



## Indigenous music therapy theory building through grounded theory research: The developing indigenous theory framework<sup>☆</sup>

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### ABSTRACT

There are diverse understandings within music therapy about what constitutes theory. Also, there is debate about whether research methodology, developed outside of the field of music therapy, is able to support the development of music therapy theory that is indigenous to the profession. In this paper, a framework, called the developing indigenous theory (DIT) framework, which allows for the development of indigenous theory through the use of grounded theory research methodology, is presented. A new definition of indigenous music therapy theory is provided. Here, indigenous music therapy theory refers to knowledge emergent from music therapy relationships which are able to be plausibly generalised across settings and time, allowing for the development of theory that is idiosyncratic to the field of music therapy. The difference between “precursors to theory” and actual “theory” are examined, and the outcomes of numerous studies are considered through the use of the framework. The distinction between complete and modified grounded theory studies is discussed. It is suggested that the DIT framework may hold relevance for the development of theory in other human relationship-based arts therapies.

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Within the music therapy profession there are various understandings of what constitutes theory, what is required of theory, and how to construct theory (Aigen, 1991, 2005; Bruscia, 2005; Garred, 2001; Kenny, 2001, 2002, 2003; McFerran, 2005; Rykov, 2005; Wheeler, 2005). A framework is presented here to support the development of indigenous music therapy theory from grounded theory research methodology. The framework is called the developing indigenous therapy framework (i.e., the DIT framework). This presentation is contextualised within contemporary discussion about the existing use of grounded theory research within music therapy (e.g., Amir, 2005), and the desire for inno-

vative research methodology to enable indigenous music therapy theory (Aigen, 1991, 2005).

After Aigen (1991) first discussed the importance of developing indigenous, rather than “borrowing,” theories to create music therapy knowledge, Andsell (1995) suggested that music therapy could include hybrid understandings, from a range of disciplines, in combination with indigenous music therapy theory. We propose that “indigenous music therapy theory” can emerge from analysing the lived experiences of music therapists and/or clients in “complete” grounded theory studies. These research findings can inform indigenous theory, that is, descriptions of patterns of music therapy phenomena, from which plausible generalisations can be made. We believe that indigenous theory can exist alongside a range of theories, from varied disciplines, to elucidate music therapy understanding; and that indigenous music therapy theory, borne from grounded theory research of clients' and therapists' experiences, may contain components of preexisting theory and philosophies (including those developed outside of music therapy) that already inform the respondents' world views. Indigenous music therapy theory therefore refers to knowledge emergent from music therapy relationships within music

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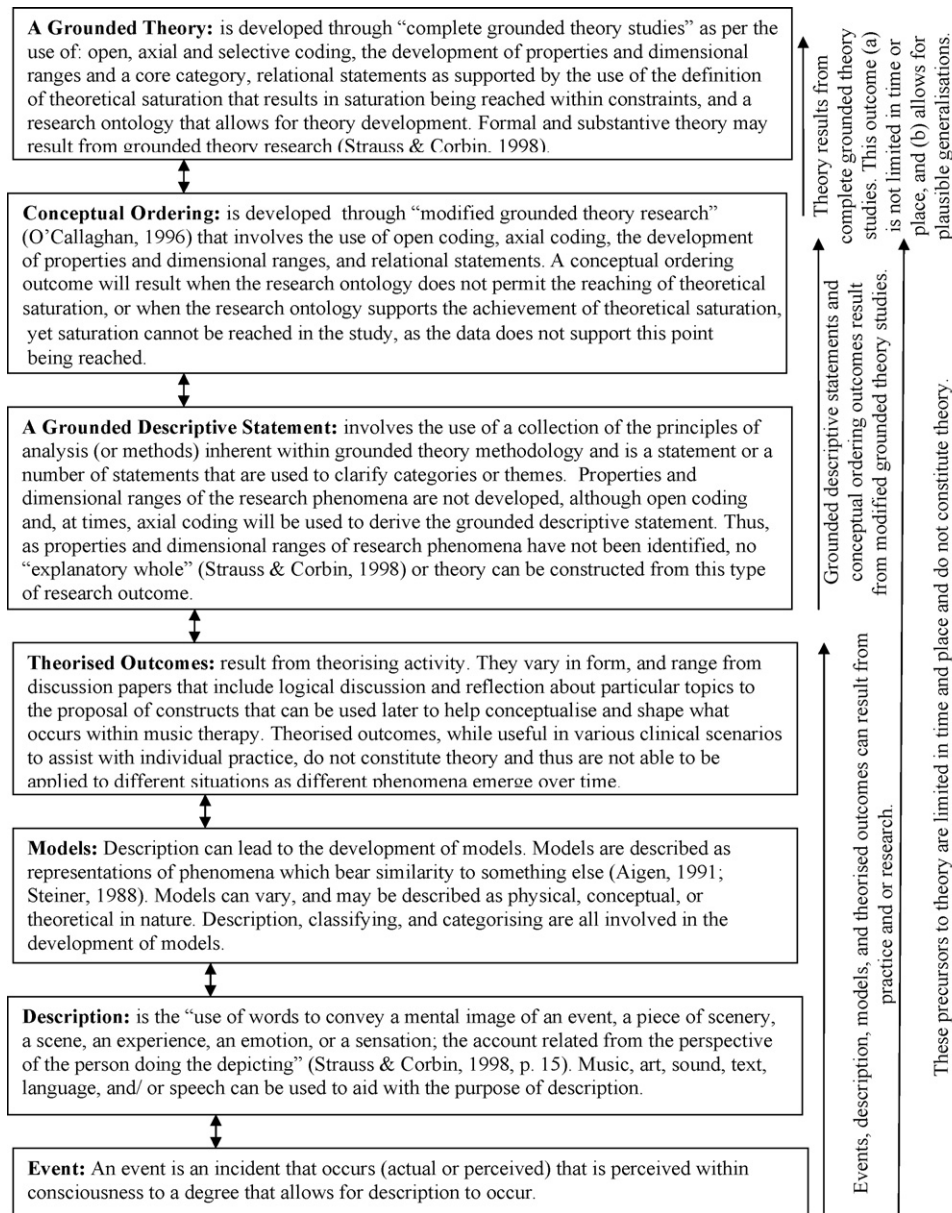


Fig. 1. The developing indigenous theory or DIT framework in music therapy as enabled through grounded theory research.

therapy, and is thus idiosyncratic to the field of music therapy.

In this paper the differences between “precursors to theory” and “theory” are clarified to aid with understanding the requirements of theory developed from research. In addition, it is shown how practice and “modified grounded theory research” (O’Callaghan, 1996) can enable the development of precursors to theory. It is also shown how “indigenous music therapy theory” has already emerged from “complete” grounded theory research studies. The DIT Framework is offered to support researchers’ journeying toward indigenous music therapy theory development. A number of implications of this approach to theory development are considered.

### Developing theory through practice and research

#### Distinguishing between precursors to theory and theory

The term “theory” is derived from the Greek “theoria,” which means contemplation or speculation (Rykov, 2005; Steiner, 1988).

This generic definition supports popular use of the term as simply referring to someone’s thoughts about a particular phenomenon or topic. The term theory, in relation to research however, requires a more specific and technical definition (Steiner, 1988). Accordingly, a distinction between “precursors to theory” and actual “theory” is discussed.

There are many types of precursors to theory. Five precursors are outlined in this paper, and they form part of the DIT Framework. Even though all of these precursors are grounded in therapist’s and/or client’s experiences, and they may illuminate readers’ understandings about their own music therapy work, they are not able to be classified as theory because they are relatively situation specific. In contrast, theory offers more scope for the generalisation of outcomes (Steiner, 1988).

#### Precursors to theory from practice reflection and research: description, model and theorised outcomes

Three precursors to theory, as shown in Fig. 1, which result from practice and/or research, include: *description, models of practice,*

and *theorised outcomes*. Description is often used by observers and participants to recount an experience, activity, or object that has, or may occur. [Strauss and Corbin \(1998\)](#) defined description as the “use of words to convey a mental image of an event, a piece of scenery, a scene, an experience, an emotion, or a sensation; the account related from the perspective of the person doing the depicting” (p. 15). In music therapy, for example, [Volkman \(1993\)](#) textually described the use of improvisation with a woman that experienced abuse. [Baker and Tamplin \(2006\)](#) described the interventions that patients receive when involved in neuro-rehabilitation.

Description resembles something else and, as clinical practice primarily involves doing or action, it is not surprising that many clinicians and participants represent their experiences of music therapy through textual description. Description may also emerge from research (e.g., the description of the context in which research occurs as provided in [O’Callaghan’s](#) doctoral thesis about the relevance of music therapy in a cancer hospital, 2001); however, such descriptions usually form part of the outcomes from research, or are involved throughout the process of the research.

Description can lead to the development of models, which are described as representations of phenomena which bear similarity to something else ([Aigen, 1991](#); [Steiner, 1988](#)). Models can vary, and may be described as physical, conceptual, or theoretical in nature. Description, classifying, and categorising are all involved in the

development of models. Examples of music therapy models that have emerged from practice include numerous models highlighted by [Bruscia \(1987\)](#), including the psychoanalytic and creative models. Models are not only shaped by clinical work, but in turn shape the work that occurs.

A third precursor to theory development is theorised outcomes. Theorised outcomes include constructs or theoretical statements that emerge from a therapist’s reflection on clinical practice, personal experiences, and theoretical principles. Such outcomes, similarly to models, are then used to help conceptualise what occurs within music therapy and may stimulate new practice ideas. An example is [Daveson and Skewes’ \(2002\)](#) theorising about rhythm within clinical practice. In this work, theorising involved reflection upon clinical practice, personal experiences, research findings and theoretical principles, from music therapy, performance, and related fields.

The outcome of theorising is not necessarily theory as, similarly to models and description, theorised outcomes are limited in time and place ([Steiner, 1988](#)). Admittedly, theorised outcomes can be applied to many different contexts. However, theorised outcomes do not possess the degree of certainty that theory holds. Theory has been constructed from the rigors of research, and this is, in part, why theory can enable plausible generalisations across time and place (or predictable generalisations, in the case of positivist research).

**Table 1**  
Definitions of grounded theory research procedures and terms as used in this paper, and within music therapy

Term	Definitions used in this paper and terms used by music therapy researchers to refer to comparable meanings or procedures
Codes or concepts	A code is as an abstract representation of phenomenon from within the data. The terms “concepts” and “codes” can be used interchangeably
Open coding	Open coding involves the dissection, examination, comparison, contrasting, and categorising of data with the view to identifying concepts and categories within the data ( <a href="#">Strauss &amp; Corbin, 1998</a> ) Within music therapy, “open coding” has been used to refer to such a process by a number of researchers including: <a href="#">Amir (2005)</a> , <a href="#">Daveson (2006)</a> , <a href="#">Edwards and Kennelly (2004)</a> , <a href="#">Magee and Davidson (2000a)</a> and <a href="#">O’Callaghan (2001)</a>
Category	Categories are phenomena, or groups of codes. Categories are developed by researchers through grouping together the codes that share similar characteristics or properties, and then giving these groups of codes a label. An example of a category might be the grouping together of two codes into one category ( <a href="#">Strauss &amp; Corbin, 1998</a> ). Categories are explained through the use of “grounded descriptive statements” The term “categories” has also been used to refer to this meaning by <a href="#">Amir (2005)</a> ; <a href="#">Daveson (2006)</a> ; <a href="#">Edwards and Kennelly (2004)</a> ; <a href="#">Magee and Davidson (2000a)</a> ; and <a href="#">O’Callaghan (2001)</a> , <a href="#">O’Callaghan (1996)</a> . <a href="#">O’Callaghan (2001)</a> also used the term “super categories” to denote groups of categories sharing similar characteristics
Axial coding	Axial coding is a procedure that involves the following: (a) development and consolidation of the property and dimensional range information about each category, (b) identification of conditions, actions, or interactions and consequences (otherwise referred to as process and structure by <a href="#">Strauss &amp; Corbin, 1998</a> ) related to the phenomena being researched, and (c) development of relational statements between categories ( <a href="#">Strauss &amp; Corbin, 1998</a> ) Axial coding involves reassembling the data (which has been or is being dissected through the procedure of open coding) and the development of relational statements between categories Axial coding was used in this way by <a href="#">Daveson (2006)</a>
Selective coding	Selective coding is the process of integrating categories along a dimensional level to form a theory, validate the statements of relationship among concepts, and fill in any categories in need of further refinement ( <a href="#">Strauss &amp; Corbin, 1998</a> ) This coding was used in this way by <a href="#">Daveson (2006)</a>
Property and dimensional ranges	A property is a characteristic of a category. An example of a property of the category “sound,” for example, might be “speed.” Properties can vary and this variation is described as the dimensional range of the property ( <a href="#">Strauss &amp; Corbin, 1998</a> ). An example of the dimensional range of “speed” found in sound might be “fast to slow” <a href="#">Edwards and Kennelly (2004)</a> and <a href="#">Daveson (2006)</a> referred to the terms properties as properties, and dimensional ranges as dimensional ranges. <a href="#">Magee and Davidson (2000b)</a> referred to dimensional ranges as “value ranges.” <a href="#">O’Callaghan (2001)</a> included the features of dimensional ranges and properties within “clarifying statements” rather than using the terms properties and dimensional ranges directly
Core or central category	A “core” or “central category” is a category that draws together the other categories to form a coherent whole through, what <a href="#">Strauss and Corbin</a> refer to as the core category’s “analytical power” (p. 146). This power allows the core category to account for variation in other findings that have emerged from the study and to draw together the findings to result in an “explanatory whole” (p. 146) <a href="#">Daveson (2006)</a> used the terms core or central category. <a href="#">O’Callaghan (2001)</a> used the terms “theme and final thematic statement” (p. 264)
Relational statements	Relational statements are links (usually expressed in textual form) that are made between the core or central category and other categories, thus enabling an interrelated set of concepts rather than a presentation of themes or categories ( <a href="#">Strauss &amp; Corbin, 1998</a> ) <a href="#">Daveson (2006)</a> referred to relational statements with the same meaning described here. <a href="#">O’Callaghan (2001)</a> used the terms “final thematic expanded statements” (e.g., p. 194), while also using the term “linking statements” (e.g., p. 194)

*Precursors to theory that emerge from grounded theory research: grounded descriptive statements and conceptual ordering*

“Grounded descriptive statements” and “conceptual ordering” are two other precursors to theory. These two precursors, shown in Fig. 1, emerge from grounded theory research (Strauss & Corbin, 1998, p. 15).<sup>2</sup> Distinguishing between these precursors is aided by clear definitions of grounded theory research procedures and constructs, and the reader is referred to Table 1 to be assisted with definitions.

A grounded descriptive statement, as highlighted in Fig. 1, involves the use of a collection of analytical principles (or methods) inherent within grounded theory research. Grounded descriptive statements clarify categories or themes that derive from or are grounded in the data. Open coding and, at times, axial coding is used to develop a grounded descriptive statement. Properties and dimensional ranges of the research phenomena are not developed when a grounded descriptive statement results. As properties and dimensional ranges of research phenomena are not been identified, no “explanatory whole” or theory can be constructed (Strauss & Corbin, 1998). Properties and dimensional ranges are defined in Table 1.

An example of three grounded descriptive statements can be found in research by Magee and Davidson (2004a). Here, open coding analysis was used to generate three major categories about the experience of music therapy with those diagnosed with multiple sclerosis which in turn led to three grounded descriptive statements being supplied for each category. A second example is Amir's (1992) study where a number of grounded descriptive statements were used to convey a number of categories along with other findings (i.e., 8 profiles for 4 clients and therapists, 15 moment types with 12 occurring on an intrapersonal level and three on an interpersonal level, along with environmental factors that allowed these moments to occur). A third example is research completed by Daveson (2006) wherein music therapy clients' temporal experiences were researched in a modified grounded theory study. With this study, one grounded descriptive statement illuminated six categories.

In studies that result in conceptual ordering outcomes, the fifth precursor to theory development, a detailed explanation of each category is provided through the identification of properties and dimensional ranges (or scope of experiences possible), as highlighted in Fig. 1. Properties and dimensional range information may be presented in a number of different ways, and is influenced by a number of factors, including the researcher's ontology regarding experiential phenomena within music therapy. For example, properties and dimensional range information was presented within “clarifying statements” in O'Callaghan's (2001) research, which resulted in theory. Contrastingly in a different study, Daveson (2006) presented properties and dimensional range information of therapists' temporal experiences through the use of diagrams, text, and tables.

Research by Edwards and Kennelly (2004) is an example of a modified grounded theory study that resulted in conceptual ordering. The techniques used by one therapist with children undergoing rehabilitation were examined, resulting in the formation of eight categories and associated properties and dimensional ranges. A

second example is Magee and Davidson's (2000b) research that examined music therapy with those diagnosed with multiple sclerosis; the outcomes included three major categories, dimensional ranges (referred to as value ranges in the study), and ultimately, two phenomenon.

Theory development is always dependent upon theoretical saturation being reached. An indicator of this occurring is the presence of properties and dimensional ranges as situated within conceptual ordering research findings or studies that result in theory. Strauss and Corbin (1998) wrote that conceptual ordering can be an endpoint of research before theory development occurs.

Thus in summary, precursors to theory which emerge from modified grounded theory research include: (a) “grounded descriptive statements,” which are either expressed as one statement to elucidate a number of categories/themes, or a series of statements to explain each category or theme, and (b) conceptual ordering outcomes which, unlike grounded descriptive statements, include properties and dimensional range information (in addition to grounded descriptive statement information). Conceptual ordering outcomes can be expressed in many different forms. For example, such outcomes may include clarifying statements or “descriptive thematic statements,” as coined by O'Callaghan (2001).

In essence, and as shown in Fig. 1, three precursors to theory (descriptions, models, and theorised outcomes) may emerge from practice and or modified grounded theory studies. While grounded descriptive statements and conceptual ordering outcomes always result from modified grounded theory studies, as highlighted initially by O'Callaghan (1996), studies categorised as modified grounded theory studies involve the use of a collection of grounded theory methods rather than the entire grounded theory methodology.

*Theory defined in relation to grounded theory research*

So what then is theory? For Strauss and Corbin (1998) theory, as derived from grounded theory methodology, relates to the development of a central or core category. A central or core category draws together the other categories to form a coherent whole through the core category's “analytical power” (Strauss & Corbin, 1998, p. 146). This power allows the core category to account for variation in findings that emerge from the research, and draws together the findings into an “explanatory whole” (p. 146). Additionally, relational statements between the core category and the other categories are required for the outcome to be termed a theory (Strauss & Corbin, 1998).

Relational statements and a core category result in a set of inter-related concepts, rather than a presentation of themes or categories, as is the case in a grounded descriptive statement or conceptual ordering outcome. For conceptual ordering and grounded descriptive outcome findings a core category is not identified. In addition, relational statements are not required for grounded descriptive statements. However and in contrast, relational statements are required for conceptual ordering outcomes, yet the relational statements that are developed do not involve the core category. This feature is what distinguishes conceptual ordering outcomes from theory, as in theory a core category is established and then included in the relational statements. An explanatory whole or theory can not emerge from conceptual ordering and grounded descriptive outcomes, as relational statements that involve a core category are not developed (Strauss & Corbin, 1998).

As highlighted in Fig. 1, open, axial, and selective coding procedures need to be used, and relational statements, properties and dimensional ranges need to be created for theory to be developed from grounded theory research. In this respect, theory development from grounded theory research requires the use of grounded theory methodology in its complete form, rather than the use of

<sup>2</sup> O'Callaghan coined the term grounded descriptive statement, while Daveson developed the taxonomy of features that are present within grounded descriptive statements and incorporated this into the framework of theory development presented in this paper. The term “grounded descriptive statement” has a different meaning to “clarifying statements” which has also been used in reference to grounded theory research by O'Callaghan. The difference between these terms is defined later.

a selection of grounded theory methods or modified versions of grounded theory (see Strauss & Corbin, 1998). Also, for relational statements to be developed, a definition of theoretical saturation (which is supported by research ontology) that permits the development of theory needs to be used.

#### *Theoretical saturation and theory development*

The definition of theoretical saturation has changed over time, and earlier definitions of this construct (see Strauss & Corbin, 1990) have been used to inform music therapy research. Theoretical saturation is reached through a process of theoretical sampling. Previously, Strauss and Corbin (1990), as well as the original creators of grounded theory, Glaser and Strauss (1967) argued that theory could be developed from grounded theory studies that exhausted theoretical sampling. This means that theory could be developed only when no new data collected within the process of the research led to contradictions within the research findings.

Accordingly, within music therapy, it has been reasoned, in line with post-modern understanding of experience, that as individual experience is always particular to individuals (i.e., experience can never be “one-fit for all”), theoretical saturation of experiential phenomenon can never be reached (O’Callaghan, 1996). It followed that as theoretical saturation could never be reached, theory was never developed. However, in 1998, Strauss and Corbin circulated a revised definition of theoretical saturation which now allows for saturation to be achieved in practice.

In the revised definition, it was stated that saturation could be reached within the constraints of a research project and that it is always and only ever reached to a matter of degree (Strauss & Corbin, 1998). This revision allows for theory about experience (e.g., experience within music therapy) to become known through understanding patterns of experience to a finite degree within the constraints of a research project (e.g., a pattern about one type of experience that has emerged through examining the experiences of many research participants about one phenomenon within a research project).

As a consequence, the revised definition of theoretical saturation allows for post-positivist ontology (i.e., the belief that truth can be known through replication) to be situated within a larger interpretivist paradigmatic frame (i.e., a frame that acknowledges that people construct their own meaning), thus enabling theory construction from knowing music therapists’ and music therapy clients’ experiences that are indigenous to music therapy.

Implicit in this approach to understanding theory and the constructs that support its development is the importance of working within the parameters of the paradigmatic frame or the ontology that is being used to inform the research. The importance of this emphasis has been highlighted previously by Edwards (1999).

#### *Types of music therapy theory possible from grounded theory methodology: formal and substantive theory*

Thus as explained so far, theories have various properties and characteristics, and theory can be developed from grounded theory research. Theories deal with universals, can be evaluated through a set of criteria, and are cohesive through the use of universal statements that are systematically related (Steiner, 1988; Strauss & Corbin, 1998). Strauss and Corbin (1998), as do other authors (see Bruscia, 2005; Ruud, 2005; Wheeler, 2005), define differences between various types of theory. Strauss and Corbin (1998) highlight the distinction between formal and substantive theory, and this classification is generally useful to music therapy. Formal theory involves theory which is less specific to place or persons and can be used broadly, while substantive theory is more limited in its scope, and is usually relevant to specific groups in specific situations.

When using the DIT Framework it is clear that different types of theories have already been developed from grounded theory research within music therapy. For example, O’Callaghan (2001, 2005) grounded theory research findings of her interpretations of the mostly helpful and occasionally questionable benefits of music therapy in oncology, including the significance of the environmental “music space,” can be appraised as being a substantive theory. This is due to a number of factors, including: (a) the research is restricted in plausible generality to adults receiving treatment within an adult oncological hospital, (b) properties and dimensional ranges were clarified through the inclusion of clarifying statements (referred to as “descriptive thematic statements” in the study), and (c) one resultant “theme” that was inclusive of relational statements emerged from the research. Thus, the development of a core category and relational statements occurred. Also, although O’Callaghan (2001) used a convenience sample, wherein she collected as much data as possible within a specified 3-month data collection period, the principles of theoretical sampling were evident throughout the research process, as indicated by the description of her constant comparative process and repeated findings emergent from the extensive data set that was sampled. In addition, the ontology that underpinned the research allowed for constructed realities to be known within the context of the research and/or similar contexts to the one where the research was completed—thus allowing for the development of substantive theory.

In contrast, the time in music therapists’ experiences and descriptions theory (or the TIMED theory) that resulted from Daveson’s (2006) complete grounded theory research can be appraised as a formal theory as it: (a) is theory that deals with universals within music therapy, regardless of time or place; (b) can be applied across fields of practice; (c) was developed through the use of complete grounded theory research, that included the use of theoretical sampling; (d) and was informed by the most recent definition of theoretical saturation (which allows for saturation to be reached) (i.e., Strauss & Corbin, 1998). The process of theoretical sampling in this study, for example, involved extensive secondary data sampling (over one million words were sampled and analysed over a 2-year period), followed by interviewing key music therapists practising around the world in various fields (with their work described as being guided by various philosophical approaches to practice). In addition, this research involved sampling the same phenomena across different contexts of practice, and was supported by an ontology that supported the development of theory.

#### **Implications for music therapy grounded theory research**

There are three main implications from the work presented in this paper. First, the rationale that underpins the DIT Framework highlights that it is essential to approach research and theory development from an ontological, value-based, or paradigmatic perspective, rather than approaching the evaluation of research from a procedural perspective. Such a value-based starting point informs an understanding of whether the research constructs involved in the research are in-line with the research ontology that informs the research, or not. It follows that subsequent and close examination of research procedures, as informed by the constructs and ontology that underpinned their use (e.g., the definition of theoretical saturation that was used to guide the research analysis) can assist with determining the validity of the claims being made about the research outcomes.

Accordingly, it is suggested that future discussion within music therapy about complete or modified versions of grounded theory (e.g., Amir, 2005), and grounded theory research in general,

needs to include the acknowledgement of ontological complexities that are possible within grounded theory music therapy research. This approach to research has been encouraged previously by others who have proposed that the beliefs that underpin qualitative research are essential to the research process (e.g., Edwards, 1999; Lincoln & Guba, 2003; O'Callaghan, 2001; Wheeler, 2005). Additionally, the clarification of the paradigmatic frame that under-scores research has been identified as enabling high standard qualitative research (Edwards, 1999; Wheeler, 2005).

...any definition of research... is grounded in beliefs of the researcher as to what is a legitimate objective of study, the relationship between the knower and the known, the nature of causality, and what is meant by truth in research. ...and an understanding of these questions will deepen music therapists' understanding of research and its meaning. (Wheeler, 2005, p. 3)

Second, the terms “modified” and “complete” are useful in distinguishing between different types of grounded theory studies, and therefore should continue to be used within the profession. These terms, for example, can be used to aid with the identification of the type of research outcome (e.g., precursor to theory or theory). The call for the continued use of these different terms within music therapy is an alternate view to Amir's (2005) suggestion that any type of grounded theory study, whether modified or otherwise, should generally be referred to as a grounded theory study. While these distinctions are useful in appraising the outcomes of grounded theory studies it does not imply that the findings from the different studies are inferior or less complete or developed than those that result in theory, but rather that they offer a different representation of the phenomena that has been researched.

A final implication is that the notion of creating indigenous music therapy theory, as initially coined by Aigen (1991, 2005) can now be constructed. Accordingly, music therapy knowledge, as known and described by music therapy clients and therapists and researched within complete grounded theory studies, can be created. This can occur through integrating post-positivist ontology within an interpretivist paradigm. Accordingly, “truths” can be known through the understanding of replicable patterns (Edwards, 1999) as situated within constructed understandings of reality (Fossey, Harvey, McDermott, & Davidson, 2002). The shift to integrate post-positivist ontology within an interpretivist research frame is in accordance with holarchical understandings of phenomena, i.e., understanding each outcome or experience as a “whole” in and of itself (Wilber, 1997, p. 76), rather than hierarchical representations of knowledge or experience.

Holarchical understanding differs from hierarchical understanding in that usually each level of a hierarchy is viewed as being a step toward the next and highest level, rather than each level being an endpoint in itself. When using a frame of reference that incorporates holarchical understanding, wholes are referred to as *holons* (Wilber, 1997, p. 76). Wilber (1997) asserts that holons are best understood as embedded within larger holons. Such understandings lead to a *holarchical* representation of existence, rather than a hierarchical system or representation (Wilber, 1997).

Holarchical representation of experience and knowledge allows for what may seem to be contradictions being incorporated within higher holons of understanding. For example, what one understands to be factually true may not always correspond with what one knows to be true. Nevertheless, one person may believe both different types of truths simultaneously and thereby believe factual and seemingly contradictory intuitive knowledge at the same time. Similarly, each research finding (whether the outcome is a grounded descriptive statement, conceptual ordering,

or theory) is valuable in and of itself, and each can be understood in relation to other findings. In addition, each outcome has parameters around the ways the finding can be understood and applied.

Holarchical representation enables the integration of post-positivist ontology within an interpretivist frame, and while there has traditionally been a divide between research paradigms, and the beliefs that have underscored them have been thought to be irreconcilable (Johnstone, 2004; Lincoln & Guba, 2003), “various paradigms are beginning to ‘interbreed’ such that two theorists previously thought to be in irreconcilable conflict may now appear, under a different theoretical rubric, to be informing one another's arguments” (Lincoln & Guba, 2003, p. 254).

## Summary

To recapitulate, many precursors to theory can emerge from practice and research, including descriptions, models, and theorising outcomes. There are also two precursors to theory that can emerge from modified grounded theory studies, namely grounded descriptive statements and conceptual ordering outcomes. Substantive and formal theory indigenous to music therapy can result from complete grounded theory studies that illuminate music therapists' and clients' experiences of music therapy relationships (including relationships to and/or of music), which are idiosyncratic to music therapy.

Distinguishing between modified and complete versions of grounded theory studies and acknowledging ontological complexities within grounded theory research enables good quality research. In addition, the use of a common nomenclature for theory development within the profession can assist with understanding and appraising research outcomes, as will clear and specified definitions of the research constructs (e.g., theoretical saturation) and the clarification of the research ontology that underpinned the research.

When considering the need for research methodologies that allow indigenous music therapy theory development, Aigen (1991) wrote that new methodologies may need to be developed to sufficiently articulate music therapy experience “to render our implicit knowledge more public...” (p. 377). As indicated in this paper, we suggest that one way of generating and constructing theory indigenous to music therapy is through examining the individually held knowledge and experiences of music therapy clinicians and music therapy clients according to the DIT Framework presented in this paper. This entails using a holarchical representation of reality that incorporates post-positivist ontology within an interpretivist frame; researching experiences of clients and therapists via a complete grounded theory study; and conceptualising theoretical saturation as such that it can be complete with constraints but will nevertheless enable findings that can be plausibly generalised. As a consequence this will (i) allow the researcher, along with the research findings, to remain firmly grounded in the lived experiences of therapists and clients; (ii) enable research findings about patterns of music therapy phenomena, from which plausible generalisations can be made; and importantly (iii) support theory development that is indigenous to music therapy.

## References

- Aigen, K. (1991). *The roots of music therapy: Towards an indigenous research paradigm*. (Volumes I and II). Unpublished doctoral dissertation, New York University, New York.
- Aigen, K. (2005). Philosophical inquiry. In B. Wheeler (Ed.), *Music therapy research* (2nd ed., pp. 540–551). Gilsum, NH: Barcelona Publishers.
- Amir, D. (1992). *Awakening and expanding the self: Meaningful moments in the music therapy process as experienced and described by music therapists and music therapy clients*. New York University, New York; Ann Arbor, MI: UMI Distribution Services.

- Amir, D. (2005). Grounded Theory. In B. Wheeler (Ed.), *Music therapy research* (2nd ed., pp. 365–378). Gilsum, NH: Barcelona Publishers.
- Andsell, G. (1995). *Music for life: Aspects of creative music therapy with adult clients*. London: Jessica Kingsley Pub. Ltd.
- Baker, F., & Tamplin, J. (2006). *Music therapy methods in neurorehabilitation: A clinician's manual*. London: Jessica Kingsley Publishers.
- Bruscia, K. (1987). *Improvisational models of music therapy*. Springfield, IL: C.C. Thomas Publishers.
- Bruscia, K. (2005). Developing theory. In B. Wheeler (Ed.), *Music therapy research* (2nd ed., pp. 540–551). Gilsum, NH: Barcelona Publishers.
- Daveson, B. A. (2006). *Grounded theory study of music therapists' and clients' experiences and descriptions of temporality within music therapy*. Unpublished doctoral dissertation, University of Melbourne, Australia.
- Daveson, B., & Skewes, K. (2002). A philosophical enquiry into the role of rhythm in music therapy. *Arts in Psychotherapy*, 29(2), 265–270.
- Edwards, J. (1999). Considering the paradigmatic frame: Social science research approaches relevant to research in music therapy. *Arts in Psychotherapy*, 26, 73–80.
- Edwards, J., & Kennelly, J. (2004). Music therapy in paediatric rehabilitation: The application of modified grounded theory to identify categories of techniques used by a music therapist. *Nordic Journal of Music Therapy*, 13(2), 112–126.
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36, 717–732.
- Garred, R. (2001, November). The ontology of music in music therapy: A dialogic view. *Voices: A World Forum for Music Therapy*, 1(3). Retrieved December 14, 2005, from [http://www.voices.no/mainissues/Voices1\(3\)Garred.html](http://www.voices.no/mainissues/Voices1(3)Garred.html).
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. New York: Aldine.
- Johnstone, P. L. (2004). Mixed methods, mixed methodology health services research in practice. *Qualitative Health Research*, 14(2), 259–271.
- Kenny, C. (2001, December). Music therapy theory: Yearning for beautiful ideas. *Voices: A World Forum for Music Therapy*. Retrieved May 5, 2006, from <http://www.voices.no/columnist/colkenny311201.html>.
- Kenny, C. (2002, July). Are we really looking for an "ontology"? Response to Rudy Garred's essay in *Voices* 1(3). *Voices: A World Forum for Music Therapy*. Retrieved December 14, 2005, from [http://www.voices.no/mainissues/Voices1\(3\)Garred.html](http://www.voices.no/mainissues/Voices1(3)Garred.html).
- Kenny, C. B. (2003, July). Beyond this point there be dragons: Developing General theory in music therapy. *Voices: A World Forum for Music Therapy*, 3(2). Retrieved May 5, 2006, from <http://www.voices.no/mainissues/mi40003000124.html>.
- Lincoln, Y. S., & Guba, E. G. (2003). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The landscape of qualitative research* (2nd ed., pp. 253–291). London: Sage Publications.
- Magee, W. L., & Davidson, J. W. (2004a). Singing in therapy: Monitoring disease process in chronic degenerative illness. *British Journal of Music Therapy*, 18(2), 65–77.
- Magee, W. L., & Davidson, J. W. (2004b). Music therapy in multiple sclerosis: Results of a systematic qualitative analysis. *Music Therapy Perspectives*, 22, 39–51.
- McFerran, K. (August 2005). A story of 549 music therapists. . . And a question about where we are all going? *Voices: A World Forum for Music Therapy*. Retrieved December 14, 2005, from [http://www.voices.no/mainissues/Voices1\(3\)Garred.html](http://www.voices.no/mainissues/Voices1(3)Garred.html).
- O'Callaghan, C. (1996). Lyrical themes in songs written by palliative care patients. *Journal of Music Therapy*, 33, 74–92.
- O'Callaghan, C. (2001). *Music therapy's relevance in a cancer hospital researched through a constructivist lens*. Unpublished doctoral dissertation, Department of Social Work and Faculty of Music, University of Melbourne, Victoria, Australia. <http://eprints.infodiv.unimelb.edu.au/archive/00003827>.
- O'Callaghan, C. (2005). Qualitative data-mining through reflexive journal analysis: Implications for music therapy practice development. *Journal of Social Work Research and Evaluation*, 6(2), 219–231.
- Ruud, E. (2005). Philosophy and theory of science. In B. Wheeler (Ed.), *Music therapy research* (2nd ed., pp. 33–44). Gilsum, NH: Barcelona Publishers.
- Rykov, M. (2005). One Size Fits All, or What is Music Therapy Theory For? *Voices: A World Forum for Music Therapy*. Retrieved June 10, 2006, from <http://www.voices.no/mainissues/mi40005000170.html>.
- Steiner, E. (1988). *Methodology of theory building*. Sydney, Australia: Educology Research Associates.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. London: Sage Publications.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). London: Sage Publications.
- Volkman, S. (1993). Music therapy and the treatment of trauma-induced dissociative disorders. *Arts in Psychotherapy*, 20, 243–251.
- Wheeler, B. (2005). Overview of music therapy research. In B. Wheeler (Ed.), *Music therapy research* (2nd ed., pp. 3–19). Gilsum, NH: Barcelona Publishers.
- Wilber, K. (1997). An integral theory of consciousness. *Journal of Consciousness Studies*, 4(1), 71–92.