

Undertaking Research in the Workplace

Introduction

Throughout this essay I intend to define and discuss ontological and epistemological viewpoints surrounding voice instruction, and acceptable methodologies, methods and tools, to ethically undertake research in the voice studio. I will be using these factors and my personal paradigms to drive my exploration to ultimately discover appropriate research methodologies, methods and designs to utilize in further research, while also expounding on their validity and ethical concerns. Research itself consists of countless options a researcher must strategically choose from, and no one is more correct than another (Descombe, 2003). However, some tactical choices are better suited for certain scenarios and may lead to other decisions and discoveries throughout the research process. Evenso, these research paths have also been explained and expanded many times over by countless researchers, so their definitions and contexts are widely stretched to fit various fields of thought (Glaser, 1999). My goal is to aptly define and narrow down these factors to generate a concise foundation and structure for future research endeavors. For my future research topic, I hope to examine exercise science integration in the voice studio, so the principles and perspectives explained below may be examined through the fields of voice and exercise science.

Axiological, Ontological and Epistemological Stances

The “nature of ethics” (Mertens, 2010, p.470), or axiology, drives moral and honest research based on the practitioner's individual core tenets. It is important to note that the researcher's choices of paradigm, ontological, epistemological, and methodological viewpoint must align with the core axiological ideals of the researcher (Killam, 2013). Research must be focused around the researcher's values, while also considering and adapting to outside ethical constraints. Personally, I advocate for vocal, mental and emotional openness and balance in my studio. I believe that in order to progress, a singer must be vulnerable enough to lean into uncharted territory, while also maintaining balance, to perpetuate sustainable technique. Openness and communication, in my opinion, will positively mold my research process due to the fact that I am already comfortable connecting with my sample students, subjectively, on a personal level. Also, my current integration of balance will allow me to navigate the fine lines of insider knowledge to ultimately derive ethical data.

Oxford's English dictionary defines ontology as a metaphysical principle pertaining to the nature of existence and how subjects interact to form reality (2022). Ontology, in research, pertains to the researchers specific beliefs about reality and how their research and practice is affected (Gray, 2004). This leads to metaphysical questions of true existence. Realism and relativism, as well as variances in between, represent how ontological standpoints can be categorized, and are often debated (Killam, 2013). Both realism and relativism are developing and are elucidated differently within research, thus sparking contest. In basic terms, realism is the belief system and research principle that a single truth and reality subsists completely discrete from human influence. It is further characterized by the priority of sound law and generalizational, statistical data that is collected objectively (Killam, 2013; Clark, 1998; Crossan, 2003). Vastly opposite to realism, relativists are of the opinion that multiple interpretations of reality exist based on the individual's situational context, which is "dynamic" (Killam, 2013; Crossan, 2003) and can evolve through interaction and experience.

From an ontological standpoint, I believe that multiple realities and constructs of said realities exist within both the field of voice and exercise science, thus backing relativist ontological ideals. Even within the voice community, addition of exercise regime is debated (Chandler, 2022). Although exercise science principles have been incorporated for some time, via skill acquisition and warm-up practices, vocal coaches and pedagogues have varying opinions about physical exercise in studio settings (Sandage & Hoch, 2018; LeBorgne & Rosenberg, 2021). Lawrence (2022) aids in dismantling the stereotype that exercises cause excess tension that affects vocalization. However despite it recently being researched, the stereotype against vocalist exercise has been ingrained in the field for quite some time and some are reluctant to adapt (Chandler, 2022). Lawrence (2022), Chandler (2022), and others notice how dynamic the voice industry is and understand the importance of upregulating performers to fit these demands by means of exercise. These two angles are different portrayals of realities within the field; two varying schools of thought, both valid in the eye of the beholder. I align with the latter, but axiologically advise and strive for balanced integration of exercise in my studio, in order for my vocal athletes to perform at the highest level, both vocally and physically.

A step further, epistemology refers to the essence of knowledge and the connection between the researcher and knowledge during exploration (Steup & Neta, 2020). A researcher's axiological values and ontological grasp of reality directly affect their epistemology (Killam,

2013). In layman's terms the relation between researcher and knowledge pertains to how a practitioner uses their belief systems to acquire specific knowledge, thus analyzing how one knows what they can come to know. The duality of objective and subjective research categorize epistemological standpoints between practitioners. Objectivity, in research terms, is gained by the dualist, or impartial, relationship between practitioner and subjects, whereas subjective research is interactional and cooperative (Guba & Lincoln, 2005; Merthens, 2010; Killam, 2013). I anticipate a very subjective research experience due to my axiological values, and relativist ontology. I also understand that the sample group for my future research will be composed of my vocal athlete students, with whom I already have professional relationships with. The subjectivity of my research process will allow for authentic connection between myself and my sample students, thus creating a path for open communication about their exercise and vocal journeys. This, I believe, will yield co-created, functional results.

Personal Paradigms

"Paradigms serve as metaphysical frameworks that guide researchers in the identification and clarification of their beliefs with regard to ethics, reality, knowledge and methodology" (Mertens, 2010, p.469). Winter's chapter (2020), using Callaghan's (2014) and Bogden's (2003) work, states copious paradigms can be utilized to propel voice research, however, recently, to understand vocal anatomy, a positivist paradigm and quantitative, scientific data is persistently seen. I will delve into these paradigms, in further detail, to shed light on their strengths and limitations, both generally in the voice studio and narrowed to tailor to my future research plans.

Positivism, historically noted as the one truth about a reality based on observations from sensory input and "empirical inquiry" (Gray, 2004, p. 18). Positivism was coined by Augustine Comte in hopes of transforming mere sensory information into theories and laws by means of focused experience and experiment (Walliman, 2001). It complies with realism and objective ideals, thus defining its ontological and epistemological foundations. The relationship between researcher and participant is completely dualist and independent in order to control, or eliminate, influence and bias to maintain validity of results (Killam, 2013). Research methodology for the positivist researcher include experimental and manipulative studies to acquire deductive, quantitative data that can be measured through repeated testing to prove validity of data (Williman, 2001). In order to conduct positivist research, the researcher must dispel all prior notions of the area studied in order to have an untainted view of the subject or

sample in order to analyze the data (Williman, 2001). This leads to honest analysis, but introduces a difficulty factor for the practitioner to fully disengage from other knowledge and inputs (Trochim, 2006), which may lead to “disembodied analysis” (Williman, 2001 p.167). Other shortcomings of positivist-based research are the “rejection of...abstract or hypothetical entities” (Robson et. al, 2016, p.21) and fact that observable data and theory only become credible when multiple researchers come to the same conclusion or reality (Robson et. al, 2016).

Within the setting and practice of a voice studio, positivist framed research is tricky due to restrictions of scientific research (Winter, 2020; Callaghan, 2014). Medical and auditory equipment required to acquire quantitative data surrounding vocal anatomy or quality is not readily available to many researchers due to accessibility and affordability factors. In my case, using said equipment is out of the realm of possibility, thus reducing the validity of quantitative data if my research process were positivistically driven. While the historic “gold-standard” (Killam, 2013, p.25) of positivist research is well established, newer researchers, such as myself, perceive that the only way to break into the field is through positivist, statistical and scientific method driven research (Winter, 2020). Speaking from personal experience, it is extremely daunting and seemingly unmanageable. However, I, among other pedagogues (Winter, 2020; Callaghan, 2014), believe that within the voice pedagogy field, researchers must branch out to other paradigms and methods to better understand practice research with a holistic view, rather than positivistic and statistical relevance alone.

Comprehensively contrasting with positivism, constructivism is based on ideals that “social properties...[are] constructed by human beings as they interact and engage in interpretation” (Robson, et. al, 2016, p.24), and focuses on how the reality of experiences are lived by individuals. Constructivist researchers are inclined to utilize various research methods and methodologies to understand and analyze diverse perspectives from the sample. Considered a postmodernist paradigm, constructivism migrates from traditional schools of thought that attempt to simplify one reality (Killam, 2013), by aiming to understand multiple individuals' grasps of their own realities. Axiologically, constructivism is rooted in values of authenticity, ethics, balance and reciprocity (Mertens, 2010) and the participants, and their opinions, are justly illustrated through research. From an ontological point, constructivism is very relative, meaning that reality, in the most basic sense, cannot exist without multiple versions developed from individual experience and interaction (Guba & Lincoln, 1994). All in all, constructivism is rooted in the idea that we

construct our own knowledge and, thus, our reality. Epistemologically, the constructivist practitioner and the sample participants subjectively and personally interact using collaborative methods, such as observations, interviews and dialogues, consequently co-generating findings (Killam, 2013). This personal relationship between the practitioner and sample outlines a core strength of constructivism and how it can be used in holistic voice based research to generate inductive data.

Constructivist based research acknowledges and celebrates the subjective and individualized relationships found in the voice studio. This, if ethically implemented, captures genuine qualitative data on the art of singing (Winter, 2020). Unfortunately, the constructivist research paradigm is not without its faults. Some pedagogues and researchers, such as Charmaz (2006), believe that a constructivist researcher can be deficient of responsibility and rigor without the use and accountability of the scientific method. Though clique, I agree with Sir Francis Bacon's notion that "knowledge...is power" (1597). My connection to and knowledge of vocal performance allows me to personally relate to my students and I believe that, used ethically, personal engagement in constructivist research will lead to a well designed vehicle to derive valuable data. Roll (2015) agrees, mentioning that the experience and context the practitioner has, allows them to readily interpret, analyze and synthesize qualitative data from personable observation and interview of voice student subjects.

Considering how vastly different constructivism and positivism research paradigms are, it was relatively easy for me to gravitate towards constructivism. I believe that my artistic mentality, bias toward qualitative data, and trepidation towards statistics aided in that as well. More specifically, my personal axiological aim, as a voice coach and upcoming exercise trainer, is to spread awareness of the benefits surrounding voice and exercise cross training. I plan to do this using the work from Lawrence (2022), Chandler (2022), and LeBorgne & Rosenberg (2021). This, along with my relativist ontology and subjective epistemology discussed above, indicate that my personal paradigm is mainly constructivist oriented. However, as Feilzer (2010) warns, the strict use of a singular paradigm often leads to issues and possible ethical concerns throughout the research process. I will explore this in later sections.

Research Methodologies

Kaplan (1973) proposes the idea that methodologies aid in understanding the bigger picture of the research process rather than the product or data. Quantitative, qualitative and mixed methods are research methodologies that are grounded in divergent goals and perspectives and permit a variety of diverse study data, analysis and findings (Creswell, 2014). As mentioned earlier, the researchers chosen methodological approaches are directly correlated to their axiology, ontology, epistemology and paradigm (Gray, 2004). Berg (2001) states that “Qualitative and quantitative [methodologies] are not distinct” (p. 2) and suggests that multiple methodologies used in tandem, heighten research. My intention is to explore the strengths and weaknesses of these methodologies to then generate a productive, multi-faceted research plan for future modules.

Quantitative methodology is defined by measurable amounts (Berg, 2001) and theories are tested (Creswell, 2014). It aligns with realist ontological views, is epistemologically objective and employs etic perspectives to analytically obtain deductive and statistic oriented data.

Quantitative methodologies experiments with variables, or different characteristics or elements within the sample (Creswell, 2014), to prove correlation via cause and effect (Descombe, 2003). Historically in the voice and exercise science field, an emphasis on quantitative research was required for relevancy, reliability and significance (Winter, 2020; Horn, 2014). Research methods such as experiments, measurable tests and numerically driven questionnaires or surveys drive quantitative research to answer the preestablished question (Bell, 2011). In my voice studio statistically driven experimentation seems difficult and unsustainable due to the plethora of uncontrolled factors at hand and the absence of equipment. Killam describes the detriment of experimentation to the fact that it “does not support study of human behavior in depth and does not enable exploration of feelings and mental constructions of reality” (Killam, 2013, p.25). In terms of research pertaining to the incorporation of exercise into the voice studio, Harriss, MacSween and Atkinson (2020), Feters (2011) and Horn (2011) shed some light to ease my preconceived notion that exercise science data needed to be strictly quantitative. Despite being wary of quantitative research, I predict that aspects of quantitative methodology the data it renders are necessary for a well-rounded, ethical examination surrounding voice and exercise science.

Qualitative research, most tied to relativistic ontology and subjective epistemology, drives to understand the meaning of an individuals’ experience and builds theories to delineate

phenomena (Merriam & Tisdell, 2015). Due to its subjectivity, qualitative research methodology is characterized by individualized, emic perspective of a situation (Merriam & Tisdell, 2015) and is analyzed using inductive reasoning. A core emphasis within qualitative data is the interpretation of human behavior (Patton, 2015). Some weaknesses of qualitative research are seen by the lengthy design process and interpretative aspects involved. Due to the fact that qualitative research goals are unclear in the beginning stages, the researcher has to spend time designing research to meet ethical standards to maintain reliability (Bell & Waters, 2018). Also, due to non-quantifiable data, qualitative research cannot be examined using technology (Berg, 2001). This effects the analysis of the data because it can be interpreted and induced differently by various practitioners. Within my future research, using qualitative research methodology will allow me to utilize my own experience and knowledge to communicate and connect with my participants (Bell & Waters, 2018). This can derive data on students' reactions and thoughts on both vocal quality and exercise journey.

Mixed method research methodology recognizes attributes from both qualitative and quantitative methodologies in order to approach data comprehensively and holistically (Foss & Ellefsen, 2002; Killam, 2013). Triangulation is an ideal, mainly connected with mixed methods, that allows hypotheses to be proved in multiple ways with several methods, subject groups, and analysis frames, to improve validity and quality of the findings (Bell, 2018; Killam, 2013). As explained above, both quantitative and qualitative research methodologies are empirical, meaning discoveries are verifiable. This ensures that mixed methods approach, considering the qualitative and quantitative data is procured with integrity, is valid and ethical. Since I will be conjoining two fields, voice and exercise, in my future research, I believe mixed methods and triangulation are most warranted to produce valid, generalizable data suitable for the standards of each discipline.

Research Methods

Research methods are tools to extract knowledge to drive analysis and aid in the research process (Descombe, 2003). Costley, Elliott and Gibbs (2010) explain that methods, typically deemed either qualitative or quantitative, "lend themselves to gather...both kinds of data" (p.103). In this technological age, research methods are more accessible and efficient, which considerably benefits data and researchers (Descombe, 2003). Various qualitative and quantitative methods, and the compilation of mixed methods research, provide an abundance of possibilities to practitioners and their projects. Qualitative research approaches include,

grounded theory, ethnography, action research, and phenomenological research (Merriam & Tisdell, 2015). Within these branches, specific methods such as survey, case study, and interview allow for data influx. On the other hand, quantitative methods require statistical data that is obtained through experimental research, by means of measurement, observation, survey and testing to prove cause and effect (Davies, 2021). Further discussion of these methods, along with their merits, disadvantages and practical ties are as follows.

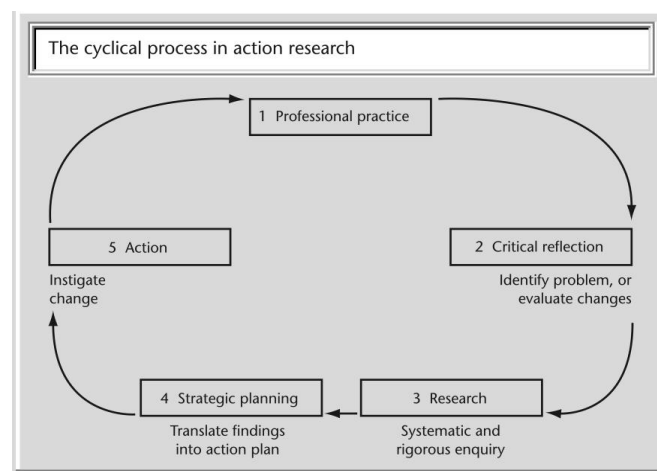
Glaser (1999) describes grounded theory as “a specific general methodology” (p. 837). Rather than testing a pre-existing theory, grounded theory develops theories, which are then systematically analyzed and grounded by empirical explanations of the real world (Descombe, 2003). Researchers begin with an open mind as theory and sample remain malleable and mutable (Bell, 2005). Glaser (1999), Locke (2001), and Goulding (2002) describes ground theory as an adapting method that allows researchers to fit the method to their needs, accordingly creating new and varying versions of the method. A positive factor of grounded theory is the accessibility to target a diverse sample group (Descombe, 2003). Since not one idea or aim is being researched at the beginning, the practitioner can cast a large net in order to spark theories. This angle also lends itself to the main weakness surrounding grounded theory, being that the research path is unclear and difficult to conceptualize (Descombe, 2003). Since I already know and have contact with my research sample group, I believe that grounded theory is too broad for my research process. However, grounded theory may be useful to generate theories that pertain to a wider range of vocal athletes in the future.

Ethnography is a qualitative research approach with a desire to understand peoples, cultures and points of view (Merriam & Tisdell, 2015). This journey of discovery requires field work and immersion into the area of study and normally observes and analyzes routine and mundane life of the everyday individual (Bell & Waters, 2018). Merriam and Tisdell (2015) explain the advantages and shortcomings of ethnographic data. Benefits of ethnography include access to direct observation, holistic viewpoints, experiential and empirical data, natural validity, and individual perceptions. Also, it is likely to be a natural and familiar practice to the practitioner. Negative aspects of ethnographic research are seen when researchers become absorbed in mere recounting rather than critical analysis, have difficulty gaining ethical consent without interrupting, and allow insider knowledge to shroud the obvious. Personally, ethnography, as a means to produce qualitative data in the voice studio, seems far-fetched, due to the individual

aspect of voice instruction I employ in my studio. As a voice coach, I must interact with my students, meaning the naturalistic, outsider-focused analysis is unattainable. However, in the basic sense of the approach, I can apply balanced practitioner immersion and holistic lens of ethnographic research to fit the setting of my future research.

Action research is a practical research method for real world settings and allows for dynamic development and understanding of the phenomena being investigated (Costley, Elliott & Gibbs, 2012; Descombe, 2003; Bell & Waters, 2018). Researchers utilizing action research use observation, reflection, research and engagement in order to experience, inspect and modify their practice through active participation. The cyclical feedback associated with action research allows for professional and personal development of the researcher, seen in figure 1 from Descombe (2003). Strengths of action research are that the development and resolution of everyday problems faced by the practitioner and sample group, the personal and professional growth via positive participation, and insider knowledge is used to propel findings (Descombe, 2003). Descombe (2003) also delineated the weaknesses, which include the lack of generalization, reduced control or limit of factors due to the natural and impromptu nature, and inevitable impartiality of the researcher. I believe this method will be most suited for the voice studio, in that most of my instruction is reflection-in focused and action based. I suspect this, plus the fact that I am able to constructively and subjectively use my knowledge as an artist and athlete to guide my students, will propel my research.

Figure 1: (Descombe, 2003)



Phenomenological research addresses perceptions, mentalities, and emotions surrounding phenomena without the use of the scientific method or numeric data (Creswell, 2014). This humanistic approach allows for individualized, authentic reports of complex experiences or phenomena in small scale research settings (Descombe, 2003). Due to the humanistic and emotionally centered aspects, some scientists believe phenomenological research lacks the scientific rigor expected from studies due to lack of analysis, and at times deemed unimportant and mundane. However, from a researcher standpoint, the act of delving into the emotional realm of phenomena, through individual accounts, allows for dissolution of preconceived assumptions, thus dissipating effects of insider knowledge (Descombe, 2003). I surmise that aspects of phenomenological research will be applicable to my future research to allow me to subjectively understand the emotional and physical reports of my research sample throughout the research process. This will provide a humanistic and holistic element to my research to hopefully triangulate with other data.

As mentioned earlier, research design approaches of survey, focus group, interviews, and observation are predominantly qualitatively driven methods for data collection (Descombe, 2003). Surveys allow for cost effective, up to date empirical data that is widespread and inclusive (Bell & Waters, 2018). Descombe (2003) states that survey data can generally reinforce, or explain quantitative data. The drawbacks of surveys are absence of detail and depth, as well as the probability of inaccurate responses. Unlike surveys, focus groups are mainly small groups in natural settings aimed to relatively focus on intricate situations by means of discussion of different realities and experiences (Descombe, 2003). Interviews are very similar to focus groups, however they can be small-group or individually centered, concentrating on the in depth individual interaction. Winter (2020) expounds that interviews can be structured, semi-structured and unstructured, which are categorized by the freedom, or lack there of, the practitioner has with asking impromptu questions. Overall, focus groups and interviews utilize numerous methods in order to obtain multiple sources of data and allows the practitioner to build and test theories without the demands of controlling variables (Descombe, 2003). The small scale factors of focus groups and interviews compel me to believe they will fit best in the studio setting. Antithetical to surveys, these designs promote a natural environment and allow a practitioner to delve into the individuals perceptions and experiences surrounding the research topic, which I believe will be most beneficial to the setting of my voice studio.

Experiments, using control and constant factors to observe and measure cause and effect, are a prime, predominant example of a quantitative data collection method (Bell & Waters, 2018). They rely on their ability to eliminate outside elements of the control group and comparison group being researched, and the repeatability of the findings. Experiments can also provide precise numerical data for a multitude of research aims among countless fields. Unfortunately, experimental methods thrive in artificial, rather than natural, settings, so ethical concerns may arise regarding the control or deception of the subjects or variables and the data rendered (Descombe, 2003). An experimental research design is a bit daunting as I am a first time researcher, however I believe I can ethically measure variables specific to voice instruction and exercise inclusion without the use of expensive equipment. For example, maximum phonation time can be assessed before and after exercise to assess muscle engagement without the need for equipment. I conclude that there are multiple ways in which I can ethically derive data using components of experimental methods.

Key Ethical Issues Relevant to Research

Like research practices, the connotations of validity can be recognized differently through the lenses of alternate paradigms across researchers (Winter, 2020). Merriam (1995) suggests the paradigm used within research molds the multitudes of perspectives on both reality and validity. The obligation of the practitioner is to design and conduct research that combats and limits the ethical concerns surrounding the paradigm, methodologies, and methods chosen. Berg (2001), using Punch (1994) work, explains that ethics mainly focus towards controlling matters of the subjects' trauma, consent, and confidentiality. He also expounds how history has shaped the generation and regulation of ethical standards. One of the most important outcomes being the idea voluntary and informed consent, meaning that a subject must be presented with the risks and choose to willingly participate (Berg, 2001; Cohen, et. al, 2007). Ethical concerns reside in both qualitative and quantitative methodologies. Within the realm of performing research within the voice practice, bias' of insider research, in all methods, is of main concern.

Ethical questions pertaining to qualitative data are dependent on the values and integrity of the researcher (Merriam & Tisdell, 2016). For example, qualitative data is analyzed by the researcher and their experience, and hence their bias, so their credibility effects the validity of the data. This phenomena lends itself to the idea that qualitative methodology lacks the rigor that scientific respect requires. Furthermore, delineating research boundaries and obtaining fair

access to the participants are other ethical concerns (Descombe, 2003). Within focus groups, interview and observation, the observer and Hawthorn effects are prevalent. Merriam & Tisdell (2016) note that “the [method] itself may bring about changes in the activity [or subject], rendering it...atypical” (p.250). These ethical dilemmas tie back to the questioned validity and efficacy of qualitative data in terms of the scientific method. Since the research theory is not predetermined within qualitative research methods (Creswell, 2014), these ethical quandries are difficult to assess and regulate before research begins.

Unlike qualitative methods, quantitative research ethics are governmentally and associationally regulated to ensure the safety and privacy of willing participants (Merriam & Tisdell, 2016). Since experiential methods are deductive and premeditated, researchers spend ample planning time towards mitigating ethical concerns (Creswell, 2014). The framework and rules for utilizing control and experimental groups, an variances inbetween, allow researchers to ethically compare data samples (Creswell, 2014). This also allows for hard-data to be investigated by several researchers, rather than inductive qualitative data that is influenced by the practitioner. This portrays the ethical rigor generalization and validity play the scientific method.

Researching within one's field, though entirely vital, is complex and can get muddled. Berg (2001) notes Babbie's (1983) work that addresses the idea that all researchers believe themselves to be ethical. In the end, the bias and ethical concerns pertaining to insider research, or the practitioner's knowledge base, affect the validity and credibility of the results. Winter (2020) describes insider research as a practitioner that is actively engrossed by the process of their research, which reminds me of qualitative action research methods that I intend to employ in future research. Here, a fine line exists in order maintain ethical standing in order to not skew results. A “process of ‘reflexivity’...must deconstruct [a practitioners] position within the research (Winter, 2020) in order to control bias and influence. I believe my prior research of Schön (1983) and Ghaye (2011) and will equip me to anticipate and mitigate ethical matters pertaining to insider research both qualitative and quantitatively.

Identification, Discussion, and Evaluation of Potential Research Opportunities

I aspire to focus my future research on the effects of exercise regimens on the voice with a holistic vocal health lense, so my personal and research perspectives explained heretofore will be framed by both voice and exercise science principles. As noted in my previous work, I am a

relatively new voice coach with both an operatic and athletic performance background, and I believe both have molded me into the vocal practitioner I am today. The general idea of researching the integration of exercise into the voice studio excites me. I am in the preliminary stages of becoming a certified personal trainer; and my goal, with continued literature and field research, is to understand what exercises benefit vocal athletes best. Ultimately, I wish to confidently incorporate regimented physical training into my voice studio to boost performance. Considering my axiological values of balance and openness, relativist ontology, and subjective epistemology, my potential research, almost indisputably, will be composed of constructive paradigm elements. The use of mixed methods, by means of triangulation will be vital for me to ethically meet research standards for both voice and exercise research to ensure valid and generalizable data. I can envision quantitatively testing a value, such as maximum phonation time, and analyze how exercise affects said value. Qualitatively, I believe subjective interviews with my students will be conducive to obtain a holistic research view. Although a majority of the design is unclear at this time, I feel primed and prepared to take on my future research endeavor on account of this module.

Conclusion

As delineated above, there are multitudes of paths and variances a researcher can embark on. Using these choices, the practitioner must address the ultimate task and responsibility of deriving ethical and honest data. The means and methods of which the data is obtained may vary due to a host of reasons, but with adherence to ethical constraints, Descombe (2003) mentions, not one way is more valid than another. During this exploration into research pillars, I have gained a better awareness of how and why I believe what I believe and the significance of that knowledge. I plan to apply the multifaceted research knowledge and self-awareness I have acquired to ethically guide my future investigation. I hope to holistically enhance performance of vocal athletes from a place of passion for, and experience with, voice and exercise instruction.

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