique perspectives and how these shape their understanding of the world (William, 2024). Given that my future research focuses on MPA, it will inherently involve a high degree of subjectivity, as it seeks to explore individuals' lived experiences. Consequently, adopting an interpretivist paradigm will be highly advantageous for informing the research methodology.

Interpretivists favour an inductive approach, viewing theory as emerging from data rather than guiding research (Grix, 2004). This approach condenses extensive data, links findings to research objectives, and identifies underlying patterns or structures (Thomas, 2003).

The constructivist philosophical paradigm aligns with the qualitative research approach because it aims to understand the phenomenon being studied through the perspectives and experiences of participants, utilizing various data collection methods (Adom et al., 2016). Taking this information into consideration, the paradigm best suited for my future research on MPA would be the constructivist/ interpretivist paradigm.

Research Methodologies

This section will discuss three research methodologies: phenomenology, action research and case studies. For each of these three methodologies, one research method will be discussed in relation to the proposed topic of research, MPA.

Phenomenology

Connelly (2010) informs us that phenomenology began as a philosophical movement centred on understanding the nature of experience from the perspective of the individual undergoing the phenomenon, often referred to as "lived experience." Exploring MPA in the classroom requires methodologies that prioritize subjective experiences. Phenomenology, which examines lived experiences, offers a strong framework for understanding how students and educators perceive and manage performance anxiety, providing deeper insight into its emotional and cognitive dimensions (Armstrong, 2005).

Past studies have proven effective using phenomenology as the methodology of choice in other areas of vocal pedagogy. Sweet and Parker (2019) stated that the aim of their phenomenological study was to explore the lived experiences of women aged 19–35 in the development of their vocal identity and to examine how these experiences influenced their future paths as musicians and music educators, also, In Rooney's (2016) study, "An Exploration of Modern Vocal Pedagogy and the Instructional Techniques of Globally Renowned Vocal Coaches," a phenomenological approach was used from an epistemological perspective, with data collected through semi-structured interviews.

Semi-Structured Interviews

The semi-structured interview combines closed and open-ended questions, often supplemented with follow-up inquiries exploring reasons or processes (Adams, 2015). This approach can enable deeper exploration of MPA, capturing nuanced personal insights beyond rigid structured formats.

My potential study can benefit from a phenomenological approach because it allows researchers to explore subjective emotions, perceptions, and meanings, making it particularly valuable for studying MPA and its personal impact on vocalists. However, since phenomenology relies on personal interpretations, findings can be subjective and influenced by researcher bias. Additionally, results are context-specific, making it difficult to generalize findings to broader populations.

Since my research focuses on MPA in the classroom, phenomenology is a strong methodological choice because it will allow me to explore how students personally experience anxiety during performances, which will align with the constructivist/interpretivist approach, as it prioritizes understanding lived experiences over numerical data.

Case Study

Heale and Twycross (2018) explains that a case study is a research method frequently utilized in the social and life sciences. It is an in-depth, systematic exploration of a specific individual, group, community, or unit, where the researcher analyses detailed data across multiple variables (Heale and Twycross, 2018). Case studies offer rich, data-driven insights and can be theoretically engaging, making it essential to evaluate their strengths and limitations while also providing practical guidance on their execution and management (Hartley, 2004).

Flyvbjerg (2011) highlights misconceptions about case studies, such as their lack of scientific rigor and generalizability, as well as their association with only exploratory research and qualitative data. However, case studies offer in-depth exploration of complex phenomena, providing valuable insights into specific contexts, behaviours, and experiences (Sharma, 2024). They inform decision-making, policy, and professional practice in real-world settings (Hermens & Clarke, 2009). Nair and Gick (2015) did a case study on the efficacy of ultrasound biofeedback in voice pedagogy during a brief masterclass session with two young tenor singers in training. This is evidence that a case study can be beneficial to the field of vocal pedagogy, and more specifically in a classroom context.

A research method that can be used to assist with this methodology is document analysis:

Document analysis

Document analysis (DA) is a structured assessment of printed or digital materials (Ernst, 2019, cited Bowen, 2009). DA involves examining existing documents related to the case being studied to gain insights into the issue at hand. It is a method of collecting data without direct interaction with the participants, making it particularly useful for in-depth, historical, or background research.

Moreover, by analysing specific cases of students or semi-professional performers experiencing MPA, this research can generate practical, evidence-based strategies for vocal coaches and educators. Case studies can allow researchers to observe interventions in action, assess their effectiveness, and refine approaches that can be applied in real classroom or performance settings.

Action Research

Action research is a problem-solving approach that aims to identify issues, implement interventions, and drive meaningful change within a specific context (Afify, 2008). The work of Afify (2008, cited Hammersley, 2004) and explained that it necessitates ongoing dialogue between researchers and practitioners and can be viewed as a fusion of theory and practice. The action research methodology, grounded in philosophy, provides a theoretical explanation of the unique nature of the 'action' that is the focus of study, as well as an epistemological justification for the type of knowledge it aims to produce (Carr, 2007).

Some issues have been noted with this methodology however, for example Carr (2007) explained that the nature of human action and the credibility and validity of the knowledge

generated through action research are central to the ongoing methodological discussions within the field of action research. Action research has limited generalizability, potential researcher bias, ethical concerns regarding participant pressure, and challenges in replication due to its flexible, iterative nature.

According to the Southern Illinois University Edwardsville (2024), One benefit of action research is that it connects theory with practice by anchoring educational decisions in real-world experiences. By systematically collecting and analysing data, educators can make informed, evidence-based decisions, resulting in more effective teaching strategies and enhanced learning outcomes (Southern Illinois University Edwardsville, 2024). Welch et al. (2005) conducted an action research study about real time feedback in the singing studio, recognizing two singing teachers and their adult students as co-researchers. Welch et al. (2005) collected data through research diaries, observations, interviews, and multimedia recordings, providing an opportunity to enhance both teachers' and students' professional knowledge and skills.

One method of research that can be performed under the action research is participant observation:

Participant Observation

As the name suggests, this method involves both participation and observation, utilizing field notes and video recordings as key data collection tools (Laurier, 2010). In action research, participant observation involves the researcher immersing themselves in the setting and observing the participants' behaviour and interactions while potentially taking part in the activities themselves. This method allows the researcher to collect data in a naturalistic context, offering insights into the dynamics of MPA as it occurs in real-world settings.

Using this methodology can be beneficial for research in MPA because it aligns well with the practical, real-world context of addressing anxiety in a classroom setting. Action research is focused on identifying and solving practical problems. In this case, understanding and addressing the impact of MPA on students can lead to actionable strategies to reduce anxiety and improve performance.

Ethical Considerations

When designing research, it is crucial to consider any potential risks or harm to participants (Patten, 2016). Ethics refers to a branch of philosophy focused on how individuals should behave, evaluating those actions (e.g., right versus wrong, good versus bad), and establishing principles for justifying actions (Kitchener and Anderson, 2000).

The nature of this research requires a qualitative approach as was discussed above, and as Halai (2006) mentions, specific qualitative research methods, including action research, biography, phenomenology, and ethnography, present intricate ethical challenges that require careful examination to uphold ethical research standards, some of which were recommended for use in this study.

In researching MPA in the classroom, ethical considerations play a crucial role in ensuring that participants are treated with respect and integrity throughout the study. Given the sensitive

nature of the topic, it is essential to prioritize participant confidentiality, ensuring that any personal experiences shared are anonymized and protected. Informed consent must be obtained, with participants fully understanding the purpose of the research, their right to withdraw at any time, and how their data will be used. Additionally, the researcher must remain aware of their position as an insider, particularly if they have experienced performance anxiety themselves. This insider perspective could influence the way participants share their experiences, so it is important to maintain reflexivity and minimize bias in data collection and analysis. Ultimately, the ethical approach aims to balance the pursuit of knowledge with the well-being and dignity of those involved in the study.

Ethical research is a moral responsibility, requiring careful consideration to ensure that the rights, well-being, and interests of participants are protected and not adversely affected by the study (Halai, 2006).

Insider Research

In qualitative research, the stories we hear, how they are conveyed to us, and the narratives we create, and share are inevitably shaped by our position and personal experiences as researchers in relation to our participants (Greene, 2014).

Saidin and Yaacob (2016) consider that conducting research as an insider can enhance the researcher's understanding of both the study and the phenomenon being explored. Some suggest according to Saidin and Yaacob (2016), that conducting research as an insider may compromise objectivity and introduce bias, while others argue that it offers a unique perspective that can provide a more balanced understanding of the issues being studied.

Insider research for a study on MPA in the classroom may involve the researcher conducting the study within a context they are personally connected to. Considerations that should be considered for insider research include elements of bias, power dynamics and ethical concerns.

Taking bias into account, being an insider can influence your perspective, making it crucial to remain reflexive and self-aware. Therefore, researchers must carefully consider ethical issues relevant to their study, as this is a crucial aspect of developing work-based research projects (Costley et al., 2010). Regarding power-dynamics, if participants are students or colleagues, the existing relationships might affect how freely they share their experiences. As a researcher, it is essential to remain aware of power dynamics. Future research and practice should continue to explore these pathways to deepen understanding of inequities—both within external partnerships and internal structures—while working toward equity that aligns with shared values (Wallerstein et al., 2019). Finally in terms of ethical considerations, maintaining confidentiality, informed consent, and voluntary participation is particularly important to avoid ethical dilemmas. This is crucial for MPA studies to ensure participants feel safe sharing personal experiences, leading to more honest and reliable data.

As a researcher with firsthand experience of MPA, the stories shared by participants, the way they express their struggles, and the narratives I construct from their experiences would be inevitably shaped by my own journey. As someone who has navigated the challenges of performance anxiety it would allow me to approach the research with empathy and insight, but

it also requires self-awareness to ensure my interpretations remain grounded in the participants' realities. Taylor (2011) suggests that while deep familiarity with one's field provides notable benefits, it also transforms the researcher's role and personal experiences within their own culture and community. This dual perspective enriches the study while emphasizing the importance of reflexivity in insider research.

Although insider research originated in ethnographic fieldwork within anthropology and sociology (Sikes & Potts, 2008), it is relevant across various disciplines and is particularly significant for those interested in the methodological and ethical implications of conducting research (Greene, 2014).

Conclusion

This paper explored diverse approaches to researching Music Performance Anxiety (MPA) within the classroom context, beginning with an examination of the philosophical foundations of axiology, ontology, and epistemology. A comparative analysis of research paradigms highlighted their respective strengths and limitations, guiding the selection of appropriate methodologies. The evaluation of three specific research methodologies demonstrated their suitability for investigating MPA, with careful attention to the relationship between methodology, data collection methods, and the chosen research paradigm. Ethical considerations, particularly those related to insider research, were critically examined to ensure responsible and reflexive research practices. By integrating these theoretical, methodological, and ethical perspectives, this paper underscores the importance of selecting well-aligned research approaches to gain meaningful insights into MPA and inform effective pedagogical interventions.

Future research should consider integrating mixed methods to balance qualitative depth with quantitative validation, as well as exploring longitudinal studies to assess the lasting impact of interventions on musicians' performance anxiety. By applying these methodological insights, researchers and educators can develop more effective, evidence-based strategies to support vocalists in managing performance anxiety and fostering confidence in musical performance.

Reference List

Adams, W.C., 2015. Conducting semi-structured interviews. In: Handbook of practical program evaluation, pp.492-505.

Adom, D., Yeboah, A. and Ankrah, A.K., 2016. Constructivism philosophical paradigm: Implication for research, teaching and learning. Global journal of arts humanities and social sciences, 4(10), pp.1-9.

Afify, M.F., 2008. Action research: Solving real-world problems. Tourism and Hospitality Research, 8(2), pp.153-159. Available at: <http://www.jstor.org/stable/23745524> [Accessed 30 January 2025].

Ajay, A., 2021. Introduction to epistemology, ontology and axiology in philosophy. Available at: https://medium.com/@softdev_ajay/introduction-to-epistemology-ontology-and-axiology-in-philosophy-5a2fc0b726ac [Accessed 28 January 2025].

Al-Saadi, H., 2014. Demystifying Ontology and Epistemology in research methods. Research Gate, 1(1), pp.1-10.

Armstrong, P.B., 2005. Phenomenology. Johns Hopkins Guide for Literary Theory and Criticism (2nd Edition). Available at: <http://litguide.press.jhu.edu/> [Accessed 28 January 2025].

Berntson, G.G. et al., 1997. Heart rate variability: origins, methods, and interpretive caveats. Psychophysiology, 34(6), pp.623-648.

Birn, R.M. et al., 2006. Separating respiratory-variation-related fluctuations from neuronal-activity-related fluctuations in fMRI. Neuroimage, 31(4), pp.1536-1548.

Bryant, C.G., 1975. Kuhn, paradigms and sociology. British Journal of Sociology, pp.354-359.

Carr, W., 2007. Philosophy, methodology and action research. In: The quality of practitioner research. Brill, pp.29-42.

Cohen, L., Manion, L. and Morrison, K., 2007. Research Methods in Education. London: Routledge.

Connelly, L.M., 2010. What is phenomenology? Medsurg Nursing, 19(2), p.127.

Costley, C., Elliott, G. and Gibbs, P., 2010. Doing work-based research: Approaches to enquiry for insider-researchers. Los Angeles: Sage.

Sharma, Urvashi (DR), n.d. Case studies in user-friendly research: understanding complex phenomena. Available at: <https://medium.com/@DrUrvashi.Sharma/case-studies-in-user-centred-research-understanding-complex-phenomena-8cccdac48a08> [Accessed 30 January 2025].

Edelheim, J. et al., 2022. Axiology, value and values. In: Teaching Tourism. Edward Elgar Publishing, pp.12-20.

Ernst, A., 2019. Research techniques and methodologies to assess social learning in participatory environmental governance. *Learning, Culture and Social Interaction*, 23, p.100331.

Flyvbjerg, B., 2011. Case study. In: *The Sage handbook of qualitative research*, 4, pp.301-316.

Grix, J., 2004. *The Foundations of Research*. New York, NY: Palgrave Macmillan.

Green, H.E., 2014. Use of theoretical and conceptual frameworks in qualitative research. *Nurse Researcher*, 21(6).

Greene, M.J., 2014. On the inside looking in: Methodological insights and challenges in conducting qualitative insider research. *The Qualitative Report*, 19(29), pp.1-13.

Halai, A., 2006. Ethics in qualitative research: Issues and challenges.

Hartley, J., 2004. What is a case study. *Essential guide to qualitative methods in organizational research*, p.323.

Heale, R. and Twycross, A., 2018. What is a case study? *Evidence-based nursing*, 21(1), pp.7-8.

Hermens, A. and Clarke, E., 2009. Integrating blended teaching and learning to enhance graduate attributes. *Education+ Training*, 51(5/6), pp.476-490.

Hollinshead, K., 2006. The Shift to Constructivism in Social Inquiry: Some Pointers for Tourism Studies. *Tourism Recreation Research*, 31, pp.43-58.

Killam, L., 2013. Research terminology simplified: Paradigms, axiology, ontology, epistemology and methodology. Laura Killam.

Laurier, E., 2010. Participant observation. *Key methods in geography*, p.133.

Lavner, Y., Gath, I. and Rosenhouse, J., 2000. The effects of acoustic modifications on the identification of familiar voices speaking isolated vowels. *Speech Communication*, 30(1), pp.9-26.

Libarkin, J.C. and Kurdziel, J.P., 2002. Research methodologies in science education: The qualitative-quantitative debate. *Journal of Geoscience Education*, 50(1), pp.78-86.

Marczyk, G.R., DeMatteo, D. and Festinger, D., 2010. *Essentials of research design and methodology*. 2nd edn. John Wiley & Sons.

Nair, A., Schellenberg, M. and Gick, B., 2015. A case study on the efficacy of ultrasound biofeedback in voice pedagogy. In: ICPHS.

Patten, M.L., 2016. Understanding research methods: An overview of the essentials. Routledge.

Pathak, V., Jena, B. and Kalra, S., 2013. Qualitative research. Perspectives in Clinical Research, 4(3), p.192.

Rehman, A.A. and Alharthi, K., 2016. An introduction to research paradigms. International Journal of Educational Investigations, 3(8), pp.51-59.

Richards, K., 2003. Qualitative Inquiry in TESOL. Basingstoke: Palgrave Macmillan.

Rooney, T.J., 2016. The understanding of contemporary vocal pedagogy and the teaching methods of internationally acclaimed vocal coaches. International Journal of Learning, Teaching and Educational Research, 15(10), pp.147-162.

Saidin, K. and Yaacob, A. (2016) 'Insider researchers: Challenges & opportunities', *Proceeding of ICECRS. International Seminar on Generating Knowledge Through Research*, Malaysia, pp. 849–854.

Salmon, P.G. (1990) 'A psychological perspective on musical performance anxiety: A review of the literature', *Medical Problems of Performing Artists*, 5(1), pp. 2-11.

Scherer, K.R. (2003) 'Vocal communication of emotion: A review of research paradigms', *Speech Communication*, 40(1-2), pp. 227-256.

Schwandt, T.A. (1994) 'Constructivist, interpretivist approaches to human inquiry', in *Handbook of qualitative research*. Sage.

Sikes, P. and Potts, A. (2008) *Researching education from the inside: Investigations from within*. London & New York: Routledge.

Snape, D. and Spencer, L. (2003) 'The foundations of qualitative research', in Ritchie, J. and Lewis, J. (eds.) *Qualitative Research Practice*, Los Angeles: Sage, pp. 1-23.

Souther Illinois University Edwardsville (2024) 'Learn the importance of action research in education at SIUE'. Available at: <https://online.siue.edu/degrees/education/msed/advanced-teaching-strategies/the-importance-of-action-research/> (Published: 19 January 2024).

Sukamolson, S. (2007) 'Fundamentals of quantitative research', *Language Institute Chulalongkorn University*, 1(3), pp. 1-20.

Sweet, B. and Parker, E.C. (2019) 'Female vocal identity development: A phenomenology', *Journal of Research in Music Education*, 67(1), pp. 62-82.

Tahirbegi, D. (2022) 'Higher music education students' experiences and management of performance anxiety: A qualitative study', *Psychology of Music*, 50(4), pp. 1184-1196.

Tamminen, K.A. and Poucher, Z.A. (2020) 'Research philosophies', in *The Routledge International Encyclopedia of Sport and Exercise Psychology*. Routledge, pp. 535-549.

Taylor, J. (2011) 'The intimate insider: Negotiating the ethics of friendship when doing insider research', *Qualitative Research*, 11(1), pp. 3-22.

The OR Briefings (2025) 'People and organizational research'. Available at: <https://oxford-review.com/the-oxford-review-dei-diversity-equity-and-inclusion-dictionary/axiology-definition-and-explanation/> (Accessed: 28 January 2025).

Thomas, D.R. (2003) 'A general inductive approach for qualitative data analysis'.

Wallerstein, N. et al. (2019) 'Power dynamics in community-based participatory research: A multiple-case study analysis of partnering contexts, histories, and practices', *Health Education & Behavior*, 46(1_suppl), pp. 19S-32S.

Welch, G.F. et al. (2005) 'Real-time feedback in the singing studio: an innovatory action-research project using new voice technology', *Music Education Research*, 7(2), pp. 225-249.

William, F.K.A. (2024) 'Interpretivism or Constructivism: Navigating Research Paradigms in Social Science Research', *Interpretivism or Constructivism: Navigating Research Paradigms in Social Science Research*, 143(1), pp. 5-5.