PRAXIS

Music as an Effective Anxiolytic Intervention in Communication Centers

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Abstract

While all Communication Centers support speakers, through consultation, in becoming more confident and competent oral communicators, the staff at one center wondered about the anxiety that speakers bring with them into the consultation. As one would expect, there is public speaking anxiety. With help from staff members who had been recruited from the pool of speakers previously worked with, the uncertainty of what is to come during the pending consultation was identified as a second source of anxiety. In an effort to help, music was used as an anxiolytic intervention.

Rationale

When Writing Centers first evolved, hands on practice eventually informed theory. The same has happened for Communication Centers. In Greensboro we have worked for over fourteen years to create and maintain a safe and judgment-free learning space where students, faculty,

staff, and members of off-campus communities can enter into meaningful dialogue, about oral communication, with a trained communication consultant who is a student. This work largely takes the form of student-speakers sitting down with undergraduate consultants. Most of our work with faculty, staff, and off-campus citizens involves our developing and facilitating interactive oral communication learning models (workshops). Occasionally our student consultants have worked one-on-one with faculty, staff, or off campus citizens. Initially we functioned largely by practice which was informed by peer educator literature. By year five we were looking to other literature for theory which might inform our practices. As a result, our practice became informed by writing center, counseling, and listening literature. We came to value the process of seeking out literature from disciplines not familiar to us as we looked to create and maintain a safe place for the self-improvement of those we work with. As we began to establish our own scholarship, around years 6 and 7, we approached literature broadly as we sought to participate in the move towards the establishment of communication center theory and literature.

The majors and minors of our student-consultants extend beyond the College of Arts and Sciences, our organizational home, into all of the professional schools. We look to leverage our student-staff's disciplinary ways of knowing as we enter into our work. It is very common, for example, to hear our consultants connecting what they have learned in their course work outside of the center with something new we are experiencing. It is through what we learn from our new experiences that our communication center way of knowing has developed. To that end, while we cannot identify our next big problem or how it will affect knowledge generation,

it is just as hard to predict from which body of literature our next challenge will be solved. We embrace this cross-disciplinary approach as we seek to answer questions.

We took a cross-disciplinary approach when we first considered ways to lower the anxiety experiences those who come to us for support have, when they are with us. The approach led us to music literature. This essay seeks to answer a few basic questions regarding the ability of music to mitigate feelings of anxiety and stress associated with preparing for and practicing public speaking. Focusing specifically on the context of speakers visiting communication centers, we first provide context then address four general issues: the reasons speakers seek support from Communication Centers, the theoretical basis for the anxiolytic or anxiety-reducing effects of music; initial attempts to employ music at the University of North Carolina at Greensboro (UNCG) Speaking Center; and suggestions for the future use of music as an anxiolytic tool in Communication Centers.

Who comes to our Speaking Center and why?

While Writing Centers as a field of study or way of knowing is represented by a vast body of literature, theory, and practice, Communication Centers is a newer field with a small yet growing academic ethos. Generally, Communication Centers support speakers in becoming more confident and competent oral communicators. A few more specifically seek excellence. While the support at some centers focuses on "public speaking: others incorporate assistance in such areas as group presentations, class debates, group communication, effective class discussion, listening, speech anxiety, nonverbal communication, intercultural communication, interpersonal communication, interviewing, PowerPoint presentations, communication and gender" (Turner & Sheckels, 2015, p. 13), storytelling, English Language development,

multimodal composing, and more. Essentially the consultation work being done in 2016 supports speakers as multimodal communicators who, through entering into meaningful dialogue about their own communication, are learning to effectively develop and deconstruct messages. This support is likely guided through goals articulated by each individual speaker who visits a center. While Communication Center directors might like for this articulation to be a genuine interest in personal gain by an individual speaker, it is more likely to be paraphrased or read from a course assignment which requires the speaker to come in and "get" specific support, or it is articulated as, "my teacher said we have to come." While most speakers sit down and enter into meaningful dialogue about oral communication with a peer educator, other successful models find speakers sitting with faculty, graduate student consultants, or professional tutors.

The work of each center supports the needs of a particular campus in ways that are unique to the political, cultural, and curricular territory of the campus. As Emery (2006) notes, it is difficult to justify comparing Communication Centers to one another. Still, it is helpful for each individual center to examine usage. Sharing usage across centers, while not a current practice, has the potential to greatly advance the Communication Centers movement. Our most extensive one year self-examination occurred as we celebrated ten years of service in 2011-2012. We found that we served around 2,900 speakers in face-to-face consultations. By analyzing our usage data, we are able to identify that, among the users, 72.15% of the speakers were native speakers of English and 27.85% of them did not speak English as their first language. The largest student group we interacted with was freshmen with 28.54% (825 students). In addition to freshmen, there were significant numbers of seniors (24.35% - 704 students), and English

language learning students from UNCG's on-campus Interlink Language Center (20.72% - 599 students) also visited. Juniors accounted for 15.22% (440 students) and sophomores took a portion of 7.61% (220 students) of the total speakers. The remaining speakers included graduate/doctorate students (1.11% - 32 students), off campus community members (0.35% - 10 speakers), faculty (0.10% - 3 speakers), and others (2.01% - 58 speakers).

Among all of these speakers, about 1,375 (47.56%) speakers visited the center for the first time and 1,516 (52.44%) were returning speakers. The majority (81.11% - 2,345 speakers) were from faculty referrals which aligns with King and Atkins-Sayre's 2012 findings regarding why students visit. About 76.24% (2,204 speakers) of speakers came as a requirement of their classes. Most of the speakers who came worked on the organizing/invention of their oral communication assignment (41.20% - 1,191 speakers) or looked for practice feedback (38.40% - 1,110 speakers).

In analyzing the purpose of the consultation for each classification, most freshmen and juniors worked on organization whereas the majority of consultation with sophomores and seniors were focused on practice/delivery. Interlink students mostly sought help to improve their verbal and non-verbal American conversation practices.

Evolution of our efforts to decrease anxiety

In 2011, we wondered about the anxiety that speakers bring with them into our consultation rooms. As one would expect there is public speaking anxiety, especially if the speaker is going to stand up and practice his or her speech. With help from our consultants who were recruited from speakers we worked with previously, we also identified the uncertainty of what is to come during the consultation as a source. Still, in our early practice without theory stage of

evolution, we contemplated behaviors that we could put into practice which might relieve these anxieties. This caused us to make some changes. All of our consultations would start with a genuine attempt to connect interpersonally with the speaker. We would also verbalize a short statement of what happens during a typical consultation. An article about consultations would appear in our newsletter each semester. Copies of the newsletter would be available in our lobby and our desk mangers would prompt speakers-in-waiting to look at the short articles if they had questions about consultation processes. We wanted to add music to our lobby as a means of anxiety reduction. Our student staff was immediately interested in adding music of their own taste to the workplace. It became clear that we would need criteria for identifying which music could be added. Our student staff would not respect a random list, and so we would have to do research to determine what music should be played. All of the changes, we hoped, would result in lowering some of the initial consultation anxiety felt by our speakers.

In the training of our consultants we would put greater focus on empathetic listening, unconditional positive regard, confirmation, and the SOFTEN technique which is comprised of a series of nonverbal behaviors practiced by the consultant (Cuny, Wilde, & Stevens, 2012). In essence we increased the relational dimension of our training. The focus of the 300-level course required of all consultants shifted too. No longer were we offering a course that trained consultants. We were now offering a theory and practice course, certified as appropriate for preparing communication consultants by the National Association of Communication Centers.

In 2013, the training of our desk managers would change. They would be asked to see themselves as hosts to the speakers waiting. They would host a series of "small gatherings" in our lobby throughout their shifts. In this role, they would attend to the speakers through verbal and nonverbal behaviors. As such our desk mangers would be setting the stage for the consultations. Verbally, they would continue to greet everyone who walks in and offer to help. They would also attempt to connect, through conversation, with the speakers in our lobby. While this connection is likely to be made by way of small talk, the role of this talk is big (Ward & Schwartzman 2009). Nonverbally they would smile, maintain open posture, lean forward, take notes as necessary, make eye contact, and nod their heads—all behaviors which we adapted from Wassmer's (1978) SOFTEN technique. These behavioral modifications match the verbal and nonverbal behaviors that our consultants practice when in consultation.

One area of anxiety reduction practice remained in development at the speaking center. In the fall of 2009 we first started to more seriously consider what role music might play in reducing the anxiety that speakers, waiting in our lobby, experience. By the summer of 2011 we were ready to focus more on what music should be played.

How Can Music Reduce Anxiety?

Some researchers believe the theoretical basis for the anxiolytic effects of music lies in its ability to promote relaxation through its effect on an individual's autonomic nervous system (Thaut 1990; Lane 1992). The sympathetic nervous system, one of three major components of the autonomic nervous system (ANS) and part of the body's peripheral nervous system, is responsible for controlling visceral functions like heart and respiratory rate, digestion, salivation, perspiration, and other similar functions. The ANS largely regulates these functions below the level of consciousness. Some research suggests that the auditory stimulation of music occupies a number of the bodies' neurotransmitters thereby diverting feelings of anxiety, fear, and pain (Miluk-Kolasa, Matejek 1996; Knight & Rickard 2001; Cooke, Chaboyer, Hiratos 2005).

The result is a more positive experience with reductions in some of the physiological symptoms of stress and is one that establishes the effectiveness of music as an anxiolytic treatment. Other researchers have found the anxiolytic effects of music to function primarily on perceptual indicators of stress with reductions in physiological stress less consistent (Updike 1990; White 1992; Winter, Paskin, Baker 1994; Burns, Labbé, Arke, Capeless, Cooksey, Steadman, Gonzales 2002). Some of this research indicates that listening to music facilitates feelings of mental and physical relaxation via music's ability to refocus attention onto more pleasurable emotions (Bailey 1986; Bonny 1986; Brown, Chen, Dworkin 1989; McCaffery 1990; Magill-Levreault 1993; Koch, Dain, Ayoub, Rosenbaum 1998). By listening to music, subjective anxiety is reduced, consequently establishing music as an effective anxiolytic treatment. Despite the fact that researchers seemingly point in two different directions, the net result is the same: anxiety is reduced, either physiologically, perceptually, or both. While a majority of this research has focused specifically on medical patients and reductions in stress and anxiety accompanying surgical procedures and other medical treatments, these findings can be more generally applied to non-medical situations that arouse anxiety. The fact that an individual is experiencing stress associated with illness or an imminent surgical procedure does not seem to determine the effectiveness of music as an anxiolytic as it has also been shown to ameliorate anxiety and attenuate the physiological correlates of stress in healthy volunteers (Evans 2002; Hayes, Buffum, Lanier, Rodahl, Sasso 2003; Chafin, Roy, Gerin, Christenfield 2004). Regardless of its source(s), the physical health of the individual seems to matter less than the individual's perceived and physiological levels of anxiety. As a result, anxiety while waiting for a medical

procedure seems largely equivalent to the anxiety while waiting to practice or prepare for a speech, at least as it regards music's ability to ameliorate that perceived anxiety.

In fact, researchers Knight and Rickard (2001) note that undergraduate students who were exposed to a cognitive stressor task involving preparation for an oral presentation demonstrated that listening to Johann Pachelbel's *Cannon in D Major* prevented significant increases in subjective anxiety, systolic blood pressure, and heart rate, which are indicative of reductions in both perceptual and physiological stress. At the UNCG Speaking Center, as at other communication centers, many speakers find themselves in similar situations, waiting anxiously to practice oral presentations. The fact that music has been shown to have powerful anxiolytic effects in these specific types of situations lends great support to the benefits of incorporating music in the main lobby at the UNCG Speaking Center and in other higher education centers.

Our Initial Attempts to Incorporate Music

Initial attempts to incorporate music at the UNCG Speaking Center began by focusing on playing certain types of music. While music has been shown to have significant and positive anxiolytic effects on listeners, the type or genre of music goes a long way in determining its effectiveness. Only by listening to certain types of music can an individual experience the positive emotional states that are associated with the buffering of anxious reactions (and in some cases, better performance on a variety of cognitive tasks). Music with minor or dissonant harmonic structures is often associated with fear or alarm and negatively impacts emotional processing, increasing feelings of stress and anxiety (Graham, Robinson, Mulhall 2009).

Additionally, songs with lyrics that listeners are familiar with often results in listeners singing

along or listening to the lyrics rather than focusing on the instrumental qualities that support the lyrical and vocal line. Focusing on lyrics rather than the qualities of the music itself interferes with the anxiolytic effects of a selected musical piece (Smith 2008). If the desired effect, therefore, is a reduction in anxiety then the type of music selected matters greatly. According to some researchers, relaxing or sedative music characterized by slow tempo, repetitive rhythms, gentle contours, and string instruments reduces subjective anxiety (Updike 1990; White 1992; Winter, Paskin, & Baker 1994). Labbé et al. suggest that the Baroque style of Classical music is a particularly effective anxiolytic genre. The Baroque style, exemplified by composers like Johann Sebastian Bach, Antonio Vivaldi, George Frideric Handel, and Johann Pachelbel, is characterized by moderate and slow tempo markings (e.g. Adante 73-77 beats per minute, Adagio 55-65 beats per minute, Largo 45-50 beats per minute) and an absence of crescendo and accelerando. These characteristics fit in nicely with the slow tempo and gentle contours suggested by Updike, White, and Winter et.al.

Taking cues from the aforementioned research, we concluded that several genres could potentially work for anxiety reduction in the UNCG Speaking Center. We began most obviously with the genre of Classical music, specifically Baroque pieces like Vivaldi's *Four Seasons* and Pachelbel's *Cannon in D Major*, both of which have been addressed by researchers. While many non-Baroque composers, like the Impressionist Claude Debussy, for example, have some compositions that conform to the same criteria, it is critical to note that there are many composers within the larger genre of classical music that would simply not fit the bill. Ludwig van Beethoven's bombastic *Symphony No. 5*, for example, especially its universally recognizable first movement, *Allegro con brio*, contains many of the qualities which make a piece of music

unfit for anxiety reduction. *Symphony No. 5* is in a minor key (C minor), is characterized by an Allegro tempo of 109-132 beats per minute (bpm), and incorporates both accelerando and crescendo. Pachelbel's *Cannon in D Major*, in contrast, is characterized by a major key, is in an Adagio tempo of 55-65bpm, and contains neither accelerando nor crescendo. Significantly, even some Baroque composers have pieces that are not ideal for anxiety reduction. Bach's famous *Mass in B Minor*, for example, is not only in a minor key but also contains numerous vocal lines (e.g the *Kyrie and Gloria* sections). By paying attention to key, tempo, the absence of lyrics, the types of instruments used, and other important musical qualities, effective anxiolytic musical selections should be more straightforward.

These qualities can be applied to non-classical music too. While not specifically addressed by many researchers, other genres of music often conform to the criteria of effective anxiolytic musical selections. Reggae, but more specifically Dub Reggae, is often characterized my major keys, slow tempo, string instruments, and the absence of vocal melodies, accelerando, and crescendo. Keith Hudson and Soul Syndicate's *Black Heart* is a good example of a dub track that meets the aforementioned criteria. *Black Heart* is in a major key, is comprised of primarily string instruments (electric guitar and bass), has simple sedate drumming keeping a tempo of roughly 55-65bpm throughout, and is strictly instrumental. King Tubby and the Aggrovators' *Dub Fi Gwan* is another example of a Dub track with slightly different qualities that still conform to the characteristics of an effective anxiolytic song. *Dub Fi Gwan*, which features many of the echo and reverb effects that are synonymous with Dub, is in a slightly quicker tempo of 73-77bpm, has mellow rhythmic drumming, is composed primarily of string instruments (electric guitar, bass, and piano), features no crescendo or accelerando, and is strictly instrumental.

Additionally, the loose and expansive category sometimes referred to as New Age music often lends itself to effective anxiolytic selections. Encompassing artists from the singer and composer Enya, to the classical composer Philip Glass, to traditional Celtic musicians, many New Age artists compose music specifically designed for relaxation by incorporating musical qualities like slow tempo, string instruments, repetitive melodies, and gentle contours. For example, the pianist Laura Sullivan's *Snowfall on Water* features string instruments like piano and cello, is largely in a major key, is roughly 65-73bpm, and features repetitive melodies.

When the UNCG Speaking Center began incorporating music in the main lobby during the summer of 2011, we largely focused on Classical, Dub Reggae, and New Age. In expanding this program, however, we were interested in incorporating musical selections from other genres provided they correspond to the features of an effective anxiolytic piece. For example, instrumental music composed for yoga or meditation could work. In the summer of 2012 we added instrumental jazz, world lullaby, and Brazilian Café instrumentals. These additions were a welcome change. As our playlist continues to change, we believe, greater variety will appeal to and expand the diverse musical tastes of speakers and our staff members as well.

Suggestions for Getting Started

We believe that directors who might be looking to minimally try testing the effects of relaxing music will find a good place to start is the purchase of a Native American Flute, Yoga, or Meditation collection by various artists or *Guitar Lullaby* by Ricardo Cobo. All of these purchases will yield music that supports stress reduction/relaxation.

Suggestions for Future Use of Anxiolytic Music at Communication Centers

There is still work to be performed, research to be conducted, and problems to be solved before any systematic assessments of the effectiveness of music as an anxiolytic treatment in Communication Centers can be offered. Many questions still remain: Do musical selections outside the genre of Baroque music provide the same degree of anxiety relief that selections within the genre do? Do speakers prefer certain genres to others? Do speakers find some selections either fail to mitigate or actually increase anxiety? In a given block of time, is it more effective for a single genre to be played or should different genres be mixed together? Does a piece of music with lyrics in a foreign language compare favorably with a piece of music without lyrics? Many of these questions can be answered only by experimentally designed research. Such would need to have controlled conditions so that music can be isolated as an independent variable. The UNCG Speaking Center does not have the resources or research focus to mount this effort.

Other issues need to be addressed. For example, what are the legal issues regarding playing music? Online music programs like Pandora for Businesses, a fully licensed customizable for-fee service, offer listeners access to many different genres of music. However, at present there is no way to ensure that the computer generated musical selections will conform to the criteria of an effective anxiolytic piece. Perhaps Vivaldi will be followed by Beethoven, or King Tubby by Bob Marley. The same holds true for radio stations and online streaming. Yoga, meditation, or Native American Flue music might be better choices when using a service like Pandora for Businesses. Other online programs allow users significantly more control over musical selections. Will our plans to test Music Online: Classical Music in Video collection offered by Alexander Street Press, a fully licensed subscription service

provided by our University Libraries prove useful? Is staff-owned music shared while at work an option? These questions need to be addressed before we can ethically and legally expand music as an anxiolytic intervention at the UNCG Speaking Center and into other communication centers.

Conclusion

While questions still remain, and obtaining data in the form of experimental research is needed, incorporating music as an anxiolytic treatment in Communication Centers holds much promise. Helping to reduce and manage speaker anxiety is one of the major roles of communication Centers, and while anxiety management is often something addressed during a consultation itself, creating a comfortable, welcoming, and low-stress environment while speakers wait for their appointments is yet another way to help them become more competent and confident public speakers.

As a result of our efforts, we feel confident that this practice of playing music as an anxiolytic treatment for anxiety is worth adopting by others. If communication centers with experimental research capacity adopt these music ideas, they could move practice to communication center theory. The theory generated could inform Writing Centers and other Learning Spaces. This would in turn positively affect the ethos of the Communication Centers field of study. There is great potential in both this practice and the related research. What happens next remains to be seen.

References

- Bailey, L. (1986) Music therapy in pain management. *Journal of Pain and Symptom Management* 1, 25-28. Bonny, H. (1986) Music and healing. *Music Therapy* 6A, 3-12.
- Brown, C., Chen, A., & Dworkin, S (1989) Music in the control of human pain. Music Therapy 8, 47-60.
- Burns, J., Labbé, E., Arke, B., Capeless, K., Steadman, A., Gonzales, C. (2002) The effects of different types of music on perceived and physiological measures of stress. *Journal of Music Therapy* 39, 101-116.
- Chafin, S., Roy, M., Gerin, W., & Christenfield, N. (2004) Music can facilitate blood pressure recovery from stress. *British Journal of Health Psychology* 9, 393-403.
- Cooke, M., Chaboyer, W. & Hiratos, M. (2005) Music and its effect on anxiety in short waiting periods: a critical appraisal. *Journal of Clinical Nursing* 14, 145-155.
- Cuny, K.M., Wilde, S.M. & Stevens, A.V. (2012). Using empathetic listening to build relationships at the center, In Yook, E. & Atkins Sayre, W. (Eds.), Communication Centers and Oral Communication Programs in Higher Education: Advantages, Challenges, and New Directions. (pp. 249-256). Lanham, MD: Lexington.
- Emery, D. L. (2006). Front and center: Speaking, listening, and assessment in the contexts of communication instruction. International Journal of Listening, 20, 62-65.
- Evans, D. (2002) The effectiveness of music as an intervention for hospital patients: a systematic review. *Journal of Advanced Nursing* 37, 8-18.
- Graham, R., Robinson, J. & Mulhall, P. (2009) Effects of concurrent music listening on emotional processing. *Psychology of Music* 37, 163-169.
- Hayes, A., Buffum, M., Lanier, E., Rodhal, E., & Sasso, C. (2003) A music intervention to reduce anxiety prior to gastrointestinal procedures. *Gastroenterology Nursing* 26, 145-149.

- King, M. L. & Atkins Sayre, W. (2012). Focusing on faculty: The importance of faculty support to communication center success. In Yook, E. & Atkins Sayre, W. (Eds.), Communication Centers and Oral Communication Programs in Higher Education: Advantages, Challenges, and New Directions. (pp. 147-162). Lanham, MD: Lexington.
- Knight W.E.J & Rickard, N. S. (2001). Relaxing music prevents stress-induced increases in subjective anxiety, systolic blood pressure, and heart rate in healthy males and females. *Journal of Music Therapy* 38, (4): 254-272. doi: 10.1093/jmt/38.4.254
- Koch, M.E., Dain, Z.N., Ayoub, C. & Rosenbaum, S.H. (1998) The sedative and analgesic sparing effect of music. *Anesthesiology* 89, 300-306.
- Lane, D (1992) Music therapy: a gift beyond measure. Oncology Nursing Forum 19, 863-867.
- Magill-Levreault, L. (1993) Music therapy in pain and symptom management. *Journal of Palliative Care* 9, 42-47.
- McCaffery, M. (1990) Nursing approaches to nonpharmacological pain control. *International Journal of Nursing Studies* 27, 1-5.
- Miluk-Kolasa, B., Matejek, M. & Stupnicki, R. (1996) The effects of music listening on changes in selected physiological parameters in adult pre-surgical patients. *Journal of Music Therapy* 33, 208-218.
- Smith, M. (2008) The effects of a single music relaxation session on state anxiety levels of adults in a workplace environment. *Australian Journal of Music Therapy* 19, 45-66.
- Thaut, M. (1990) Neuropsychological processes in music perception and their relevance in music therapy.

 In Music Therapy in the Treatment of Adults with Mental Disorders (Unkefer R ed.), Macmillian, New York, pp. 3-32.
- Turner, K.J. & Sheckles, T.F. (2015). Communication Centers: A Theory- Based Guide to Training and Management. Lanham, MD: Lexington Books.
- Updike, P.L. (1990) Music therapy for ICU patients. Dimensions of Critical Care Nursing 9, 39-45.

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- Wassmer, A. C. (1978). Making contact: A guide to overcoming shyness, making new relationships, and keeping those you already have, New York: Dial.
- Ward, K. & Schwartzman, R. (2009). Building interpersonal relationships as a key to effective speaking center consultations. Journal of Instructional Psychology, 36 (4), 363-372.
- White, J.M. (1992) Music Therapy: an intervention to reduce anxiety of patients in the myocardial infarction patient. *Clinical Nurse Specialist* 6, 58-63.
- Winter, M.J., Paskin, S., & Baker, T. (1994) Music reduces stress and anxiety of patients in the surgical holding area. *Journal of Post Anesthesia Nursing* 9, 340-343.