Published by

British Journal of Contemporary Research

BEXFORD PUBLISHING

Bridging Social Learning Theory to Music Therapy: A Conceptual Framework for Observational Learning

Original Research Article | Volume 1 | Issue 6 | 2026 | Article Number: 008

Accepted: 12 October 2026 | Published: 10 November 2026 | ISSN: 2979-8582 (Online)

Crossref : **https://doi.org/10.67693/BJCR-PZZPTBMZ**

Dr Deepa Iyer S

Department of Indian Music, University of Madras, Chennai, India

DIS 0000-0003-3585-1238

Correspondence: Dr Deepa Iyer S, deepaiyers29@gmail.com

Abstract

Social Learning Theory (SLT) provides a framework for understanding how behavioural patterns may be acquired through observation, modelling, cognitive processing and the consequences associated with behaviour. Although modelling, imitation, reinforcement, turn-taking and reciprocal interaction have been examined within Music Therapy research, these processes have not consistently been integrated within an explicit social-learning framework. The present conceptual article develops an SLT-informed framework for examining observational learning processes within Music Therapy literature on modelling, imitation, musical interaction and behavioural responding. Particular attention is given to the distinction between observational learning and immediate behavioural performance and to the roles of attention, retention, behavioural reproduction, motivation and social and musical consequences. The article proposes a conceptual framework in which musical–social interaction provides the context for potential modelling and observational learning, while therapist and peer behaviours may function as potential social models. The framework further distinguishes the core observational-learning processes derived from Bandura's Social Learning Theory (1977) from reciprocal interaction, which is informed by Bandura's subsequent Social Cognitive Theory (1986). The proposed framework does not present Social Learning Theory as a comprehensive explanation of Music Therapy outcomes; rather, it identifies theoretically specified and potentially testable relationships among musical interaction, modelling, behavioural reproduction, consequences and subsequent behavioural outcomes. The article concludes by identifying implications for Music Therapy practice and directions for empirical research examining whether these proposed processes contribute to behavioural learning within musical and interpersonal contexts.

Keywords: Social Learning Theory, Observational Learning, Modelling, Music Therapy, Imitation, Reinforcement, Behavioural Change, Musical Interaction

© 2026 The Authors. Published by Bexford Publishing Ltd

1. INTRODUCTION

Music Therapy research has examined musical interaction in relation to social, behavioural and communicative outcomes. Studies have investigated processes such as imitation, turn-taking, joint attention and social responsiveness within Music Therapy and music-based interventions (Duffy & Fuller, 2000; Holck, 2004; Kim et al., 2008). Modelling and imitation have also been incorporated more explicitly into intervention procedures. Moore and Mathenius (1987) examined modelling and reinforcement in relation to imitative rhythmic responses, while Forti et al. (2020) investigated a music-based imitation intervention involving movement–melody associations.

Although these studies demonstrate the presence of modelling, imitation and related behavioural processes within musical interventions, they do not necessarily establish observational learning as the underlying mechanism. Observable imitation represents behavioural performance and does not, by itself, demonstrate how a behaviour was acquired or whether it is subsequently maintained. Distinguishing behavioural acquisition from performance is therefore important when examining the mechanisms through which musical interaction may contribute to behavioural change.

Social Learning Theory (SLT), developed by Bandura, provides a theoretical perspective for examining this distinction. SLT proposes that individuals can acquire behavioural information through observing others, with cognitive processes influencing the relationship between observation and subsequent performance (Bandura, 1971, 1977). Reinforcement and observed consequences may further influence the expression of acquired behaviour. This perspective is relevant to Music Therapy research because behaviours such as imitation, participation and turn-taking are frequently assessed through observable performance.

Explicit applications of SLT to Music Therapy remain limited. Shafer and Silverman (2013) applied SLT to the conceptualisation and development of Music Therapy interventions addressing bullying and victimisation. Other Music Therapy and music-based intervention studies have examined processes that are compatible with social learning without explicitly adopting SLT as their theoretical framework. The existing literature therefore provides examples of relevant behavioural processes but does not establish how observation, acquisition, performance and consequences may be theoretically related within Music Therapy.

The present article addresses this conceptual gap by examining selected Music Therapy processes through an SLT perspective. It distinguishes observation, behavioural acquisition and performance and considers the potential roles of modelling, behavioural reproduction, consequences and musical interaction. On this basis, a conceptual framework is proposed to identify theoretically derived relationships that can be examined through future empirical research. The framework is not presented as an empirically validated causal model or as a comprehensive explanation of Music Therapy outcomes.

2. SOCIAL LEARNING THEORY: THEORETICAL FOUNDATIONS

Social Learning Theory (SLT) emerged from Bandura's attempt to extend explanations of learning beyond direct behavioural conditioning. In its early formulation, the theory proposed that behaviour could be acquired through observation of others and the consequences associated with their behaviour (Bandura, 1971). Learning was therefore conceptualised as occurring within a social environment in which individuals attend to behavioural models, retain information about observed behaviour and subsequently draw upon it in responding.

A central feature of SLT is the distinction between learning and performance. Observation of a model does not necessarily result in immediate behavioural reproduction. An individual may acquire information about

© 2026 The Authors. Published by Bexford Publishing Ltd

a behavioural response without expressing it at the time of observation, while subsequent performance may depend on capability, motivation, anticipated consequences and environmental conditions (Bandura, 1977). Bandura further identified attention, retention, behavioural reproduction and motivational processes as important in observational learning (Bandura, 1971, 1977). These processes provide a basis for distinguishing exposure to a model from subsequent behavioural performance.

Modelling occupies a central position within SLT. A model provides information about how a behaviour may be performed, while the observer processes the behaviour in relation to its context and consequences. Models may be encountered through direct interaction or mediated representations. The presence of a model alone does not establish that learning will occur, as characteristics of the observer, model, behaviour and social context may influence attention, retention, reproduction and subsequent performance (Bandura, 1977, 1986). Reinforcement is similarly relevant to the expression and maintenance of behaviour. Within SLT, consequences may influence whether an acquired behaviour is subsequently performed, while observing the consequences experienced by others may contribute to vicarious reinforcement (Bandura, 1977).

Bandura subsequently developed Social Learning Theory into Social Cognitive Theory, placing greater emphasis on reciprocal relationships among personal factors, behaviour and the environment, together with human agency and self-regulation (Bandura, 1986, 2001). This distinction is relevant to the present framework because Music Therapy involves ongoing interaction between the client, therapist and other participants. Accordingly, reciprocal interaction in the proposed framework is informed by Social Cognitive Theory rather than being presented as a component of the original 1977 formulation of SLT.

For the present article, SLT is used to examine observational learning, modelling, behavioural reproduction, reinforcement and the distinction between acquisition and performance within Music Therapy. The framework does not assume that all musical learning or therapeutic change occurs through observational learning. Rather, it provides a theoretically specific perspective for examining how observed behaviour may be acquired and subsequently expressed within a social and musical context.

3. LITERATURE INFORMING THE CONCEPTUAL FRAMEWORK

Music Therapy research, music-based intervention research and studies of musical interaction have examined processes relevant to Social Learning Theory (SLT), including modelling, imitation, reinforcement and turn-taking. These processes have generally been investigated as intervention components or behavioural outcomes rather than as interconnected elements of an explicit social-learning framework. The literature was selected purposively to identify studies relevant to modelling, imitation, reinforcement, musical interaction and applications of SLT to Music Therapy.

For the purposes of this article, Music Therapy research refers to studies explicitly involving Music Therapy as the intervention or therapeutic context. Music-based intervention research refers to studies in which music is used as an intervention or activity without necessarily being identified as Music Therapy. Musical interaction research refers to studies examining interactional processes within musical contexts.

Modelling and imitation provide a direct connection with SLT. Moore and Mathenius (1987) examined modelling and reinforcement in relation to imitative rhythmic performance, with effects differing across behavioural tasks. Finnigan and Starr (2010) examined spontaneous imitation within a musical play routine involving therapist imitation and social reinforcement. More recent work has incorporated structured movement–melody imitation and video modelling within music-based interventions. These studies demonstrate that modelling and imitation can be incorporated into musical interventions, but they do not directly test SLT.

© 2026 The Authors. Published by Bexford Publishing Ltd

Reinforcement represents a related process. Music Therapy interactions may involve social consequences through therapist and peer responses. Experimental research has examined reinforcement in relation to imitative behaviour, while Bandura (1977) distinguishes reinforcement from the acquisition of observed behaviour. Consequences may influence whether an acquired behaviour is subsequently expressed or maintained.

Musical interaction research has examined behaviours such as turn-taking, joint attention and social responsiveness. Holck (2004) analysed turn-taking within Music Therapy, while Kim et al. (2008) examined joint attention, eye contact and turn-taking during improvisational Music Therapy. A systematic review of music-based interventions for individuals with communication disorders also identified social and participatory outcomes including initiation, turn-taking and joint attention. These findings demonstrate the relevance of social-learning processes to musical interaction, but do not establish observational learning as the mechanism underlying behavioural change.

Explicit applications of SLT to Music Therapy remain limited. Shafer and Silverman (2013) applied SLT to the conceptualisation of bullying and victimisation and to Music Therapy intervention development. The broader literature examines processes compatible with SLT without explicitly adopting the theory as its explanatory framework. The present conceptual analysis therefore brings these processes into a common theoretical frame while maintaining the distinction between observation, acquisition, behavioural reproduction and performance.

The studies identified for the present analysis are summarised in Table 1. They should not be interpreted as equivalent tests of SLT. Shafer and Silverman (2013) provide a direct theoretical application, whereas the other studies examine individual processes that may be interpreted through an SLT-informed perspective. Boster et al. (2021) is included as a systematic review providing broader context for social and participatory outcomes in music-based interventions.

© 2026 The Authors. Published by Bexford Publishing Ltd

Table 1. Selected Music Therapy, Music-Based Intervention and Musical Interaction Research Relevant to Social Learning Processes

Study	Population / context	Process examined	Behaviour / outcome	Relevance to Social Learning Theory
Moore & Mathenius (1987)	Adolescents with intellectual disability	Modelling; reinforcement	Imitative rhythmic/motor responses	Provides experimental evidence concerning modelling and behavioural reproduction
Finnigan & Starr (2010)	Child with autism	Therapist imitation; social reinforcement	Spontaneous imitation	Demonstrates therapist imitation and social consequences within musical interaction
Holck (2004)	Children with communication disorders	Musical interaction	Turn-taking	Illustrates contingent responding within musical interaction
Kim et al. (2008)	Preschool children with autism	Improvisational Music Therapy	Joint attention; eye contact; turn-taking	Demonstrates changes in observable social behaviour during improvisational Music Therapy
Forti et al. (2020)	Children with autism	Movement–melody imitation; video modelling	Imitation accuracy; social attention	Provides evidence concerning structured modelling and behavioural reproduction
Hawkins & Farrant (2022)	Socially vulnerable young teenagers	Imitation; turn-taking; musical responding	Reciprocal participation and interaction	Illustrates observation, imitation and turn-taking within musical activities
Shafer & Silverman (2013)	Bullying/victimisation context	Social Learning Theory	Social/behavioural processes	Provides a direct theoretical application of SLT to Music Therapy
Boster et al. (2021)	Communication disorders	Music-based social interaction	Response, initiation, turn-taking, joint attention, group participation	Provides broader evidence concerning social and participatory outcomes in music-based interventions

© 2026 The Authors. Published by Bexford Publishing Ltd

4. APPLICATION OF SOCIAL LEARNING THEORY IN MUSIC THERAPY

The application of Social Learning Theory (SLT) to Music Therapy requires consideration of both the mechanisms proposed by the theory and the processes documented in Music Therapy and related music-based intervention research. Bandura (1977) emphasised that learning can occur through observation of others and of the consequences associated with behaviour, while distinguishing learning from the subsequent performance of an acquired behaviour. This distinction is particularly relevant to Music Therapy research, where changes in observable behaviour do not necessarily establish how those behaviours were acquired.

Modelling provides a direct point of application. Moore and Mathenius (1987) experimentally examined modelling, reinforcement and tempo in the imitative rhythmic responses of eight adolescents with intellectual disability. Although modelling conditions did not significantly affect imitative dance movements, percussion performance improved under simultaneous modelling compared with the no-modelling condition. These findings indicate that the manner in which a musical behaviour is modelled may influence subsequent performance, although the differing effects across behavioural domains caution against assuming that modelling operates uniformly across responses.

From an SLT perspective, reproduction of a modelled response demonstrates performance but does not, by itself, establish observational learning. The distinction between acquisition and performance therefore requires attention to whether behaviour is retained, reproduced under subsequent conditions and influenced by the consequences associated with the modelled response. This perspective is particularly relevant in Music Therapy, where imitation may emerge during musical interaction without necessarily demonstrating the cognitive processes through which the behaviour was acquired.

Finnigan and Starr (2010), for example, examined music and non-music interventions with a preschool child with autism and measured social responsive and avoidant behaviours across an alternating-treatment design. Their findings illustrate how musical intervention may be associated with changes in social responsiveness, but do not establish SLT as the mechanism underlying those changes. Such findings are therefore relevant to an SLT-informed interpretation while remaining distinct from direct tests of the theory.

A more explicit application is provided by Shafer and Silverman (2013), who applied SLT to the conceptualisation of bullying and victimisation and used the framework to inform Music Therapy intervention development. Their work is significant because it explicitly connects social-learning principles with Music Therapy rather than simply identifying behaviours that may be compatible with observational learning. However, the work is theoretical and intervention-oriented rather than an experimental examination of whether SLT mechanisms account for therapeutic outcomes.

Reinforcement represents a related but distinct component of the application. Bandura (1977) recognised that consequences can influence the subsequent performance of observed behaviour and that individuals may learn through observing the consequences experienced by others. In Music Therapy, consequences may include therapist approval, peer responses, successful musical coordination or continuation of a musical interaction. Moore and Mathenius (1987) incorporated positive reinforcement within their experimental procedure; however, because modelling, reinforcement and musical tempo were examined within the same experimental context, their findings do not support treating reinforcement as an isolated mechanism of change.

The literature supports a circumscribed application of SLT to Music Therapy. The theory provides a framework for examining how participants attend to models, retain and reproduce observed responses and

© 2026 The Authors. Published by Bexford Publishing Ltd

respond to social consequences. However, relatively few studies have been designed to test these processes as an integrated theoretical mechanism. Much of the existing evidence instead examines individual processes such as imitation, modelling, turn-taking and social responsiveness, or applies SLT conceptually to intervention development.

Accordingly, SLT is positioned in the present article as an explanatory framework for particular learning processes within Music Therapy rather than as a comprehensive theory of therapeutic change. This positioning allows observable social and behavioural learning to be examined through an SLT-informed perspective while recognising that musical, relational, affective, developmental and other therapeutic processes may contribute to outcomes. The proposed conceptual framework therefore identifies theoretically plausible points at which SLT mechanisms may operate while distinguishing these propositions from mechanisms that have been empirically demonstrated.

5. MUSIC AS A CONTEXT FOR SOCIAL LEARNING

The application of Social Learning Theory to Music Therapy becomes particularly relevant when music is examined as a context in which observation, response and behavioural reproduction can occur. Music Therapy interactions may require participants to attend to another person's musical or bodily behaviour and respond through imitation, turn-taking or coordinated musical activity. These processes should not, however, be equated automatically with social learning. Rather, they provide observable interactional conditions through which mechanisms proposed by Social Learning Theory can be examined.

Forti et al. (2020) provide an example through the Soundbeam Imitation Intervention for children with autism, which incorporated repeated movement–melody associations and progressively more complex synchronous and delayed imitation activities. Improvements in imitation accuracy and sustained social attention were reported following the intervention. From an SLT perspective, the intervention contains elements compatible with observational learning: a behaviour is presented, attention is directed towards the model and subsequent behaviour involves reproduction of the observed action. However, because the study was not designed to test SLT, its findings support the presence of processes compatible with the theory rather than demonstrating SLT as the mechanism underlying the observed changes.

Musical interaction can also provide opportunities for social learning through reciprocal responding rather than through observation of a model alone. Holck (2004) demonstrated how musical cues can organise turn-yielding and turn-taking within Music Therapy interaction, requiring participants to attend and respond to another person's behaviour. Hawkins and Farrant (2022) similarly examined musical activities involving turn-taking and synchronous action, illustrating that different forms of musical coordination create different interactional conditions. From an SLT perspective, such reciprocal activities provide repeated opportunities to observe a response, produce behaviour and receive subsequent social consequences. However, turn-taking and synchronisation themselves are not evidence of observational learning and may involve additional processes such as anticipation, practice and contingency.

The relevance of music to Social Learning Theory therefore lies less in music having an inherently social-learning function than in the way particular musical procedures organise opportunities for observation, response and behavioural reproduction. Imitation-based interventions provide relatively direct conditions for examining these processes, whereas turn-taking and reciprocal musical interaction represent broader contexts in which social learning may occur. The existing evidence consequently supports a conceptual relationship between musical interaction and social-learning processes while indicating the need for research that explicitly examines whether these processes contribute to behavioural change in Music Therapy.

© 2026 The Authors. Published by Bexford Publishing Ltd

6. MODELLING AND OBSERVATIONAL LEARNING IN MUSIC THERAPY

Within a Social Learning Theory framework, the therapist represents one potential source of modelling, but modelling depends on the participant's observation of, attention to and subsequent response to the modelled behaviour. Bandura (1977) proposed that behavioural patterns may be acquired through observing others and the consequences associated with their behaviour. In Music Therapy, this possibility is particularly relevant because therapist behaviour may be embedded within ongoing musical interaction rather than presented as a separate instructional demonstration.

Music Therapy research provides examples in which modelling is incorporated into intervention procedures. Forti et al. (2020), for example, used video modelling within an imitation-focused intervention involving movement–melody patterns and reported increased imitation accuracy. The study therefore illustrates the relevance of modelling and behavioural reproduction within a music-based intervention, but does not establish therapist modelling as the mechanism responsible for the observed change. Similarly, Holck (2004) described how therapist and participant behaviour can provide auditory and visual cues within turn-taking. From an SLT perspective, such interactions create opportunities for observation and subsequent response, although turn-taking itself should not be equated with observational learning.

An explicit theoretical application is provided by Shafer and Silverman (2013), who applied SLT to the conceptualisation of bullying and victimisation and used the framework to inform Music Therapy intervention development. Their work establishes a direct theoretical connection between social-learning processes and Music Therapy, while remaining conceptual and intervention-oriented rather than an empirical test of therapist modelling as a mechanism of therapeutic change.

The therapist is not the only potential model within Music Therapy. Group settings may allow participants to observe one another's musical and interpersonal behaviour, creating opportunities for peer modelling. In sequential musical activities, for example, one participant's response may provide an observable model for another participant before that participant's turn. Such procedures create repeated opportunities for observation and reproduction, but the presence of peer behaviour does not by itself demonstrate vicarious learning. Evidence would be required that observation influenced subsequent behaviour.

Importantly, the presence of a model does not guarantee observational learning. Within Bandura's framework, attention, retention, behavioural reproduction and motivational processes contribute to whether observed behaviour is subsequently performed (Bandura, 1977). Immediate imitation may therefore demonstrate behavioural reproduction without establishing acquisition. Evidence of persistence across time, transfer to another context, or reproduction in the absence of the original model or immediate support would provide stronger evidence that learning has occurred.

Within the proposed framework, therefore, the therapist and other participants are conceptualised as potential social models rather than inherently functioning models. Their significance depends on the structure of the musical interaction and on whether the participant attends to, retains and subsequently reproduces the observed behaviour. This distinction allows modelling to be examined as a specific social-learning process within Music Therapy without assuming that every instance of imitation, turn-taking or therapist–participant interaction constitutes observational learning.

7. PROPOSED CONCEPTUAL FRAMEWORK

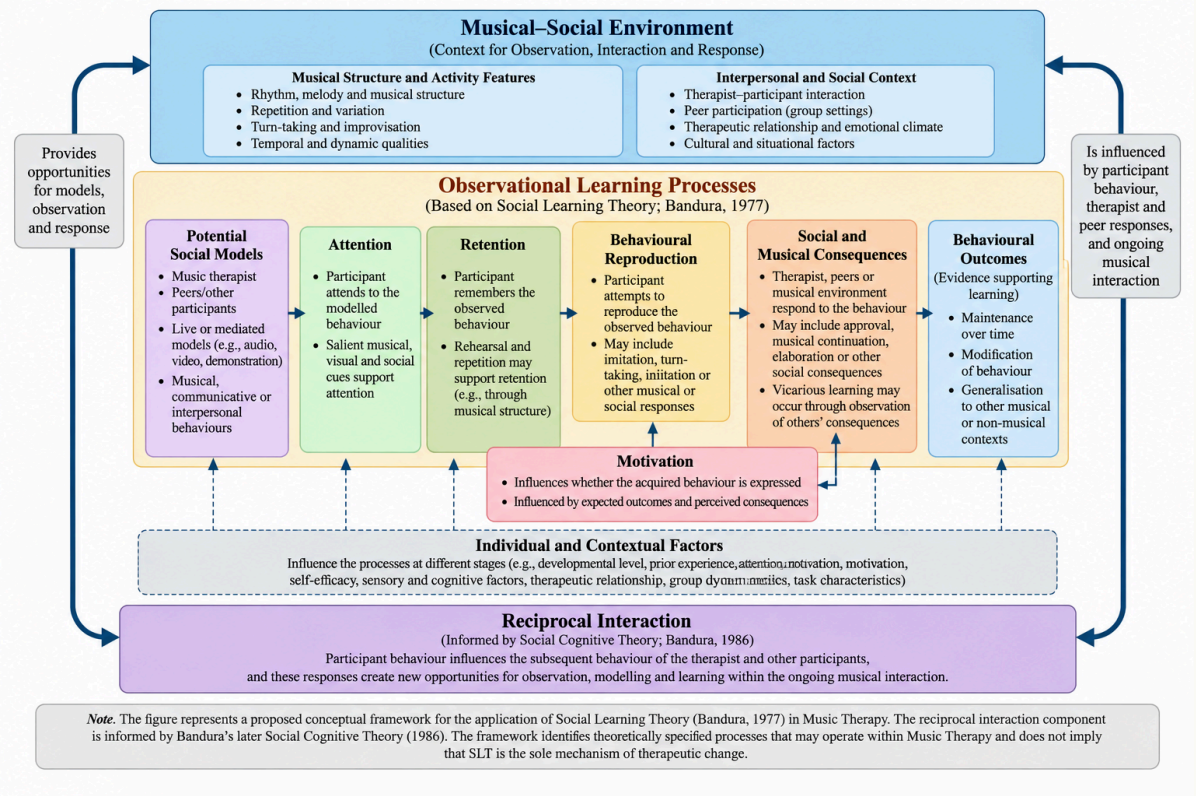
The preceding analysis indicates that Social Learning Theory (SLT) provides a theoretically relevant framework for examining selected learning processes within Music Therapy, while the existing literature does not establish a comprehensive SLT-based mechanism of therapeutic change. The present article therefore proposes a conceptual framework for examining how observational learning processes may

© 2026 The Authors. Published by Bexford Publishing Ltd

operate within the musical and interpersonal conditions of Music Therapy. The framework is primarily informed by Bandura's Social Learning Theory (1977), with reciprocal interaction incorporated as a contextual component informed by Bandura's later Social Cognitive Theory (1986).

The framework begins with the musical–social environment, which represents the context in which observation and interaction occur. Within Music Therapy, this environment may include musical structures such as rhythm, melody, repetition, turn-taking and improvisation, together with interpersonal conditions involving the therapist, peers and other participants. These features are not themselves treated as evidence of social learning; rather, they provide conditions within which behaviours can become observable and opportunities for observation, response and interaction can arise. The proposed relationships among these theoretical and Music Therapy-specific components are presented in Figure 1.

Figure 1. Proposed conceptual framework for the application of Social Learning Theory in Music Therapy



Note. The figure represents a proposed conceptual framework for the application of Social Learning Theory (Bandura, 1977) in Music Therapy. The reciprocal interaction component is informed by Bandura's later Social Cognitive Theory (1986). The framework identifies theoretically specified processes that may operate within Music Therapy and does not imply that SLT is the sole mechanism of therapeutic change.

Within this environment, the participant encounters potential social models. The music therapist may model musical, communicative or interpersonal behaviours, while peers and other participants may provide additional models, particularly in group settings. Models may also be presented through mediated forms such as video or structured demonstrations. The presence of a model does not itself establish observational learning. The participant must attend to relevant features of the behaviour and retain information that can subsequently guide performance (Bandura, 1977).

The framework therefore identifies attention and retention as initial cognitive processes through which observed behaviour may become available for subsequent reproduction. Attention concerns the selection of relevant features of the modelled behaviour, whereas retention concerns the preservation of information that can guide later performance. In Music Therapy, repetition, salient auditory or visual cues and the structure of an activity may provide conditions that support these processes. These are proposed as potential facilitators rather than as mechanisms established specifically within Music Therapy.

The subsequent component is behavioural reproduction, in which the participant attempts to express the

© 2026 The Authors. Published by Bexford Publishing Ltd

observed behaviour. This may involve imitation of rhythmic or melodic patterns, turn-taking, initiation of interaction or other musical and interpersonal responses. Research demonstrates that such behaviours can be elicited and measured within music-based interventions (Moore & Mathenius, 1987; Forti et al., 2020). Within the proposed framework, however, behavioural reproduction is distinguished from learning: immediate imitation demonstrates performance of a behaviour but does not, by itself, establish durable acquisition.

Following behavioural reproduction, the participant encounters social and musical consequences. These may include therapist approval, continuation or elaboration of the musical exchange, peer responses or other social consequences associated with the behaviour. From an SLT perspective, consequences can influence subsequent performance and provide information about the likely outcomes of behaviour (Bandura, 1977). In group Music Therapy, observing consequences experienced by another participant may additionally provide conditions for vicarious learning. The framework therefore treats consequences as potential influences rather than assuming that reinforcement accounts for behavioural change in every intervention.

Motivation constitutes a further component of the observational learning process. Bandura (1977) distinguished acquisition from performance and proposed that motivational processes influence whether acquired behaviour is expressed. Within the present framework, consequences associated with behaviour may therefore influence the participant's subsequent willingness to reproduce, modify or discontinue a response. Motivation is consequently positioned as an influence on behavioural expression and continuation rather than as evidence of learning itself.

The framework distinguishes behavioural outcomes from immediate performance. Evidence that learning has occurred would be strengthened when an observed behaviour is maintained over time, appropriately modified, or generalised beyond the immediate modelling situation. This distinction is particularly important in Music Therapy research because increased immediate imitation or participation cannot automatically be interpreted as evidence of observational learning. Persistence, transfer or generalisation would provide stronger evidence that behavioural change extends beyond the immediate therapeutic interaction.

Individual and contextual factors may influence different stages of the process. These may include prior experience, developmental level, attention, motivation, self-efficacy, sensory and cognitive characteristics, the therapeutic relationship, group dynamics and task characteristics. Their inclusion reflects the broader theoretical position that observational learning occurs in interaction with individual and environmental conditions (Bandura, 1977, 1986). The framework does not propose that these factors have identical effects or that each must be examined in every Music Therapy intervention; rather, they represent potential conditions under which social-learning processes may vary.

Finally, the framework incorporates reciprocal interaction, drawing specifically on Bandura's later Social Cognitive Theory (1986). This component is deliberately distinguished from the core observational-learning sequence derived from the earlier SLT formulation. In Music Therapy, participant behaviour may influence the therapist's subsequent musical or interpersonal response, while therapist and peer responses may in turn influence the participant's subsequent behaviour. The musical interaction therefore continually generates new opportunities for observation, modelling, response and consequence. Reciprocal interaction is consequently represented as a contextual feedback process rather than an additional stage in the original observational-learning sequence.

Importantly, the proposed framework does not position SLT as a comprehensive explanation of Music Therapy outcomes. It identifies theoretically specified processes through which observational learning may

© 2026 The Authors. Published by Bexford Publishing Ltd

be examined within a musical and interpersonal context. The framework should therefore be understood as a testable conceptual model proposed by the present article, rather than as an established causal model or a representation of Bandura's original theory. Its purpose is to organise processes identified in the preceding literature and provide a theoretically explicit basis for investigating how modelling, observation, behavioural reproduction, consequences and motivation may contribute to behavioural learning within Music Therapy.

8. IMPLICATIONS FOR MUSIC THERAPY PRACTICE AND RESEARCH

The proposed framework has implications for both Music Therapy practice and research. Its primary implication is that modelling, observation, behavioural reproduction and social consequences can be considered as identifiable processes within Music Therapy rather than solely as incidental features of therapeutic interaction. Existing research has examined behaviours such as imitation, turn-taking, initiation, joint attention and social participation within music-based interventions, but these processes have generally not been investigated as components of an integrated Social Learning Theory mechanism.

8.1 Implications for Music Therapy Practice

From a practice perspective, the framework suggests that therapists may consider how specific musical activities create opportunities for observation and behavioural reproduction. Rhythmic imitation, melodic repetition, turn-taking, musical exchange and structured modelling can make particular behaviours observable and provide repeated opportunities for participants to respond. Modelling can therefore be incorporated intentionally into intervention procedures when observational learning is a relevant therapeutic objective.

The framework also highlights the role of therapist responsiveness. When a participant initiates a musical response, the therapist may continue, imitate, elaborate or otherwise respond to that behaviour. Such responses may subsequently become observable behaviour for the participant, creating further opportunities for modelling within the interaction. This reflects the reciprocal component of the framework, which is informed by Bandura's later Social Cognitive Theory (Bandura, 1986).

Group Music Therapy provides additional opportunities for peer modelling, as participants can observe one another's musical and interpersonal responses. However, peer observation should not automatically be interpreted as learning. The relevant consideration is whether observed behaviour subsequently influences another participant's behaviour.

The framework therefore encourages greater specificity in intervention planning. Imitation, turn-taking and participation may function as therapeutic targets, intervention processes or potential behavioural indicators of learning and these functions should not be conflated. An activity may require imitation without intending to establish observational learning, while an increase in turn-taking does not necessarily demonstrate that turn-taking was acquired through modelling.

8.2 Implications for Music Therapy Research

The principal research implication is the need to move beyond demonstrating behavioural change towards examining the processes through which such change may occur. Existing research has examined social interaction, communication, imitation, turn-taking and related outcomes in music-based interventions, but the mechanisms underlying these changes remain insufficiently specified.

The proposed framework provides several directions for empirical investigation. Future studies could compare different modelling conditions, including therapist modelling, peer modelling, mediated modelling and conditions without explicit modelling. Moore and Mathenius (1987) provide an early

© 2026 The Authors. Published by Bexford Publishing Ltd

example of experimental investigation of modelling and reinforcement in relation to imitative musical responses.

Research could also distinguish immediate reproduction from subsequent learning. Rather than assessing imitation only during the modelling episode, studies could examine whether behaviour is retained across sessions, reproduced when prompts are reduced, or transferred to another context. Such measures would provide stronger evidence for the distinction between performance and learning central to Bandura's formulation.

A further area concerns consequences and motivation. Studies could examine whether therapist responses, peer responses or musical continuation influence the subsequent frequency or persistence of a modelled behaviour. This would help distinguish the contribution of modelling from reinforcement and other therapeutic processes.

The framework also permits investigation of proposed relationships between its components. For example, research could examine whether exposure to a modelling procedure is associated with behavioural reproduction and whether reproduction is subsequently maintained or generalised. Such designs would allow relationships proposed by the framework to be examined empirically rather than inferred from outcome measures alone.

Finally, research should extend assessment beyond the immediate modelling situation where feasible. Evidence of persistence across sessions, transfer to other contexts or generalisation beyond the therapeutic setting would provide stronger support for learning than immediate performance alone. Longer-term assessment is therefore particularly relevant when the intended outcome concerns durable behavioural change.

Overall, the framework does not prescribe a single Music Therapy technique based on Social Learning Theory. Instead, it identifies theoretically defined processes that can be incorporated into intervention design and empirical research. Its principal research value lies in making the proposed relationships sufficiently explicit for processes such as modelling, attention, retention, reproduction, consequences, motivation and reciprocal interaction to be examined empirically, either individually or in relation to one another.

9. LIMITATIONS AND CONSIDERATIONS

The proposed framework should be interpreted within several theoretical and evidentiary boundaries. First, it is conceptual and has not been empirically validated as an integrated model. The literature considered in the present article provides evidence concerning individual processes such as modelling, imitation, turn-taking, social responsiveness and musical interaction, but relatively few studies have examined these processes as components of a Social Learning Theory-based mechanism. The relationships represented in the framework should therefore be understood as theoretically derived propositions rather than established causal relationships.

A second consideration concerns the heterogeneity of the literature on which the framework is based. The studies discussed involve different populations, musical procedures, therapeutic contexts, behavioural targets and outcome measures. Findings concerning imitation or social interaction in one population or intervention cannot therefore be assumed to generalise across Music Therapy contexts. The framework provides a common conceptual structure for examining these processes while recognising that their manifestation and significance may vary according to the population, intervention and musical task.

A further limitation concerns the interpretation of observable behavioural change. Imitation, turn-taking, initiation, synchronisation and participation are measurable behaviours, but their occurrence does not by

© 2026 The Authors. Published by Bexford Publishing Ltd

itself establish observational learning. Such behaviours may arise through repeated practice, direct instruction, contingency, interpersonal attunement, sensorimotor processes or other mechanisms. Similarly, immediate reproduction of a modelled behaviour does not demonstrate retention or generalisation. Research applying the proposed framework would therefore need to distinguish immediate performance from subsequent maintenance, modification and transfer.

The framework also does not assume that modelling, reinforcement, musical feedback and reciprocal interaction can be readily isolated in actual Music Therapy practice. Musical interactions are dynamic and may involve several processes simultaneously. A therapist may model a behaviour, respond to the participant, provide musical feedback and modify the activity within the same interaction. Attributing behavioural change to a single SLT mechanism may therefore oversimplify the therapeutic process. Experimental or process-oriented research would be required to examine the relative contribution of individual components.

The theoretical boundaries of the framework also require consideration. The central observational-learning sequence is grounded primarily in Bandura's Social Learning Theory (1977), whereas reciprocal interaction is informed by Bandura's subsequent Social Cognitive Theory (1986). This distinction is intentional: reciprocal interaction reflects the ongoing exchange between participant, therapist, peers and environment but is not proposed as an additional stage of Bandura's original observational-learning sequence.

Finally, Social Learning Theory represents one possible account of learning and change within Music Therapy. Musical interaction may involve affective, relational, embodied, developmental, cultural and aesthetic processes that are not fully represented by an observational-learning framework. The present model should therefore not be interpreted as reducing Music Therapy to social learning or as proposing that therapeutic change can be explained through modelling and behavioural consequences alone. Its intended contribution is narrower: to provide a theoretically explicit framework through which selected learning processes associated with observation and behavioural reproduction can be identified, differentiated and subjected to empirical investigation within musical and interpersonal contexts.

10. CONCLUSION

Social Learning Theory provides a theoretically bounded perspective through which selected learning processes within Music Therapy can be examined. The literature reviewed demonstrates the presence of modelling, imitation, behavioural reproduction, turn-taking and social consequences within musical interventions, but does not establish these processes as manifestations of SLT or demonstrate SLT as a mechanism of therapeutic change. The framework proposed in this article maps selected Music Therapy processes onto Bandura's observational-learning constructs while distinguishing these from reciprocal interaction informed by later Social Cognitive Theory. Its principal contribution is to generate testable propositions concerning modelling, attention, retention, behavioural reproduction, consequences, motivation, persistence and generalisation. Empirical research examining these processes directly is needed to determine whether the proposed relationships function as mechanisms of behavioural learning within Music Therapy.

References

Bandura, A. (1971). *Social learning theory*. General Learning Press.

Bandura, A. (1977). *Social learning theory*. Prentice Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.

© 2026 The Authors. Published by Bexford Publishing Ltd

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1–26. https://doi.org/10.1146/annurev.psych.52.1.1

Boster, J. B., Spitzley, A. M., Castle, T. W., Jewell, A. R., Corso, C. L., & McCarthy, J. W. (2021). Music improves social and participation outcomes for individuals with communication disorders: A systematic review. *Journal of Music Therapy, 58*(1), 12–42. https://doi.org/10.1093/jmt/thaa015

Duffy, B., & Fuller, R. (2000). Role of music therapy in social skills development in children with moderate intellectual disability. *Journal of Applied Research in Intellectual Disabilities, 13*(2), 77–89. https://doi.org/10.1046/j.1468-3148.2000.00011.x

Finnigan, E., & Starr, E. (2010). Increasing social responsiveness in a child with autism: A comparison of music and non-music interventions. *Autism, 14*(4), 321–348. https://doi.org/10.1177/1362361309357747

Forti, S., Colombo, B., Clark, J., Bonfanti, A., Molteni, S., Crippa, A., Antonietti, A., & Molteni, M. (2020). Soundbeam imitation intervention: Training children with autism to imitate meaningless body gestures through music. *Advances in Autism, 6*(3), 227–240. https://doi.org/10.1108/AIA-07-2019-0023

Hawkins, S., & Farrant, C. (2022). Influence of turn-taking in musical and spoken activities on empathy and self-esteem of socially vulnerable young teenagers. *Frontiers in Psychology, 12*, Article 801574. https://doi.org/10.3389/fpsyg.2021.801574

Holck, U. (2004). Turn-taking in music therapy with children with communication disorders. *British Journal of Music Therapy, 18*(2), 45–54. https://doi.org/10.1177/135945750401800203

Kim, J., Wigram, T., & Gold, C. (2008). The effects of improvisational music therapy on joint attention behaviors in autistic children: A randomized controlled study. *Journal of Autism and Developmental Disorders, 38*(9), 1758–1766. https://doi.org/10.1007/s10803-008-0566-6

Moore, R. S., & Mathenius, L. (1987). The effects of modeling, reinforcement and tempo on imitative rhythmic responses of moderately retarded adolescents. *Journal of Music Therapy, 24*(3), 160–169. https://doi.org/10.1093/jmt/24.3.160

Shafer, K. S., & Silverman, M. J. (2013). Applying a social learning theoretical framework to music therapy as a prevention and intervention for bullies and victims of bullying. *The Arts in Psychotherapy, 40*(5), 495–500. https://doi.org/10.1016/j.aip.2013.07.004



© 2026 by the authors. Submitted for possible open access publication under the terms and conditions of the **Creative Commons Attribution (CC BY 4.0) licence** (https://creativecommons.org/licenses/by/4.0/)