Journal of Music Therapy, *57*(3), 2020, 315–352
doi:10.1093/jmt/thaa005; Advance Access publication 30 March 2020

Music Therapist Experiences of a Randomized Controlled Trial as Clinician Researchers

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We would like to thank all of the music therapists who served on the SMART intervention teams and provided survey responses.

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Music therapy clinicians bring an important perspective to the design and conduct of clinically meaningful studies. Unfortunately, there continue to be roadblocks that hinder clinician involvement in research and the development of successful partnerships between academic researchers and practicing clinicians. To help grow clinician involvement, it is important that research teams share their experiences. As such, the purpose of this qualitative study was to share music therapists' perspectives about their experience of working as a research clinician on a large multisite randomized controlled trial. 10 board-certified music therapists provided written responses to 6 data-generating questions about: (a) reasons for participating, (b) perceived challenges and benefits, (c) experiences of quality assurance monitoring, (d) professional growth, (e) value of research, and (f) advice for clinicians considering research involvement. Using thematic content analysis, we identified primary themes and subthemes for each question (20 themes; 30 subthemes). Qualitative analysis revealed not only common challenges, such as reconciling clinical and research responsibilities, but also benefits, including continued professional growth, greater understanding of research processes, and research participation as a way to advocate and advance the profession. Finally, for clinicians interested in becoming involved in research, therapists noted the importance of having workplace support from a mentor, supervisor, and/or administrator; seeking out available resources; and knowing roles and responsibilities before initiating research involvement. Findings offer important insight and recommendations to support the involvement of clinicians in research and support further exploration of clinician involvement in dissemination efforts to improve translation and uptake of research into practice.

Keywords: *clinicians; research; randomized controlled trial; music therapy*

Conducting research can be a daunting task for many clinicians, not only in the music therapy profession but also across other professions as well. Many reasons for this exist, yet in reality, expert

clinicians are positioned to make important contributions to the development of meaningful research based on their clinical practice knowledge (Neugebauer, 2015). Research conducted by academic scholars sometimes leaves clinicians struggling with how to interpret and apply findings to their clinical practice (Funk, Tornquist, & Champagne, 1995; Titler, Wilson, Resnick, & Shever, 2013; Waldon, 2015; Waldon & Wheeler, 2017). To help bridge this gap and advance evidence-based practice, it is important to bring clinicians and academic researchers together to improve the design, conduct, and dissemination of research findings that are relevant and meaningful to practicing clinicians (Albers & Sedler, 2004; Chambers & Azrin, 2013; Crooke & Olswang, 2015; Leach & Tucker, 2017; Parsons et al., 2013). Roll et al. (2013) described the collaborative process of engaging nurses in research for a multisite randomized clinical trial and concluded that clinician engagement promoted mutual respect across all professions in both academic and clinical settings. Studies have also identified additional benefits gained through clinician involvement in research, including enhanced teamwork (Albers & Sedler, 2004; Hoffmann et al., 2015; Pager, Holden, & Golenko, 2012; Rosa-Rizzotto et al., 2010), improved communication and understanding of the research process (Hoffmann et al., 2015; Messner et al., 2016; Roll et al., 2013), and opportunities to positively change practice, improve patient outcomes, and impact policy (Boase, Kim, Craven, & Cohn, 2012; Hoffmann et al., 2015; McAlearney, Song, & Reiter, 2012; Messner et al., 2016; Pager et al., 2012). Collaboration between practicing clinicians and research scholars brings together knowledge and experience from both worlds, but despite these benefits there continues to be roadblocks that can hinder effective partnerships.

Barriers to clinician involvement in research are consistent across a variety of healthcare professions. Nurses, physicians, psychologists, and allied health professionals practicing in their fields cite time constraints, prioritization of client caseload, inadequate research skills, lack of administrative support, and limited access to funding as the top obstacles to conducting research (Albers & Sedler, 2004; Boase et al., 2012; Hoffmann et al., 2015; McAlearney et al., 2012; Messner et al., 2016; Pager et al., 2012; Waldon, 2015). Despite these barriers, clinicians also express their desire to participate in research, recognize the benefits of their involvement, and have identified support from mentors, research coordinators, and healthcare

system administrators as primary facilitators to their research involvement (Hoffmann et al., 2015; McAlearney et al., 2012; Messner et al., 2016). Additional factors that build clinicians' research capacity include professional development and research training opportunities, protected time to work on research projects, and access to research infrastructure, such as library resources, statisticians, software, administrative support, and money (Messner et al., 2016; Pager et al., 2012). As noted by Johnson et al. (2014), the combination of professional development and mentorship from academic researchers can increase clinician confidence and develop a culture of research that promotes ongoing clinician engagement.

The music therapy profession has a vested interest in finding ways to support collaborative research endeavors between research scholars and clinicians. It has been postulated that the field does not have enough active researchers to conduct the vast amount of research needed to advance practice across all clinical populations (Aigen, 2015; Bradt, 2015). For university faculty, increased demands for teaching and administrative duties often result in diminished research productivity (Bradt, 2015). Similarly, clinicians must attend to their clinical caseloads and find it difficult to plan and conduct research in their workplace (Messner et al., 2016). Use of a team science approach has been proposed, bringing researchers and clinicians together to build more effective and productive programs of research (American Music Therapy Association, 2015; Bennett, Gadlin, & Marchand, 2019; Titler et al., 2013). This was a common theme found in published proceedings from the American Music Therapy Association (2015), *Improving Access and Quality: Music Therapy Research 2025*. Several key goal areas were identified, including the expansion of partnerships, collaborations, and networks; the need for research capacity building to include education and training as well as infrastructure; and the essential role of clinicians, not only in accessing and utilizing published research but also as contributing team members in conducting research (American Music Therapy Association, 2015). Waldon (2015) also identified the importance of clinician involvement:

> Elevating the research competency of all music therapists is a task that is better assumed with a sense of shared responsibility rather than placing the burden on a single arm of the profession (Waldon, 2015, p. 189).

As the music therapy profession strives to encourage and grow clinician involvement in research, it is vitally important that research teams share their experiences. To that end, as part of our collaborative work on a multisite music therapy randomized controlled trial (aka, the SMART II trial), our team of board-certified music therapists identified challenges and benefits they encountered as research clinicians. The purpose of this qualitative study was to identify and share clinician perspectives about their experiences as a research clinician working on a randomized controlled trial study. The following six questions guided our inquiry:

1. Why did music therapists choose to participate in the SMART II trial?
2. What are the perceived challenges and benefits of delivering an intervention within a set protocol?
3. What are therapists' experiences of self and external quality assurance monitoring?
4. What are therapists' perspectives about their professional growth as a result of participating in a controlled trial study?
5. What are music therapists' thoughts on the value of research in music therapy from a study interventionist perspective?
6. What advice would music therapists give to clinicians who are deciding whether to involve themselves in research at the workplace?

The SMART II Trial

Based on the findings from an earlier efficacy trial (Robb, Burns, Stegenga, et al., 2014), the SMART II study was a two group randomized controlled trial designed to examine the efficacy of the Therapeutic Music Video (TMV) intervention for a broader population of adolescents and young adults (AYA) with high-risk cancer. This study, which received funding from the National Cancer Institute (R01CA162181) and the Children's Oncology Group (ANUR1131; U10CA098543; U10CA095861), also examined the efficacy of a nurse-delivered parent intervention to reduce parent distress and enhance parent–AYA communication during treatment; however, the focus of this manuscript is on therapist experiences of delivering the TMV intervention and completing study-related tasks. In this study, AYAs and parents were enrolled as dyads. All

AYAs received the TMV as the standard of care, with the parent randomized to a nurse-delivered parent intervention or a low-dose condition. The SMART II trial recruited participants from seven hospitals across the United States and involved the participation of 26 board-certified music therapists over a 5-year period. In the section that follows, we describe study training and research responsibilities carried out by members of our music therapy clinician team.

Study Training

Prior to working with study participants, board-certified music therapists participated in a two-day, in-person training session. Training covered five key areas: (a) overview of the study, (b) theoretical frameworks that informed development and delivery of the TMV intervention, (c) theoretical framework that guided selection of outcome measures, (d) TMV intervention training and role-play, and (e) study documentation and quality assurance monitoring procedures.

Therapeutic Music Video Intervention

Two theoretical models informed TMV intervention design. The Resilience in Illness Model (RIM) guided conceptualization of the clinical problem and our outcomes of interest, while the Contextual Support Model of Music Therapy (CSM-MT) informed the design and content of the TMV intervention (Haase et al., 2017; Robb, 2000,2003a, 2003b). The RIM is a strengths-based, positive health model that identifies two risk and five protective factors that influence AYA self-transcendence and resilience (Haase et al., 2017). To improve AYA coping and adjustment during high-risk cancer treatment, the TMV was designed to help AYA explore, identify, and express their experiences and what is important to them during treatment for a life-threatening illness. Through therapeutic songwriting and digital video production, AYA identified and wrote about their experiences of illness-related distress (risk factor), as well as family, friends, healthcare providers, spiritual perspectives, and hope-derived meaning (protective factors). AYA then had the option to share those experiences with others through their music video (Haase et al., 2019; Robb, Burns, Stegenga, et al., 2014).

Both content and delivery of the TMV were based on the CSM-MT, which describes how music can be used to create supportive environments that promote engagement and in turn

positive health outcomes (Haase et al., 2019; Robb, Burns, Stegenga, et al., 2014). Supportive environments have optimal levels of *structure, autonomy support, and relationship support*, and these principles guided TMV intervention design. First, we created *structure* through clearly defined goals and the use of structured, familiar, and preferred music. Second, we provided *autonomy support* through AYA-directed choices about music, lyric writing, video content, and the involvement of others. Third, we provided *relationship support* through a nonthreatening, creative activity designed to help AYA explore, identify, and express what is important to them (Haase et al., 2019; Robb, Burns, Stegenga, et al., 2014; Table 1). In addition, music therapists used these same principles to tailor the delivery of the intervention based on the individual needs of each AYA participant. For example, the therapist would tailor experiences by offering more or less structure and support, to accommodate fluctuations in symptom distress (i.e., fatigue, pain, nausea). In this trial, AYA received five, individual 60-min sessions over 6–8 weeks.

Quality Assurance Monitoring and Bimonthly Conference Calls

In addition to initial in-person training, music therapists participated in ongoing self and external quality assurance monitoring and bimonthly conference calls. These activities were an essential part of our treatment fidelity plan, which included a variety of strategies to ensure that interventions were delivered as intended across therapists and sites over time (Robb, Burns, Docherty, & Haase, 2011). Quality assurance (QA) monitoring for our study included self and external monitoring of audio-recorded TMV sessions. All sessions were encrypted and uploaded to a secure, web-based server that could only be accessed by the music therapist who led that session and the external monitor. Self-monitoring procedures specified that music therapists listen to their audio-recorded session (within 2 days of delivery) while completing a session-specific checklist that listed essential elements of each session. Similarly, the external monitor listened to therapists' sessions and completed the same session-specific checklist. The external monitor would identify the absence of any essential session content, offer strategies to improve session content delivery, and offer clinicians the opportunity to discuss any particularly challenging situations that the rest of the team could learn from during bimonthly conference calls. When needed, the external monitor scheduled

Table 1

Therapeutic Music Video Intervention: Summary of Contextual Support and Intervention Content

Elements of Contextual Support from CSM-MT[a]	Summary of Intervention Content by Session[b]		
	Week	Session	TMV Intervention Content
Structure	1	1	- Learn how to use a songwriting script
• Familiar, predictable music			- Select music for project (i.e., offered 10 songs from 5 music genres)
• Song Scripts			- Brainstorm ideas for lyric/video content (i.e., what is important to AYA)
• Storyboards	1	2	- Write lyrics to a familiar song using a songwriting script
• Leveled Involvement			- Discuss lyrics and what is important to AYA
Autonomy Support			- Sing/practice song with CD accompaniment track
• AYA-Directed			- Select who will sing on the song recording
• Choices (music, lyrics, visual images, vocalists, involving others)	2	3	- Sing/rehearse completed song
			- Discuss AYA thoughts about/reflections on video project
• Quality product			- Digitally record vocal soundtrack for video
Relationship Support			- Listen to AYA vocals mixed with accompaniment track[c]
• Music to communicate unspoken thoughts, feelings, dreams for future	2	4	- Begin storyboard process (i.e., select visual images to go with song lyrics)
			- Listen to completed song/discuss visual images—memories/importance
• AYA-Centered			- Digital camera available during hospitalization/treatment
• Therapist support	3	5	- Gather visual images and/or take pictures
• Family, peer, healthcare provider involvement			- Complete storyboard
			- Listen to completed song/discuss visual images—memories/importance
	3	6	- Private viewing of music DVD
			- Optional "Video Premiere" (i.e., AYA invites others to view)

Note. AYA = adolescents/young adults; CD = compact disc; DVD = digital video disc; TMV = therapeutic music video.

[a]Grounded in motivational and developmental coping theory, the Contextual Support Model of Music Therapy (CSM-MT) describes how music can be used to provide structure, autonomy support, and relationship support to diminish distress and promote positive health outcomes.

[b]Sessions facilitated by board-certified music therapists.

[c]CD accompaniment soundtrack purchased for each music video project. Music selections available upon request.

individual telephone meetings to discuss any QA discrepancies and identify experiences that might benefit the rest of the clinical team (e.g., strategies the therapist used; a unique challenge).

Five study team members, all board-certified music therapists, served as external monitors. Three of the external monitor held advanced degrees (two masters; one PhD) and two held bachelor's degrees. In addition to receiving standardized training on the intervention protocol, all monitors had at least 2 years of experience delivering the intervention and ongoing support from the principal investigator. Early QA monitoring helped therapists solidify learning and delivery of the intervention, with ongoing monitoring to minimize "drift" from protocol content. Self and external monitoring were completed for the first three participants, and then every fifth participant. However, if a therapist had not delivered the intervention within a two-month period, they would complete the QA monitoring for that participant. In addition to external monitoring, therapists attended bimonthly conference calls, facilitated by the study principal investigator that lasted approximately 60 min. The calls provided the music therapists an opportunity to discuss active study participants and protocol implementation, share successes and troubleshoot challenges, and collaborate and learn from each other's experiences of delivering the intervention.

Methods

Participants

This project started as a presentation for an American Music Therapy Association national conference (Robb, Burns, Haase, et al., 2014), which was later developed into a qualitative analysis of therapist experiences. Participation in the project was voluntary, with 10 board-certified music therapists providing responses to questions about their experiences of being involved in the SMART II study. The number of music therapists working on the SMART II trial varied over time, but at the time of data collection, there were 11 therapists, for a 90% participation rate. Of the 10 respondents, half (n = 5) had a bachelor's degree, and the remaining 5 had a master's degree. Most were employed as a music therapist by the participating hospital (full time, n = 5; part-time, n = 1), with the remaining four employed by the study as a contractual music

therapist. Our contractual music therapists held part-time positions, had their own private practice, or were attending graduate school. Years of music therapy clinical practice experience varied; half of our music therapists had 13–29 years, three had 2–7 years, and two were in their first year of clinical practice. A majority of our clinicians ($n = 8$) had pediatric work experience prior to the study, and for the majority ($n = 7$) this was their first research experience.

Procedures

A portion of our bimonthly music therapy interventionist calls focused on the identification of topics for dissemination through professional presentations and publications. As we explored content other credentialed music therapists may find of value, our team began to discuss not only the ways their involvement in the trial had influenced their clinical practice, research knowledge, and abilities, but also the wealth of knowledge they had acquired about challenges and barriers in conducting clinical research, and ways to overcome those barriers. Based on these discussions, our team decided it would be important to investigate these concepts further by creating a standard set of data-generating questions each therapist could respond to independently.

A core group of music therapists worked with the senior author to develop nine data generating questions that were reviewed and approved by the larger group (Table 2). These questions were then e-mailed to all participating music therapists, who were encouraged to send their written responses to the first author (A. K. Henley) who removed all identifying information and collated responses for subsequent analysis. Participation in the provision of written responses and subsequent analysis was voluntary. Based on consultation with the first author's Institutional Review Board (IRB) representative, our project did not require additional IRB review and approval.

Data Analysis

We used the principles of thematic content analysis to identify core themes for each of our primary research questions (Krippendorff, 2004). We used the following four-step process to identify, code, and confirm thematic content for each question: (1) we divided responses among our eight music therapist coauthors, with a minimum of two clinicians independently reviewing responses to each data generating question for significant statements

Table 2

Data Generating Questions for Music Therapist Experiences

Research Question	Corresponding Data Generating Questions
1. Why did music therapists choose to participate in the SMART II trial?	• Briefly describe why you chose to participate in the SMART study as a music therapist intervener?
2. What are the perceived challenges and benefits of delivering an intervention within a set protocol?	• What has been most challenging and/or appealing about delivering an intervention with a set protocol? • Describe your experience working as a member of the SMART team at your hospital and across hospitals—what were the challenges, what has helped you/your team move through those challenges, what worked/did not work, what recommendations would you make?
3. What are therapists' experiences of self and external quality assurance monitoring?	• Share your thoughts on quality assurance monitoring—both for your own work and for receiving information from monitors about your work/sessions.
4. What are therapists' perspectives about their professional growth as a result of participating in a controlled trial study?	• Has your study participation contributed to your growth as a clinician? If so, please describe. • Have there been any changes in your daily practice as a result of your study involvement? • Have there been any other opportunities that have emerged as a result of your SMART study involvement?
5. What are music therapists' thoughts on the value of research in music therapy from a study interventionist perspective?	• What are your thoughts on the value of research in music therapy from an MT intervener's perspective?
6. What advice would you give to clinicians who are deciding whether to involve themselves in research at the workplace?	• What advice would you give to a clinician who is deciding whether to involve themselves in research at the workplace?

and recurring themes; (2) the first and senior author reviewed transcribed responses and therapist identified themes to develop a list of coding categories; (3) using MAXQDA© Plus software, the first and senior authors coded therapists' statements which were then used to identify and describe common themes and subthemes characterizing therapists' experiences; (4) themes and subthemes, including linked supporting statements, were reviewed by the full

team to confirm and refine thematic categories to ensure that we had fully captured the essence of therapist responses to each question.

Results

Table 3 summarizes the overall findings, including core themes, subthemes, and representative statements for each research question. Here, we report results by research question describing the core themes and subthemes that emerged and include a corresponding therapist-authored vignette of their experience.

Question 1: Why Did Music Therapists Choose to Participate in the SMART II Trial?

Therapist Vignette

> When one of our clinical research nurses approached me about a chance to participate in the SMART II study, I was immediately interested. I was fairly new to the hospital and was the first full-time, non-contract music therapist that the hospital had hired. I thought that the study would be a wonderful opportunity to build strong relationships with other departments and increase the visibility of music therapy. In addition, the study participants would produce a tangible end product that would allow staff to see the value and potential of music therapy, especially for the less-often referred AYA population. I was also thrilled to have a chance to expand my skills both as a clinician and as a researcher under the guidance of an experienced research team.—E. F. Frees

Three core themes emerged from therapists' descriptions about their decision to participate in the trial (Table 3). The first core theme, *(1.0) Opportunities to develop advanced research skills*, reflects clinicians' desire to expand their research knowledge. Several therapists shared they had not yet had opportunities to be involved in formal research and this offered them a "hands-on opportunity," while others viewed it as a way to expand on prior research experiences.

Table 3

Themes and Subthemes Organized by Research Question

Themes	Subthemes	Representative Statements
Question 1: Why did music therapists choose to participate in the SMART II trial?		
Theme 1: Opportunity to develop advanced skills in research.		*"I was excited to have this be my first real hands-on research opportunity and to "get my feet wet"…"*
Theme 2: Working in a team environment provides opportunities to advance research in a way that overcomes challenges associated with conducting research alone.	2.1. Working in teams provides greater feasibility for full-time clinicians.	*"…it was nice to be able to get on board an established study as it is difficult/time consuming to create your own research project while working full-time clinically."*
	2.2. Benefit from collaboration with experienced researchers and an interdisciplinary perspective.	*"I was attempting to get involved with research at my facility but found it overwhelming and time consuming. The way the SMART is set up and the accountability of the team to make it a success is the gold standard."*
	2.3. Recognizing additional ways to leverage personal and institutional resources.	*"…knowing what I know now with the SMART study experiences, I feel better equipped to find the resources for research."*
Theme 3: Opportunity to advance music therapy research, and increase awareness and utilization of music therapy services.		*"I was excited about the opportunity to contribute to a research project that was clinically relevant to music therapists, and that would also play a role in advancing the field."*

TABLE 3
Continued

Themes	Subthemes	Representative Statements
Question 2: What are the perceived challenges and benefits of delivering an intervention with a set protocol?		
Theme 1: Initial challenge: Understanding what it means to work within a protocol.	1.1. Initial concern that the protocol would be confining for the therapist and patient.	*"At first, I was afraid of being flexible and "in the moment," and was initially scared of going into "robot" mode—only delivering exactly what I was supposed to deliver…I worried that …the protocol would become a barrier between me and the patient."*
	1.2. As familiarity with protocol increases, you become less scripted and more comfortable tailoring the intervention based on patient need.	*"I found that with more experience (and time), I could easily stay within the protocol and bring my own personality into the mix."*
Theme 2: Ongoing challenge: Integrating roles as researcher and clinician.	2.1 Reconciling study vs. institution patient load.	*"I find some patients who are coping very well engaged in SMART. If I met them outside of the study and assessed they were coping well with resources, I would not necessarily embark on a project this time intensive…"*
	2.2. Scheduling time to complete study responsibilities is challenging especially for contracted music therapists.	*"It is more difficult for MTs who do not work full-time to accommodate the patients' schedules at all times."*
	2.3. Clinical trials require intervention fidelity that can limit therapists' ability to modify the study intervention or introduce new interventions.	*"The challenge has been to stay within the protocol …while we have some flexibility with this,…there is not the same leeway that would be present if the patient was not on a study."*
	2.4. Communication within and across sites to ensure coordination and timely delivery of study activities requires an active commitment.	*"Early on we had a few hurdles to cross regarding communication, but we worked on that together and found a way to share information that was more effective for all of us."*

TABLE 3
Continued

Themes	Subthemes	Representative Statements
Theme 3: Benefits: Refines treatment and service delivery.	3.1. Using a protocol rooted in theory provides a framework the therapist can use to deliver individualized and effective care that benefits patients.	*"Once the process/protocol is learned, then I can relax and enjoy the work with the patient and keep the focus on the patient's needs/concerns/issues, instead of being concerned about my "performance."*
	3.2. Opportunities to work within a protocol and learn new intervention techniques, including ways to integrate technology into practice.	*"The most appealing is getting to learn new techniques and integrate technology into practice."*
	3.3. Study provided infrastructure that allowed for increased visibility and integration of music therapy services within the healthcare setting.	*"I have had a chance to build relationships with the nurse practitioners and Hem/Onc researchers, which has helped my working relationship with other departments." (Therapist 2)*
	3.4. Supportive relationships were cultivated from working and learning together with other therapists.	*"It was great having other MTs working on the SMART II study here as support systems as I moved through the interventions with participants…"*

TABLE 3
Continued

Themes	Subthemes	Representative Statements
Question 3. What are therapists' experiences of self and external quality assurance monitoring?		
Theme 1: Quality assurance monitoring provides protocol accountability.	1.1. External and Self-monitoring provides validation, affirmation, and alleviates self-doubt related to protocol delivery.	*"…it is helpful to me as an intervener to sometimes show the difference between what I think I did in the session and what I actually did. The feedback from QA monitors has always been welcomed. Having a third party's reflections allows me to think outside my own process, and it is nice sometimes just to have that affirmation that I'm on the right track."*
	1.2. External monitoring helps clarify and refine protocol delivery through collaborative brainstorming.	*"For example, one patient I worked with had a hard time coming up with lyrics, and the QA monitor was able to suggest some brainstorming strategies that I hadn't tried yet."*
	1.3. Self-monitoring is valued but can be time consuming.	*"It is a great tool, and I learned a lot about myself after listening to sessions. However, it does take up quite a bit of time in the work day."*
Theme 2: Quality assurance monitoring provides professional development.	2.1. Self-monitoring process validates strengths and helps identify areas for growth	"*I often walk away from my study interactions thinking, "that did not go well" or "I don't think I delivered as a therapist,' sometimes doubting my abilities; however, after listening back, it was often the exact opposite, and I was surprised with what I and the patient actually did accomplish.*"
	2.2. Self-monitoring increases self-awareness (tendencies, patterns as a clinician) and improves practice skills	*"Listening back to my own recordings has helped me to notice everything from words/phrases I may overuse to how my voice actually sounds, to things that went well during the session."*

Table 3
Continued

Themes	Subthemes	Representative Statements
	2.3. External monitoring provides helpful advice and strategies for growth; a different perspective	*"Receiving feedback from monitors has been very helpful not only for quality assurance but for professional development."*
	2.4. External monitor provides valued professional feedback/support not normally available in work environment	*"As clinicians, we don't always have the opportunity to receive feedback from other MTs, so it was nice to hear that feedback about our works as well as being able to ask questions of others about either our performance or protocol."*
Question 4: What are therapists' perspectives about their professional growth as a result on participating in a controlled trial study?		
Theme 1: Able to identify areas for professional growth through experiences not often available in the workplace.	1.1. Quality Assurance Self-Monitoring provided opportunities for self-evaluation and reflection.	*"There are a lot of barriers to recording sessions at my regular job (in a psychiatric hospital), so participating in the study has allowed me to engage in a level of self-analysis that I probably would not have done otherwise."*
	1.2. Group Music Therapist calls provided peer support and opportunities to learn from other clinicians.	*"Being connected to a group of music therapists working on the study has been stimulating, and I've learned from the strategies that others have shared."*
Theme 2: Enhanced clinical knowledge and skills.	2.1. Increased knowledge about adolescents/young adults, family dynamics, and oncology.	*"I feel that I've learned a lot about this population of kids/AYAs. This isn't an area that I usually work in during my normal MT hours here, so I was happy to get to know this population a little more."*
	2.2. Enhanced skills in therapeutic songwriting, technology use, and song repertoire.	*"I think the study has led me to become more comfortable with using technology such as Garage Band and iMovie, so I'm more likely to use these programs during my session."*

TABLE 3
Continued

Themes	Subthemes	Representative Statements
	2.3. Sharpened clinical documentation and communication to foster supportive relationships with patients, families, and staff.	*"I feel that this process has helped me sharpen my communication skills, both with staff, families, patients, but also in written form (patient charts, assessments, emails, etc.) and increasing my ability to report objectively on my interactions with patients."*
Theme 3: Encouraged critical thinking about interventions, research, and significance of clinical work.	3.1. Examination of own MT practice and its application.	*"…participation in the study has helped me to use a more critical eye when looking at my interventions."*
	3.2. Reading research critically and applying it to practice.	*"It has renewed my interest in research, and I have applied to be a part of an Evidence Based Scholars group that meets to analyze and synthesize research literature to answer questions that come in from various groups/departments in the hospital."*
	3.3. Transferring knowledge and skills learned to work with other patient populations.	*"There is a lot that doesn't translate directly. But I think I am more likely to use songwriting in my groups now."*
Theme 4: Inspired interest in research and pursuit of additional research experiences.	4.1. Opportunity to participate in research presentations and dissemination.	*"I have learned so much about the hospital setting, [medical condition], and research. This has lit a spark within me to pursue more opportunities in these areas."*
	4.2. Pursuit of advanced studies and training.	*"I started a PhD in Expressive Therapy at Lesley University last fall, and am excited about the possibility of contributing more to the growing research base supporting music therapy in the future."*

Table 3
Continued

Themes	Subthemes	Representative Statements
Question 5. What are your thoughts on the value of research in music therapy from an interventionist's perspectives?		
Theme 1: Research evidence is necessary to advance the profession and is an integral part of music therapy advocacy.		*"Music therapy must continue to pursue this [research] if we are to keep moving forward, especially in today's healthcare environments."*
Theme 2: Research helps music therapists provide the best possible care by enhancing quality and consistency of care.		*"Measuring the effect of different interventions and communicating those findings can help ensure that therapists are using effective practices that have been thoughtfully developed and tested, thus providing the best possible care to their clients."*
Theme 3: Opportunities to work as a study team member help de-mystify research and increase awareness about the value of research partnerships.		*"…it takes a village to complete a research study, and although I don't feel my talents lie in writing, and investigating and detailing of data, I do feel comfortable in the role of MT intervener, and am so happy to have been able to contribute to this important mission."*
Theme 4: Expanding professional network within and outside the music therapy profession helps increase awareness and uptake of research.		*"In doing research, you also have opportunities to expand your professional network."*

TABLE 3
Continued

Themes	Subthemes	Representative Statements
Question 6. What advice would you give to clinicians who are deciding whether to involve themselves in research at the workplace?		
Theme 1: Learn what participation will require. Conducting research is time consuming and requires skills beyond intervention delivery.		*"I'd say first go into it with "eyes wide open"—learn about all the pieces that are required so you don't get yourself in over your head to begin with, especially time-wise."*
Theme 2: Collaboration, communication and support are essential to success.		*"Collaborate with others—there are so many opportunities for our profession to do this with other professions and doing something in a team allows for the full use of the diversity of the skills sets of the individuals."*
Theme 3: Seek out and use available opportunities and resources.		*"…use all the available resources you have. In larger settings, there are often departments that are waiting to help with different parts of the process, and hopefully most are not going to look down on you if you don't have all the knowledge or answers already. In my setting, most of the time those folks are just happy that someone really has an interest in research to start seeking out more information."*
Theme 4: Participation in research promotes professional development and can "reap big rewards" for the clinician and profession.		*"Involvement in research is a big commitment but can also help reap big rewards for the clinician's work and the profession."*

The second core theme, *(2.0) Working in a team overcomes challenges associated with conducting research alone*, had three subthemes highlighting the importance of (2.1) working in teams, (2.2) drawing on researcher expertise, and (2.3) leveraging personal and institutional resources. Therapists shared that it can be difficult and time consuming to create your own research project while working as a full-time clinician and that working in an interdisciplinary research team with experienced researchers helped support their involvement and the overall success of the study.

The third core theme, *(3.0) Opportunities to advance music therapy research and increase awareness and utilization of music therapy services*, represents clinicians' statements about their desire and dedication to advance the field through their contributions to music therapy clinical research. Therapists shared that research plays an important role in improving clinical care, while also raising public awareness and access to music therapy services.

Question 2: What Are the Perceived Challenges and Benefits of Delivering an Intervention Within a Set Protocol?

Therapist Vignette

> The SMART study provided my first opportunity to conduct music therapy sessions under a strict protocol. Though the protocol initially felt stressful and confining, I eventually found it comfortable because I always felt prepared. The protocol pushed me to be more creative by working within the same boundaries for all patients regardless of their age and musical preference. My patients' individuality was highlighted because though the process was the same every patient project had a unique outcome.—H. Bush

Three core themes emerged from therapists' perceived challenges and benefits of delivering an intervention using a set protocol (Table 3). The first core theme, *(1.0) Understanding what it means to work within a protocol*, had two subthemes describing one specific challenge therapists experienced early in the study, and its eventual resolution. Therapists described an *(1.1) initial concern that the protocol would be confining* for the therapist and patients. This was reflected in the statements about initial concerns that they would go into "robot mode," that the protocol would be "inflexible"

or become a "barrier." However, therapists also shared that *(1.2) over time, they gained comfort tailoring the intervention based on patient need*. Therapists shared that as they became more familiar with the protocol, they realized their clinical interaction style did not have to change and that their flexibility and clinical decision-making remained central to sessions.

The second core theme, *(2.0) Ongoing challenge: integrating roles as researcher and clinician*, had four subthemes about complexities related to having a dual role. These challenges included the need to *(2.1) reconcile study and institution patient loads*, *(2.2) navigate scheduling*, maintain *(2.3) intervention fidelity*, and develop good *(2.4.) communication within and across sites*. Therapists shared that study activities often would affect the number of patients seen on a typical day. In addition, because the research team was working to identify for whom the intervention offers the most benefit, study patients did not always present with higher levels of distress (i.e., those typically prioritized for music therapy services). In addition, scheduling time to complete study responsibilities required that therapist navigates last-minute changes in patient schedules and negotiate time with other service lines. This was especially challenging for contract music therapists. Members of the team also noted that clinical trials require intervention fidelity that limit therapists' ability to modify the study intervention or introduce new interventions. Finally, communication within and across sites was identified as essential to ensure coordination and timely delivery of study activities, and that this requires active commitment on the part of all team members.

The third core theme, *(3.0) Benefits: Treatment refinement and service delivery* had four subthemes that captured therapists' statements about benefits they derived from learning the protocol and through their participation in research. Subthemes included the use of *(3.1) theoretically grounded protocols*, opportunities to *(3.2) learn new intervention techniques*, infrastructure that *(3.3) increased visibility and integration of music therapy services*, and the value of *(3.4) supportive relationships* that were cultivated from opportunities to work with and learn from other music therapists. Therapists shared how using a protocol rooted in theory provided a framework they could use to deliver individualized care. In addition, therapists noted that the protocol provided opportunities to learn something new, including ways to integrate technology into practice. Research

infrastructure created by the trial also helped increase visibility and integration of music therapy services beyond hematology/oncology by affording opportunities to build new interdisciplinary relationships. Finally, there was valuing of dedicated time for music therapists to learn from each other.

Question 3: What Are Therapists' Experiences of Self and External Quality Assurance Monitoring?

Therapist Vignette

> Quality assurance (QA) played an important role while working with a participant who spent the majority of his life in treatment and as a result was not on target academically, cognitively, or socially. During our first session, he did not make eye contact with me, answered questions using 1 or 2 words, and displayed a concrete level of thinking. It was evident that this participant would benefit tremendously from the project, but I would need to significantly adapt the protocol to meet his functioning level. As I prepared to adapt the protocol, I discussed my ideas with my QA monitor who gave feedback to ensure I stayed within the protocol while adjusting it to best meet the needs of the patient. I felt some insecurity about my QA monitor listening to sessions when the patient barely spoke, at times questioning my approach that elicited minimal responses, but my QA monitor validated the challenges and affirmed the techniques I used to adapt my approach so he could function at his highest level. Because my QA monitor heard everything said, she had a unique insight into the sessions and gave useful and supportive feedback on this challenging case.—K. Bruno

The following two core themes emerged from therapists' descriptions about their experiences with self and external quality assurance monitoring (Table 3). The first core theme, *(1.0) Quality assurance monitoring provides protocol accountability*, had three subthemes that focused on ways monitoring provided *(1.1) validation and alleviated self-doubt related to protocol delivery*, the importance of *(1.2) external monitoring to refine delivery through collaborative brainstorming*, and that *(1.3) self-monitoring is valued, but time consuming*. External monitoring was viewed as a collaborative process and

therapists shared that having a third party comment and reflect on their work allowed them to think outside of their own process, gain confidence in protocol delivery, and receive affirmation about their work. Similarly, therapists viewed self-monitoring as a valuable tool, but a more time-consuming process.

The second core theme, *(2.0) Quality assurance monitoring provides professional development*, had four subthemes. Two subthemes captured experiences with self-monitoring and two with external monitoring. For self-monitoring, therapists indicated the process helped *(2.1) validate strengths and identify areas for growth* and *(2.2) increased self-awareness and improved practice skills.* For external monitoring, therapists shared that the process provided *(2.3) helpful advice and strategies for growth (2.3)* and provided *(2.4) professional feedback/support not normally available in the work environment.*

Question 4: What Are Therapists' Perspectives About Their Professional Growth as a Result of Participating in a Controlled Trial Study?

Therapist Vignette

> Participating in the SMART studies renewed my interest in research, and motivated me to pursue additional opportunities at work related to research. One of those opportunities was my application for and acceptance into the Evidence-Based Practice Scholars. The Scholars group meets twice a month for 3.5 hr each to analyze research articles for hospital teams and individuals who are working on clinical practice guidelines and/or for answering clinical questions to inform best practice. This is a formal process utilizing specific software to report findings. Involvement in the Scholars has truly been a stretch for me as it is quite a complicated and intensive process, but it continues to give me a great opportunity to be in the research literature and to learn more about (and work consistently with) evaluating the strength of studies in order to best inform clinical practice.—K. Robertson

The following four core themes emerged from therapists' descriptions about their professional growth as a result of their work on a controlled trial study (Table 3). The first core theme, *(1.0) Identified areas for professional growth through experiences not often*

available in the workplace, had two subthemes that focused on two experiences: *(1.1) quality assurance monitoring* and *(1.2) music therapist conference calls*. Therapists shared how these two experiences benefited their own professional growth. First, experiences with quality assurance monitoring allowed them to engage in a level of self-analysis they probably would not have done otherwise. Second, regularly scheduled group conference calls provided a way to connect with and learn from other professional music therapists.

The second core theme, (2.0) *Enhanced clinical knowledge and skills*, had three subthemes that encapsulate specific areas of growth, including (2.1*) increased knowledge about adolescents/young adults, family dynamics, and oncology*, (2.2) *enhanced skills in therapeutic songwriting and technology use*, and (2.3) *sharpened clinical documentation and communication skills* (2.3). For some therapists, hematology/oncology was not their primary area of patient care, and the study allowed them to work with a new group of patients and families. Others became more comfortable with technology, and, as a result, felt more comfortable integrating it into other areas of their practice. Finally, others expressed growth in their clinical documentation and verbal communication with staff, families, and patients. Therapists attributed this to a variety of experiences including clinical notes written for each participant session, ongoing clinical discussions with the study team, and sharing study information with others.

The third core theme, (3.0) *Encouraged critical thinking about interventions, research, and significance of clinical work*, had three subthemes that centered on (3.1) *self-examination of music therapy practice*, (3.2) *reading research critically*, and (3.3) *transferring newly acquired skills and knowledge to work with other patient populations*. Music therapists wrote about having greater awareness about the significance of what they do and heightened critical thinking about clinical practice. They spoke of a renewed interest in research, working to apply the information they read in journals to their clinical practice, and participating in research groups at their hospitals. Therapists also talked about using their experiences to inform other areas of their work.

The fourth core theme, (4.0) *Inspired interest in research and the pursuit of additional research experiences* (4.0), had two subthemes noting (4.1) *opportunities to participate in research presentations and dissemination* and the (4.2) pursuit of advanced studies

and training. Many shared comments about their involvement in research presentations about the study, the writing of this manuscript, and secondary data analyses from the trial. Others shared that they are pursuing or considering doctoral studies, have pursued advanced training opportunities at their own hospital, and/or expressed readiness for new research opportunities.

Question 5: What Are Therapists' Thoughts on the Value of Research in Music Therapy From an Interventionist's Perspective?

Therapist Vignette

> Working within a research protocol prompted me to modify elements of my practice with the patient population involved in the study. Participation in the study brought about changes in my approach as well as the perception nonmusic therapists have of our services. Entering a patient session as an interventionist encouraged me to be mindful of how I present therapy goals to Adolescents/Young Adults (AYA). The parameters of the session were well defined by the study's protocol and the AYAs on the study responded very well to those expectations. I have since incorporated some of the same concepts with non-research patients and feel this change has improved my effectiveness as a music therapist. My involvement in research has also brought more awareness to music therapy services in the large facility at which I'm employed. Referrals for services have increased as floor nurses, who observed patients participating in the study, asked if music therapists would also visit the other patients on their caseload. The research team at my facility is strong and well respected by the medical team. This increased network of support has been of tremendous help inside and outside of work on the study. The highest compliment came from my participation in this study attracting the attention of our new medical director. When I told him of our hospital's participation in the multisite music therapy research, he said, "Oh, yes. I'm aware of the study," and he has been supportive of continued music therapy research efforts.—E. C.

Four core themes emerged from therapists' thoughts about the value of research in music therapy (Table 3). The first core theme, *(1.0) Research evidence is necessary to advance the profession and is an integral part of advocacy*, is reflective of statements that research and advocacy go hand-in-hand and the importance of research to demonstrate efficacy and improve access to services. The second core theme, *(2.0) Research is central to providing the best possible care by enhancing quality and consistency of care*, emerged from statements about the synergy between clinical practice and research, and the importance of research to the development of effective practice. The third core theme, *(3.0) Collaborating on research helps de-mystify research and increase awareness about the value of research partnerships*, highlights the benefits of working in teams and leveraging the unique talents of different members. The fourth core theme, *(4.0) Expanding ones' professional network within and outside the music therapy profession helps increase awareness and uptake of research*, reflected therapists' experiences of growing their professional networks as a result of their study involvement.

Question 6: What Advice Would Therapists' Give to Clinicians Who Are Deciding Whether to Involve Themselves in Research at the Workplace?

Therapist Vignette

> Joining the SMART study so early on in my career bolstered strong mentorship, supervision, and discussion with other, more seasoned MTs, provided me with opportunities for attending and presenting at AMTA National Conference, helped me establish a foundation within pediatric medical music therapy, expanded my knowledge of research beyond what I had read during school, and continues to challenge me in the form of collaborative manuscript writing. Another invaluable way that SMART has impacted the entire profession of music therapy is by making music therapy more present and encouraged by physicians and nursing staff on hematology-oncology units. My "reap big rewards" moment came during a walk down the hallway with a Hem/Onc Fellow in which I was not only able to keep up with, but also lead a conversation based on current standards of practice within mixed methods research,

> possible outlets for other forms of music therapy research, and where we thought the future of medical care and whole person wellness was headed. It was deeply validating and owed solely to my participation on the study.—-M. A. Biard

The following four core themes emerged based on the advice our music therapists' would give to other clinicians about whether to involve themselves in research at the workplace (Table 3). The first core theme, *(1.0) Learn what participation will entail and the skills required*, captures advice encouraging clinicians to gather information so that they can make an informed decision, noting that it does take extra time and involves tasks beyond intervention delivery. The second core theme, *(2.0) Collaboration, communication, and support are essential to success*, encompasses advice centered on leveraging opportunities to work with others, and the need for good communication and support from supervisors, other key players, and mentors to ensure support for involvement in research. The third core theme centered on advice to *(3.0) Seek out and use available opportunities and resources.* As noted by one therapist, ..."use all the available resources that you have. In larger settings, there are often departments that are waiting to help with different parts of the process, and … most are not going to look down on you if you don't have all the knowledge or answers already." Other advice included taking research coursework within or outside your facility and forming alliances with nurses, psychologists, or rehabilitation therapists who are invested in research. The fourth core theme, *(4.0) Participation promotes professional development and can "reap big rewards" for the clinician and profession*, included statements encouraging clinician involvement in research. Therapists acknowledged that some clinicians may be hesitant, but that despite the "big commitment" involvement in research can "reap big rewards" for the clinician, their work, and the profession.

Discussion

This study is one of the first to look at music therapists' experiences of being involved in a large, federally funded trial. In discussing therapist-identified challenges and benefits related

to their research involvement, it is important to acknowledge the unique attributes of this trial and our therapist team. First, the SMART II trial had funding that supported the time and work of site investigators, project managers, and music therapists. Second, although music therapists on our team had a wide range of clinical experience (50% ≥13 years; 50% <7 years), for the majority this was their first research experience. These factors likely influenced the experiences of our clinician team. Therapists with prior research experience or those involved in smaller studies or trials without funding support may have different experiences.

In this study, music therapists' motivations to become involved in the research were similar to those noted by other healthcare professionals. These motivations included a desire to develop advanced research skills, make meaningful contributions that advance clinical practice, and a way to overcome barriers associated with conducting research in isolation (Albers & Sedler, 2004; Hoffmann et al., 2015; Messner et al., 2016; Pager et al., 2012; Rosa-Rizzotto et al., 2010). In particular, music therapists noted that working on a collaborative research study made involvement in research more feasible given time demands associated with their responsibilities as full-time clinicians. Although the number of music therapy clinical trials involving academic–clinician partnerships is on the rise, the formation of research interest groups (RIGs), also referred to as special interest groups (SIGs), would be another way to support clinician involvement in research. RIGs provide a way for busy clinicians and academics, with varying levels of research experience, to work collaboratively on a shared topic of interest (Beckstrand & McBride, 1990; Smith-Blair & Davis, 2016). RIGs can be focused on a specific topic (e.g., palliative care) or group of individuals (e.g., adolescents/young adults with cancer), and often these groups work to identify gaps in knowledge, support the early stages of research design/development, form collaborations, and/or pursue external funding. For example, see the Association for Clinical and Translational Science Special Interest Groups (http://www.actscience.org/page/creating-a-sig) and/or the American Psychosocial Oncology Society Special Interest Groups (https://apos-society.org/membership/special-interest-groups/).

Music therapists from our team also identified early and ongoing challenges, as well as benefits, associated with delivering a standardized intervention protocol. Initially, therapists had concerns that working within a set protocol would constrain their work with patients; however, they found that as they became more familiar with the intervention and its underlying theory, they experienced increased comfort and ease in tailoring the intervention to the individual needs of each participant. However, it is important to acknowledge that at times therapists had to reconcile not being able to deliver a different intervention. Although the primary aim of efficacy trials is to determine whether an intervention is beneficial for a specified group of people, we know that not everyone in that group will experience benefit. As such an equally important question these trials strive to answer are "for whom" the intervention benefits.

While identified as an initial challenge, music therapists noted these same experiences also benefited and informed their clinical work beyond the delivery of the study intervention. This finding suggests that research involvement, wherein therapists are engaged in conversations centered on theory-informed decision-making about intervention delivery for individual participants, can be a form of professional development that may help advance therapists' skills in the areas of clinical reasoning and decision-making (Baker, 2007; Beer, 2011; Kern, 2010; Thompson, 2013). Equally important, the ability to monitor and justify clinical decisions made during the conduct of a controlled trial can help research teams identify essential elements (or content) of an intervention and generate meaningful information that informs translation and encourages the uptake of research into clinical practice (Bennet, Gadlin, & Marchano, 2019; Chambers & Azrin, 2013; Rosa-Rizzotto et al., 2010).

Of particular interest were therapists' experiences with quality assurance monitoring. Although reported as time consuming, music therapists experienced quality assurance monitoring as a form of professional development that resulted in benefits one might expect from engagement in clinical supervision (Forinash, 2019; Kennelly, Daveson, & Baker, 2016). This is interesting because the goal of quality assurance monitoring (as a part of treatment fidelity) is not to provide clinical supervision or improve professional

practice; rather, the purpose is to ensure that interventions are delivered consistently (across study participants and therapists) according to the specified protocol (Docherty et al., 2013). However, required QA activities (i.e., self-monitoring, checklist completion) and resulting conversations have some characteristics of professional supervision. For example, self-monitoring provided music therapists an opportunity to be reflective about their work, which encouraged critical thinking and theory-based decision-making during subsequent sessions. In addition, conversations with the external QA monitor (who listened to audio-recorded sessions) afforded opportunities for therapists to gain a different perspective and valuable feedback on their clinical work (Kennelly et al., 2016; Schoenwald, 2016). This finding is important because it suggests that a methodological strategy, like QA monitoring, holds value beyond ensuring intervention fidelity and study rigor. Rather, there is a potential benefit for clinicians in terms of their professional growth, which may ultimately translate to improved care for patients and families.

Similar to previous studies, ongoing challenges included: the identification of effective communication strategies both within and between clinical sites to help coordinate study activities, scheduling time to complete study-related activities, and reconciling study and institution patient load (Albers & Sedler, 2004; Boase et al., 2012; Harvey, Plummer, Nielsen, Adams, & Pain, 2016; Hoffmann et al., 2015; Pager et al., 2012; Waldon, 2015). Given demands on therapist time in the clinical setting, communication is essential to their sustained involvement in research. In the case of multisite trials, this requires the use of effective communication strategies for the larger group (i.e., across all sites) and the use of strategies for within site communication that may be unique to each hospital. To address these challenges, our team used regularly scheduled biweekly conference calls that involved personnel across all sites to discuss active participants, share successes and troubleshoot challenging situations, and provide reminders and updates for study activities and participants. At the site level, music therapists worked with their site-specific study coordinator to determine the best strategies for communicating and coordinating study activities. For example, most sites used e-mail to communicate information about new participant enrollment but used pagers or Vocera™

for more immediate communication that might occur when the therapist was delivering study conditions. Other strategies include the use of shared electronic calendars to identify therapist availability and anticipate any overlap for scheduled time off due to vacation and professional development activities.

The aforementioned communication strategies were also essential in addressing another therapist-identified concern, balancing clinical responsibilities with research activities, a challenge that has been consistently identified by clinicians across a wide range of health disciplines (Albers & Sedler, 2004; Boase et al., 2012; Harvey et al., 2016; Hoffmann et al., 2015; Pager et al., 2012). Music therapists from our team noted the importance of having support from their immediate supervisor and administration teams and ongoing conversations about how to navigate patient load and prioritization. A majority of the institutions involved in our study have identified clinician involvement in research as a strategic priority; however, ongoing conversations about how to reconcile time spent on study activities with therapists' usual clinical load require thoughtful conversations and planning that involve the music therapist, supervisor, and study principal investigator. This has important implications for music therapist involvement in research and highlights the importance of having conversations before a study begins. Based on therapist recommendations, these conversations should focus on compensation for therapist time, how a study will affect workload distribution, and ensuring enthusiasm and support for music therapist involvement from all members of the clinical team, regardless of their direct involvement. Once a study begins, it is also important to have ongoing conversations about these topics due to changes that can occur over time related to salary, billing, and clinical program structures, as well as therapists' own professional interests and goals.

In addition to identifying the challenges and benefits of their work as a study clinician, therapists reflected on the value of research describing it as "necessary" to advance the profession and "integral" to advocacy efforts. This advocacy raises awareness about the value and benefits of music therapy and may ultimately increase access to services. In this study, therapists viewed their work as making important contributions to the profession, not

only in terms of generating evidence but also through the growth of their own professional networks. For some, their involvement in the study also led them to pursue their own research ideas and studies. This is consistent with findings by Messner et al. (2016) that clinicians with practice-based research experience often have a broader view about the benefits of research involvement. In their study, all clinicians, regardless of research experience, noted the benefits of research related to advances in patient care; however, clinicians with practice-based research experience also cited the intellectual, professional, and societal benefits of research involvement (Messner et al., 2016). This suggests that clinician involvement in research may help demystify the research process, create new connections between research and clinical practice, and encourage clinician-initiated research (Waldon & Wheeler, 2017).

One of the stated goals of *Music Therapy Research 2025* is to find ways to increase collaborative work between clinicians and researchers (American Music Therapy Association, 2015). Based on the findings from this analysis and the extant literature, we offer a list of recommended items that investigators and clinicians explore prior to conducting research in a clinical setting. First, research is time consuming and often requires activities beyond intervention delivery. It is important that therapists ask questions, so they can make an informed decision about whether their involvement is feasible and consistent with their own interests and abilities. Second, conducting research in isolation is much harder than working with a team. Our therapists recommended exploring what resources and opportunities might be available at ones' institution (e.g., librarians, statistical support, research development teams, pilot funds, new investigator programs) and developing collaborative relationships with others who have expertise in different areas (i.e., nurses, biostatisticians, physicians) (Messner et al., 2016; Pager et al., 2012). Third, seek out and establish support from supervisors, administrators, and colleagues for a study concept prior to implementation (Hoffmann et al., 2015; McAlearney et al., 2012; Messner et al., 2016). Fourth, participation in research can result in professional growth and support advancement of clinical programming at one's hospital (Boase et al., 2012; Hoffmann et al., 2015; McAlearney et al., 2012; Messner et al., 2016; Pager

et al., 2012). It is important to recognize and capitalize on ways involvement in research can benefit program growth beyond the publication of study findings.

Limitations

It is important to acknowledge that findings from this analysis represent the experiences of this small group of clinicians, involved in this particular trial, and likely does not reflect the experiences of all clinical music therapists engaged in research. In addition, findings may be positively skewed due to several factors including: (a) the voluntary nature of therapist involvement in the questionnaire and resulting analysis, (b) the voluntary decision to work as a study clinician on the SMART II trial, and (c) our inability to completely mask therapist identity from their responses during the analysis. Finally, because the senior author and therapists are coauthors, it is possible that therapists did not fully disclose all of the negative or less-than-positive aspects of their experience with the trial.

Conclusion

In summary, 10 music therapists shared their experiences with and perspectives on their involvement as a research clinician delivering study conditions for a randomized controlled trial study. Qualitative analysis of therapist responses revealed not only common challenges, such as reconciling clinical and research responsibilities, but also benefits, such as continued professional growth, a greater understanding of research processes, and their participation in research as a way to advocate and advance their profession. Finally, for clinicians interested in becoming involved in research, therapists noted the importance of having support in the workplace from a mentor, supervisor and/or administrator, seeking out available resources, and knowing roles and responsibilities that will be required before initiating their involvement in research. Our profession will benefit from additional studies that examine a wider range of clinician research experiences, with varying levels of funding support. For example, it would be helpful to understand the experience of music therapists who are conducting clinician-initiated research or involved in institutionally sponsored studies focused on program evaluation and quality

improvement projects. Based on our findings, it would also be interesting to explore how music therapist involvement in research may affect clinical decision-making skills and how direct involvement of clinicians in dissemination efforts may improve translation and the uptake of research into clinical practice.

Conflicts of interest

None declared.

Funding

This study was funded by the National Cancer Institute (R01CA162181; ANUR1131; U10CA098543; U10CA095861).

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