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We Are The Same But Different: The Lives Of Two College Music Majors

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The University of Southern Mississippi

We are the same but different: The lives of two college music majors

by

Josephine Marie Cannon

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of the Requirements for the Degree of
Bachelor of Music Education
in the School of Music

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Abstract

As the prevalence of Autism Spectrum Disorder continues to increase every year, so does the number of students on the spectrum who pursue a college education. This case study was designed to examine the lives of two college music majors: one, Bella, lies on the autism spectrum with a diagnosis of Asperger's Syndrome (AS), and the other, Rebekah, does not. In order to collect rich, reliable, and valid data, several different methods of data collection were employed. Each student graciously recorded several video journal entries, as well as individual practice sessions on their major applied instrument. In addition, each student, their shared applied instrument professor, and their mothers participated in interviews with the researcher.

This case study was designed to find out how the diagnosis of AS affects Bella's college success, as compared to that of students who are not on the spectrum, like Rebekah. The point was to see if Bella is challenged in more profound ways than other students, and also to see what lengths she has to go to in her efforts to succeed at the university level. The results found that Bella's diagnosis might actually aid in her academic load, as she enjoys putting forth the time necessary for school work, which requires vast amounts of alone time. However, the diagnosis does pose challenges for the social aspects of college life, which do sometimes cause uncomfortable situations. However, her level of effort she puts forth and her level of success and fulfillment do not appear to be any different from those of Rebekah. Thus, the title of the case study is very applicable: while these two students are starkly different, they are ultimately the same.

Key Words: Autism Spectrum Disorder (ASD), Asperger's Syndrome (AS), higher education, music major

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Chapter 1: Introduction

Over the past two decades autism spectrum disorder (ASD) has grown more and more prevalent in children. It is a developmental disorder that begins in the early years of life which affects social, communication, and motor development, and it ranges over a broad spectrum from high functioning (only slight signs of the disorder), to low functioning (never able to live an independent life) (“A Parent’s Guide to Autism Spectrum Disorder,” n.d.). There has been a plethora of research focusing on the lives of children with ASD, their development, and interventions used with them, especially in the elementary school setting with young children, including those studies done by Jellison (1984) and Elder et al. (2006); there are even plenty of case studies available which detail the benefits of music used as a therapeutic device within the elementary school setting for children with ASD, such as one that was done by Kern et al. (2007). However, there has been relatively little research done on adults with ASD, and even less on university students with ASD, let alone university students with ASD who are majoring in music.

Majoring in music is a unique experience. Students majoring in music often feel different from their non-music major peers in college: while they must take tests, write papers, and complete projects like other students, there is also that performance aspect which requires time put into practicing and rehearsing. Students who study music often find themselves in large social situations: as participation in music ensembles (such as various university bands, orchestras, and choirs) is required for all music majors, there is no way for them to avoid that social scene. However, majoring in music also requires much time alone: practicing and perfecting an instrument or singing takes hours in the

practice room weekly, and real discipline to keep up with it. While the music world at the university level is typically small and close, it also requires the hard work of individuals. Because there are two sides to the social situation of majoring in music at the university level, having a diagnosis of ASD can present unique needs to a music major.

As a college degree is now becoming a more necessary requirement for many careers, higher education is becoming a much more popular choice for high school students with ASD. The transition from high school to college is very difficult for many typically-developed students; it is an even greater challenge for those students who deal with ASD, as cited in a study by Heck-Sorter in 2002. College is a pivotal time in a person's life: it provides an education for a career, but it is also that last bridge for a young adult from dependence upon parents to the real world of work, and (usually) independence. However, research focusing upon the lives of college students with ASD and their struggle to succeed is strongly lacking. By conducting this case study, I intend to contribute to the research in this field.

Chapter 2: Review of Literature

Autism Spectrum Disorder

Autism spectrum disorder has become extremely prevalent in children worldwide over the past decade: now 1 in 68 children lie somewhere on the spectrum, and they need special aid in order to be at the same level as their peers who do not have ASD (“A Parent’s Guide to Autism Spectrum Disorder,” n.d.). These children tend to have social impairment. They often isolate themselves and avoid eye contact; they do not try to play with toys or react to displays of emotion as other children their age normally do; they don’t notice or understand social cues; it is difficult for the people around them to understand and interpret their speaking and body language. Children on the autism spectrum also tend to have severe communication issues. Normally they have delayed language development and might find some other form of communication, such as sign language; they also might not respond to their name being called, or develop simple gestures such as pointing. Those who can speak might only speak in one-word answers, or develop echolalia, which is the repetition of words other people say (“A Parent’s Guide to Autism Spectrum Disorder,” n.d.). Sadly, as these children grow older they become aware of their misunderstandings and sometimes develop mental health problems and signs of depression. Children with ASD perform repetitive and stereotyped behaviors, such as arm flapping; they also can become overly focused on certain objects and obsess over specific subjects. These children may also develop sensory sensitivity, which means they can become very sensitive to light, noises, and touch. In addition, they may suffer from seizures, gastrointestinal problems, and mental health problems. Children on the autism spectrum are treated with intensive therapy, structured daily life,

special curriculum, and applied behavior analysis (“A Parent’s Guide to Autism Spectrum Disorder,” n.d.).

Asperger’s Syndrome (AS) is on the high functioning end of the autism spectrum. The mean age for diagnosis is 8 years old, and it is estimated that 48 out of 10,000 children have an official diagnosis of AS (“A Parent’s Guide to Autism Spectrum Disorder,” n.d.). It is a “developmental disorder characterized by significant difficulties in social interaction and emotional relatedness and by unusual patterns of narrow interests and unique stereotyped behavior” (Elder, Caterino, Chao, Shacknai, & De Simone, 2006). The main issues that come with AS are late speech development, motor clumsiness, sensory sensitivity, and self-esteem problems (“A Parent’s Guide to Autism Spectrum Disorder,” n.d.). Since AS is on the autism spectrum, every person who has a diagnosis of it differs vastly from one another. One person diagnosed with AS may have all of the above-listed issues, while another person with the same diagnosis might only exhibit one or two of these symptoms. Thus, treatment and accommodations vary from patient to patient. There is still debate and research over AS and High Functioning Autism (HFA), which are overwhelmingly similar to one another, as they lie on the same spectrum (Elder et al., 2006).

The Diagnostic and Statistical Manual (DSM) is the official manual which psychologists and psychiatrists use to diagnose mental disorders. The previously-used DSM-IV formally defined Asperger’s Syndrome as above described. However, the diagnostic procedures of AS and other autism-related diagnoses have been recently changed (“DSM-V: What changes may mean,” n.d.). Now the disorders previously known as Asperger’s Syndrome and Pervasive Developmental Disorder Not Otherwise

Specified lie under an umbrella term of Autism Spectrum Disorder. The reasons for this change in classification are: “1) The old way isn’t precise enough—different clinicians diagnose the same person with different disorders, and some change their diagnosis of the same symptoms differently from year to year, and 2) autism is defined by a common set of behaviors and it should be characterized by a single name according to severity” (“DSM-V: What changes may mean,” n.d.). Now a person with ASD can be diagnosed as Level 1, Level 2, or Level 3, instead of their previous diagnosis. The requirements for diagnosis are much more strict under the DSM-V, raising questions for many people who have high-functioning diagnoses; some, for example, have had to go to lengths to maintain their previous diagnosis under DSM-IV regulations (“DSM-V: What changes may mean,” n.d.).

Majoring in Music Education

Though many college students feel stress as a result of tests, papers, projects, activities, and other academic demands, Conway, Eros, Pellegrino, and West (2009) found students majoring in music education feel differently than their peers. Naturally, music majors in general feel this difference from the rest of the college world: in addition to papers, tests, and projects in many classes, music majors also have numerous rehearsals, ensemble performances, private lessons, practicing, and juries. They feel like they have to put in even more time and work than non-music major university students. In addition, music education majors feel aloof and different from their other music major peers, such as those majoring in performance (Conway et al., 2010, p. 266). While these majors have their fair share of rehearsals and performance-related activities, they also have many education classes to take, and must sacrifice performing in order to go out and

teach and spend much of their time with children. Many music education majors tend to enter into their college career with an intention of performing, using the education degree as a back-up plan; however, these students often find themselves changing their desire from performance to teaching (p. 270). Music education majors, while very challenged by their degree program and often overloaded, love what they do and are in their major for that reason: their passion for music and teaching is often what drives them to stay with their major.

Higher Education Students with ASD

Typically-developed students usually have a difficult time transitioning from high school to college. It is a big step from familiarity to a different world of new people and harder classes. For a student with ASD, the challenge is heightened. Heck-Sorter (2012) performed a cross-case study of seven individuals with ASD and explored their daily lives at their four-year university. As every person with a form of autism varies greatly from one another, these seven individuals, although all experiencing learning difficulties, had different kinds of challenges in the classroom. Some of them had difficulty understanding the material, while others struggled with the way the material was presented by the professors. Six out of the seven participants stated that the most difficult barrier of persisting in college is passing the classes (p. 221). The work load and stress level is high for these students, but despite that obstacle they all persist because they are dedicated students. Part of what makes class so difficult for these students is that all seven experienced trouble approaching their professors because they felt intimidated (p. 221). In addition to academic challenges, these students faced multiple social difficulties. Mainly, they have a hard time socializing with their peers, miss social cues, and are not

articulate with nonverbal communication (p. 221). These students still persisted, however, and continue to attend their universities.

It is important for all students to have the ability to discover the most important factors which determine their success in college. Ciccantelli (2011) studied three college students with ASD in order to find out what they thought were the critical factors determining a successful college experience. The results yielded 10 different themes. For academic success they were: proximity to home, campus support services, faculty and staff understanding of ASD, and advanced preparation. For social success they were: a support system, advanced preparation, and social involvement. For independent living success they were: advanced preparation, daily living skills, and individualized housing accommodations.

In addition to knowing what it takes to succeed at the university level, college students must have the skills to set goals, become motivated, and work to attain those goals for themselves. In an investigation of behaviors indicative of self-determination skills, Szentmiklosi (2009) interviewed five community college students diagnosed with AS. Of additional interest were the participants' abilities to navigate socially and academically in the college environment. The major themes which emerged were that the students who participated enjoyed academic success, found disability services and accommodations important, chose majors based on personal interests, relied on family members for support, and had difficulty developing social connections on campus (p. 135). Most of the students, all of whom were very successful academically, attributed their success to AS-related behaviors, such as intense and regular study rituals (p. 136). The participants also attributed their success to accommodations made for them by the

disabilities office (p. 138). The fact that they all chose majors which piqued their interests aided in academic success as well, as they never became burned out or bored with their work (p. 140). Family support, particularly that of the parents, also aided in the success of these students. All of them had active parents in their lives who helped them make their decisions for college and who provided steady support throughout the process (p. 143). The main difficulties for these students were their social lives at school. One particular problem that comes with AS is social impairment: these students did not show much interest in socialization at school; none of them were involved in social clubs or organizations (p. 146).

Considering the challenges encountered by music majors, students on the autism spectrum who study music at the university level might run into even deeper and more unique challenges. Farrell (2004) describes the challenges of a young man with a diagnosis of Asperger's Syndrome in college. This young man, who was double-majoring in music and accounting at the time of the study, was a very academically successful and hard-working student. However, he ran into major set-backs when specific instructions were not given for large assignments; intimidated by social interaction with his professors, on several occasions he completely withdrew from those classes, preferring that option, as opposed to potentially making a poor grade. This article points out that people with AS are typically very literal-minded, making it difficult for them to accomplish assignments which do not give specific instructions and criteria for grading. In addition, it speaks about the common intimidation felt about social interaction, which people who lie on the autism spectrum often demonstrate.

There is a gap in the literature which focuses on university students with ASD and their extremely deep involvement in music. It is possible that a diagnosis of AS may exacerbate the stress of being a music major, although the unique challenges that come with the diagnosis may be different from those typically encountered by other music majors. The purpose of this study is to contribute to this area with new research by investigating the impact and challenges of having a diagnosis of Asperger's Syndrome on a student majoring in music (Bella) at Southern Magnolia State University (SMSU), as compared to the difficulties a non-diagnosed, but otherwise similar, student majoring in music (Rebekah). My specific research questions were:

1. How does AS make Bella's experience as a music major different from that of other music majors, such as Rebekah?
2. What, if any, extra work does Bella have to do in order to have as much success as other music majors, such as Rebekah?

Chapter 3: Methodology

Overall Design and Participants

I have utilized a case study design, the structure of which has been informed by Merriam (2002); it was designed in order to develop understandings about a phenomenon (majoring in music with a diagnosis of AS) and the perspectives of the people involved. The study was conducted within the SMSU School of Music with two students. Both are female, junior music education majors, and are in the same applied instrument studio, although one of these students has been diagnosed with a mild form of Asperger's Syndrome (AS). This way the role of AS can be isolated in order to have more reliable results. It should be noted that there may be other differences and similarities between these participants, which will be elaborated upon in the Results section.

Triangulation, which is the process of collecting data in numerous ways to achieve reliable and valid results (Stake, 2010), was achieved by collecting and analyzing data from a number of sources: video reflective journals, behavioral observation of individual practice sessions for both participants, and personal interviews with each participant, their applied instrument teacher, and both of their mothers

Setting

The entire research project was conducted at Southern Magnolia State University (pseudonym), specifically within the School of Music. SMSU was founded in 1910, and has grown to become a leading premiere research university. It enrolls approximately 17,000 students each year, and offers a wide variety of fields of study with distinguished excellence. The School of Music within the university “offers a comprehensive music

program of 475 majors. It has approximately 42 full-time faculty, 15 part-time faculty, 62 graduate assistants, and eight professional staff. It sponsors more than 250 recitals, concerts, performances and lectures every year. Degrees offered include the PhD in music education, DMA in conducting or performance, MM, MME, BM, BME and BA.” SMSU was chosen not only for its convenience of location to the researcher, but also for its distinguished music program and unique students who are participating in this study.

Before my case study, I began to get to know my participants in order to gain their trust and for the three of us to become more comfortable with each other. In studies conducted by Heck-Sorter (2012) and Ciccantelli (2011) with college students who either had ASD or AS, previous effort to become acquainted with the participants was not made; however, these studies were done with more than two participants so it would have been more difficult for them to do so. In a study conducted by Szentmiklosi (2009), the researcher introduced herself to the participants in addition to communicating via email or telephone prior to the personal interviews. The participants and I have become comfortable with one another, creating a warm atmosphere in which to conduct research. They are both compliant and enthusiastic people, which has made the entire process of data collection go much smoother than it could have.

Interviews

I conducted semi-structured personal interviews with these students. These interviews have been audio-recorded and transcribed. They were semi-structured with open-ended questions so that the participants were free to expand as needed on their answers; open-ended questions allow for any necessary tangents that contribute to

developing rich data. Guiding questions for the interviews are located in Appendices A, B, and C. Interviews with the two case students and their applied instrument teacher were conducted face-to-face, while interviews with the parents were conducted via telephone; these interviews have also been audio-recorded and transcribed.

Observations

In order to be able to compare the functionality of both case students in the work environment, I asked both of them to record two thirty-minute long personal practice sessions each. They emailed me the video files of these and I watched them and took field notes, documenting behaviors evident in the sessions. Watching the students' individual practice methods was helpful for determining work styles. However, even though observations are useful, it is impossible to observe everything. Even though the observations were useful, interviews and reflective journals were the only way to access and begin to understand the thoughts and perspectives of the participants (Patton, 2002).

Video Reflective Journals

I requested that the two case participants keep a reflective, video-recorded journal. During the middle of the semester around mid-terms and towards the end of the semester before finals I asked them to record a brief entry for three days per each week-long period. For these recordings I asked that the participants reflect on four main points:

- Current stress
- Current short-term and/or long-term goals (e.g. paper due soon, upcoming tests, social interests, etc.)
- Recent/current struggles or challenges
- Recent/current successes

I gave each student a written outline of points to reflect upon to help guide their journal entries, but left it optional; the participants were not required to adhere strictly to it. In order to keep this easy and convenient for them I did not assign a specific three day interval each time. Rather, I assigned a specific week-long interval, from which they were enabled to choose any three days (they didn't have to be and were not consecutive) to record on so that it was completely convenient. They emailed the files of their recordings to me so I could have them for my records. I also transcribed these reflections. The guiding outline I gave to the participants prior to these reflections can be found in Appendix D.

Analysis and Interpretation

In order to make sure all of my data were accurate I used member-checking. Member-checking is defined as sending data to the participants and asking them to validate the accuracy of the data, in addition to making any pertinent and useful comments (Merriam, 2002). Similarly to the researchers Szentmiklosi (2009), Ciccantelli (2011), and Heck-Sorter (2012), I emailed the transcriptions of interviews, observation field notes, and reflections, in addition to my summations and themes extracted from these data, to each corresponding participant and gave them each the opportunity to review these and let me know of any inaccuracies and to verify or clarify the data. Once the interpretations of the data had all been verified as accurate, I categorized it into themes. This was done first by conducting within-case analyses for each case student. For the transcriptions of data relating to each individual student I took notes on patterns I found. Once this was done I compared the patterns found for each student using cross-case analysis.

Chapter 4: Results and Discussion

The purpose of this case study was to examine the lives of two seemingly similar music majors, to see what kind of effect a diagnosis of Asperger's Syndrome has on one of these students, in comparison with the other. I wanted to see how this particular student, Bella, may be challenged in higher education, as compared to her very similar, yet non-diagnosed peer, Rebekah. I also wanted to see what these challenges may imply for anyone else similar to this individual, in terms of necessary output, in order to attain success and achievement at the university level, and also to have a fulfilling college experience.

The two student participants for this study, Bella and Rebekah, were very gracious throughout the whole data analysis process. They each recorded two sets of three reflective video journal entries, submitted videos of their individual practice sessions, and sat down for thirty minute-long interviews with me. In addition, their mothers consented to being interviewed via telephone, and their applied instrument professor, Dr. Thomas, was also interviewed. In total, approximately 160 minutes were recorded in interviews and video journals; this cumulated to forty pages of transcriptions. In addition, two hours of individual practicing were observed, culminating into two pages of anecdotal notes. As alike as the two are on paper—they are both female music majors in the same instrument studio at the same university in the same year—they are strikingly different people. Some of these differences can be attributed to Bella's diagnosis of Asperger's Syndrome, but many of these differences appear to be completely outside of the diagnosis.

Emerging Themes

When analyzing the data, six major themes emerged. These were color-coded in the printed transcripts in order to keep them organized.. At times the information lying within themes overlaps with each other. These six themes are: Reasons for loving music, Successes in college, Challenges and ways to overcome challenges in college, Work management, Causes of contextual stress/anxiety, and Outcomes of contextual stress/anxiety.

Similarities

Reasons for loving music

Interestingly, Bella and Rebekah both come from musical families. Both of their mothers attested to being very supportive of their children's music education, and consequently, actively involved band parents. I, the researcher, was very intrigued by this coincidence. Both participants seem to not have had much of a choice in early years but to be involved in music; however, it was each participant's own personal motivation which drove them to become music majors in college.

In addition to both participants coming from musical families, they both really enjoy their professors at the School of Music. Bella pointed out in her interview that she really values her music professors for their insight, resourcefulness, and helpfulness. In addition to those things, Rebekah also really admires the passion in her music professors. She is inspired by passionate people, and loves to see how passionate her music professors are about music education and music itself. Both participants aspire to be like their professors one day. As Rebekah put it, "That's the kind of educator that I want to be: someone who

genuinely cares about everyone, all of their students, and genuinely cares about their well-being.”

Successes in college

Both Bella and Rebekah have achieved similar successes in college: they both have earned scholarships, they both have maintained admirably high GPAs, and they both have earned various other rewards from the activities they are involved in. Interestingly, despite all of these prestigious titles and awards they have each earned, both consider their personal improvement, hard work, and jobs well-done as their greatest successes. The intrinsic reward in setting and achieving goals is greater than the extrinsic reward of recognition. Bella illustrated this:

I was selected as an honorable mention in the Orchestra Concerto Competition, and so I was really happy about that. Actually I was more happy with my performance than the ranking itself. I was happy that I didn't miss a lot of notes that day and I played really musically; I felt that I played to the best of my ability, and so I was proud of myself for having a good performance, regardless of whether or not I won anything or got placed. The honorable mention was just the cherry on top.

Challenges and overcoming challenges in college

A common challenge for both Bella and Rebekah, which is typical for most university students, is time management. Both participants had to make huge adjustments to their methods of managing time upon entering their college careers. Bella realized the importance of prioritizing her work in the order of what is most immediately necessary to be accomplished; Rebekah discovered the usefulness of writing everything in a planner. This has been an on-going challenge for both participants, but they both seem to conquer it pretty well with their own strategies, as aforementioned.

Work management

Bella and Rebekah both respond very well with blunt honesty. In their interviews, as in the interview with their applied instrument professor, Dr. Thomas, it was made clear that both participants take well to constructive criticism. They are able to distinguish criticism on instrument playing from personal criticism very well.

Causes of contextual stress/anxiety

Bella and Rebekah are both very busy students. That being said, it is no surprise that having a lot going on at once –tests, papers, performances, outside activities, etc. – is a common stressor for them both. This is most likely an applicable stressor for most university students, as everyone has a lot of things to do at once in college. However, this is really the only cause of anxiety that the two share.

Bella and Rebekah seem to be very similar to each other on the surface. As aforementioned, they are both females, about the same age, music education majors, play the same instrument, and come from families who are very passionate about music. However, it may be more apparent now how little they actually have in common; they really have many more differences than similarities. Because Bella and Rebekah are as different from one another as night and day are different, their college experiences as a whole, which centers around the themes which have been listed above, are completely different from each other.

Differences

Bella

Reasons for loving music

Bella's drive for being a musician is vastly different from that of most musicians. Many people are affected by the emotional response triggered by listening to and performing music. However, this is not the case for Bella. On the contrary, she reports her love of music to come from the achievement and success she gains from playing her instrument. While she has an appreciation for the aesthetic side of music, her love of it truly stems from working hard to perform a technically difficult piece on her instrument, and doing well with it. In her interview Bella discussed this topic: "I think for me, the most fun part of music is the process of getting better and better, and especially making something more technically accurate – you know, making it as perfect as possible. . . . I suppose, more than most people, my enjoyment of music comes from achievement and accomplishment." Bella's joy of music is derived more from perfecting repertoire and showing her hard work than from any other aspect of music.

Successes in college

Bella has had a very successful college career: she has maintained a high GPA, won titles in concerto competitions, and blossomed in her musicianship overall. Despite all these auspicious awards, however, she feels her general improvement from high school to college is her greatest success of all. This has been mentioned somewhat in the similarities section above, but in addition to knowing she did a job well-done, she is also pleased with her level of hard work, organization, and motivation. In regards to this,

Bella said: “I guess the organization of my life and the hard work that I put in, as opposed to what was happening in high school, is probably what I consider to be my greatest success in college.” She discussed how in high school she did not always put forth much effort academically, focusing all her time and effort on her instrument. Now, she has found ways to manage her time and to really take ownership of her college career and professional future.

Challenges and overcoming challenges in college

Something that Bella has had some difficulties with during her college years is realizing when she is over-worked and stressed out with school. Bella said:

I don't think I'm really effective at handling my stress a lot of the time. Maybe part of that is due to the fact that I don't always realize it when I'm stressed out. I'm not very well tuned into my emotions and so sometimes when I'm stressed out I don't realize it.

Sometimes she struggles with managing her stress; therefore, she has started forcing herself to take breaks when her responsibilities are overwhelming her. She figured out that setting aside some time every evening for herself has aided in maintaining lower stress levels.

In addition, specifically on her instrument, Bella has had to work harder on her musical expression. Dr. Thomas described this: “She was technically very proficient on [the instrument], but in terms of musical expression that was a challenge for her. She's come a long way with learning how to be expressive. And that's helped her to become more well-rounded as a [musician].” Musical expression tends to be a more abstract concept, so it makes sense that this is an area where Bella has had to put forth extra effort to work on.

Bella has helped herself to overcome the barriers which a diagnosis of AS creates. She did research on the disorder, and has come to know how she learns best, how to communicate, and how she needs to be communicated with. She has allowed Dr. Thomas to get to know these things about her so that he can be an effective teacher for her. Dr. Thomas described this:

Because Bella has Asperger's and she accepts it, and deals with it head-on, she's learned to communicate more clearly, and understand how she needs to communicate, and how she needs to be communicated to. And so I feel like, as we've worked together on the instrument, with that understanding, that's helped her learn social cues and positive and negative ways to respond to things. And I've noticed that she's incorporated that into other parts of her life. So non-musically, I feel like what we've done on the instrument, and the work of us together, I believe that it's helped her in outside relationships too, with interactions with other people.

Musical instruction and working with Dr. Thomas has helped Bella in growing in her social skills, in addition to her musical skills. She has succeeded to and continues to overcome these challenges.

Work management

Bella spends much of her time working hard for her classes – studying, writing papers, and doing homework – in addition to practicing and perfecting her applied instrument. Bella said: “I’m a very efficient paper writer and studier, so I really have no trouble with school as long as I put in the time I can get the grades that I want.” Bella described her study and practice habits for me: she sets aside an amount of time and gets to work, in a focused mindset with zero distractions. When describing specifically her instrumental practice habits, she said: “Most of the time I get pretty focused. It’s exciting; it’s really fun to just work through something and to try to make it better. It makes me feel focused, diligent, and determined – that kind of thing.” Not only is Bella focused

when she works, but she also has methods to her practice which contribute to her great success on her instrument. Her applied instrument professor, Dr. Thomas, said: “She obsessively practices, and more than other students. But the way that she practices can also be a little obsessive.” Dr. Thomas went on to say that Bella tends to really enjoy playing – and perfecting – technically difficult pieces on her instrument. He described how she can practice her instrument for a long time, repeating the same technical passage over and over again until perfection is attained. Thus, Bella makes it a prime goal to achieve absolute perfection in technique on her instrument. Dr. Thomas went on to describe Bella’s reactions to when she does not perform a passage with absolute perfection:

She has a tendency that if she does something incorrectly she takes it personal, and she acts like she’s letting you down. And that’s not the case. And so I have to constantly reassure her that it’s normal to make mistakes. She’s very perfection-oriented, and at times is obsessed with being perfectly right. And so at times if she doesn’t get it, it’s hard for her to accept that. But in some ways that drives her to be successful, which is a good thing.

Bella’s time, effort, and energy put into practicing her instrument are very admirable and impressive. Most university music students have a more difficult time trying to balance practicing with the other aspects of college life. However, both Bella and her mother have attested to one way that devoting so much time to practicing has been made easier: Bella does not spend much of her time socializing, unlike most of her peers. Her mother, Colleen, put it best:

Bella is not a big social person, because she has Asperger’s, you know. I mean she wanted to be, but she just didn’t know how. It wasn’t something that came natural to her so she was kind of on the outside. But that was okay because she put all that extra time into practicing. And I talked to her and she didn’t feel comfortable with socialization and I told her, ‘If you

get really good at this you'll have a lot of friends anyway.' So she didn't mind.

While Rebekah also appreciates honesty from the two students' shared instrument professor, Bella requires it even more so than Rebekah. Because of her diagnosis of AS, Bella has a difficult time comprehending abstract ideas. Therefore, she needs teachers to be as direct and concrete as possible. When talking about her high school private instrument instructor, Bella said:

He pushed me really hard, and he was very blunt about the things that I needed to work on, and I really appreciated that because what helps me to become a better [musician] is to have someone be completely honest with me. You know, I don't get discouraged because somebody tells me that I didn't practice enough, or 'you don't know anything about musical phrasing,' or – whatever it is that I have a deficiency in, I don't get personally offended if someone tells me that I'm doing something wrong.

In addition, Bella's current professor, Dr. Thomas, said:

If I put really concrete information – for example, if we're working on a crescendo, and I say, 'Over these four beats I want you to crescendo. Over each beat I want you to increase the volume by 10%, or this amount,' she's going to be able to execute that pretty well. But if I say, 'I want you to crescendo really loud. Let's imagine that it's like a really big, loud gush of wind,' she'll have a harder time understanding what I mean by that. So giving her really concrete data, processed information, is good, or if I play it. And sometimes I challenge her and I'll say, 'I'm not going to play it this time,' and I try to encourage her to develop the other way of thinking. And she's been open to that too. I'm trying to help her be well-rounded and able to process information in different ways. And so I try to push her in that way. And then there's also the times when I know it's going to be better if I do it this way [modeling].

Similarly, in regards to academic classes, Bella said: "I like to have a very detailed, specific plan of what to study and what's going to be on the test." Bella is a hard worker and is very good at focusing on her work. Knowing how she functions and what she needs in order to be successful has helped her throughout college as well.

Communicating those needs to her teachers, such as Dr. Thomas, has resulted in success.

Causes of contextual stress/anxiety

Like any other college student, Bella experiences stress when school becomes busy with many things piled up on top of each other. However, social situations have shown to be Bella's greatest source of contextual stress and anxiety. She discussed multiple times about what exactly gives her anxiety. For Bella, not knowing what to expect in a social situation causes her stress. For example, when she is going to a rehearsal and she is not expecting to see many people there already, she does not have time to plan how to begin a conversation with them; this is a stressor for her. Bella describes this:

As long as I can work up in my mind what to say then I'm comfortable being around people; but if somebody comes up to me unexpected, or if I don't see a bunch of people until I get there, and the room that I'm going to if there's a bunch of people around then I kind of feel uncomfortable because I haven't like worked out in my mind what I'm going to say to them. I know it's weird, but that's just the way it is. I have to have a preconceived notion of what's going to happen, and if I can kind of work out what I'm going to say, or how I'm going to start a conversation, then I'm comfortable.

However, she feels the most amount of anxiety when around large groups of people, even if she knows many of them. Bella gave an example of this anxiety during marching band: "Marching band kind of stresses me out because there are nearly 300 people in the marching band and being around a lot of people like that makes me kind of tense and sometimes I feel pressure like I need to talk to people even if I don't want to." However, this stress increases when the surrounding people are unfamiliar. In regards to this, Bella said: "I get anxiety when I'm put in social situations where I don't know a lot of people." She has described this several times: the anxiety occurs both in music rehearsal settings and in non-musical settings, such as Christmas shopping.

Outcomes of contextual stress/anxiety

One of Bella's most prominent responses to anxiety is to lose focus, become distracted, and enter a panicked state. She described this several times: "Sometimes it's really easy for me to get distracted by all the people around me and it gives me a lot of anxiety, and when I have anxiety it makes it really hard for me to focus." "I feel a little bit panicked, I feel rushed, my words get rushed and I start stuttering, and I can't think of the right words to use when I get stressed out. . . . I get a little bit hyper-active and I go into overdrive, and I try to do a lot of things at the same time when I get stressed out."

Bella's other responses to contextual anxiety are related to her diagnosis of AS. Bella has stated that she has to try at times to monitor her behavior and create a filter in social situations so that she can conform to social norms. She described that when she becomes stressed, and therefore loses her focus, as stated above, she has a tendency to not try as hard to fit to those social norms:

When I'm stressed out I don't monitor my behavior as well – I mean, I spend a lot of time trying to make my behavior more normal and fit in with people and not make people upset, but when I'm stressed out the emotions are too high and I can't really make myself behave normally; sometimes I act a little bit like a child, in that I get impatient and I finish people's sentences and I don't do the social give-and-take things that you're supposed to do when you're in a give-and-take conversation with somebody.

In addition, Bella also becomes ultra sensitive to her surroundings. This is a common characteristic of Asperger's Syndrome – sensory stimulators become stronger and bothersome. Bella explained in a journal entry:

When I get anxiety sometimes I'll flap my hands or my environmental stimulators are more stimulating to me. When I'm stressed out, noises that are normally too loud for me are really, really too loud for me. Lights

seem brighter and I don't want to talk to people and basically some of my traits that are seen as a little bit autistic are more pronounced when I'm stressed out. I have a hard time keeping control of myself as well when I'm having an anxiety attack.

Finally, Bella also exhibits stereotyped behaviors when she is anxious. These actions include flapping her hands and twirling her hair. These actions are self-stimulatory behavior: they are repetitive and stereotypical for people on the autism spectrum ("A Parent's Guide to Autism Spectrum Disorder," n.d.). Bella described these behaviors manifested in her:

I stim, I move around, I'm constantly moving around, but the more stressed out I am the more I move around – and I fidget and twitch and do things like scratch my face or play with my hair; I think I play with my hair too much, it's kind of a little bit of a compulsion that I have and I do it more when I'm stressed out. I bounce my legs – I just do little stimulant kind of motions like that when I get stressed out. And I talk faster when I get stressed out.

Bella has unique qualities to her, affecting her effort and success in college. Some of these characteristics do come from her diagnosis of AS; however, it seems that many of them are products of her unique personality. Despite her unique needs and her challenges, however, Bella has succeeded in working hard and focusing on her goals in order to accomplish them. She seems to have had a fulfilling and successful college career thus far, and will surely continue to do so.

Rebekah

Reasons for loving music

In contrast from Bella, Rebekah's driving forces for being a musician are probably similar to those of most of her musical peers. For Rebekah, music is a source of mood-alteration: the music she is listening to or playing changes her emotion at the time. She has said that music brings her joy, and it also calms her when she is experiencing anxiety. Rebekah described this: "It's an outlet, like I play piano when I get stressed out, I'll just go to the practice room and play piano. It makes me feel better because it doesn't matter...it's just my interpretation." Music is what she turns to when stressed and in a negative mood; she also listens to it throughout the day to accompany her in idle times.

For the most part, however, Rebekah values music for the connection with other people which stem from it. While she does not enjoy performing music by herself so much, she truly loves to play in ensembles with her friends. She and her mother, Ruth, have spoken much about how social Rebekah is. In her interview she even spoke about how in high school she mainly tried hard in band so that she could be with her friends. At the college level now, of course, that is not her top reason for working so hard musically, but the social aspect is still a contributing factor. Rebekah spoke about the social factor several times: "It's good to play with my peers, I like playing with them because you know them outside of just the ensemble, like you know them in a personal setting too. So it makes it more special, I guess." She also expressed joy in the thought of how connected everyone seems to be in the music world: "I feel like that social aspect is always there just because, I mean, the music world is so close-knit."

In addition to performing, she also enjoys listening to music with loved ones, and listening to all types of music. She is interested in seeing other people's reactions to music and in seeing their different interpretations of it. Rebekah described this: "It's like everybody making music, and you see everyone else's interpretation, and we're all doing the same thing and we all have the same goals, generally speaking. I like that." Also, her mother, Ruth, talked about this: "Rebekah is a social butterfly. She is social, and she's very extraverted. I think her passion feeds from other people's reaction to music. She likes to see other people's reactions; she's very social." These are all reasons that drive most musicians to love what they do.

Successes in college

In addition to what was said in the similarities section about Rebekah's greatest success in college being her self-improvement and hard work, she is also pleased with herself for her many scholarships and her involvement. She said in her interview that in order for her to attend a university she needed it to be paid for in scholarships, and she managed to accomplish that. She earned several scholarships for academics, music, service, and various other activities. Rebekah said: "Having my school paid for was probably the biggest success. Just getting the scholarships that I have and keeping them – that's been really good." She is glad to not have the financial burden of college, and is proud of herself for working hard to maintain those scholarships.

Challenges and overcoming challenges in college

While her socialization and extraversion has helped Rebekah to be a successful and involved university student, it has also posed challenges to her success. The downfall

of being a “social butterfly,” as Ruth put it, is having a lot of distractions from responsibilities. Rebekah described several times about how difficult it was for her at first, and still is at times, to prioritize school responsibilities over social time. She likes to be involved in everything – music, academically challenging classes, activities, and spending time with friends. It has been a challenge for her to balance all of these and to manage her time, and she has had to learn to prioritize them. Rebekah described this:

I was so busy because I was meeting all my friends and I just wanted to hang out with my friends all the time, and then I'd remember about my work. So time management. Because there's always someone who wants to do something. Always. And so really I had to buy this huge planner to get my life planned out. I have to have everything planned out all the time, so it was really important for me to get a planner and get my life planned out, get everything scheduled and ready to go.

Dr. Thomas also discussed this challenge:

She works really hard to set goals, and she understands that to be successful in something she has to work for it. That being said, her involvement in so many different extra-musical things often gets in the way of her musical progress. But I believe that because of the hard worker that she is, it's helped her.

Rebekah has indicated to have done better in managing her time, and has learned when to turn down involvement in certain activities that distract her too much from her commitments and responsibilities. She continues to work hard to overcome this challenge.

Work management

In contrast from Bella, Rebekah herself said: “My practice habits are usually inconsistent. In the studio I'm known for not practicing. I always forget.” As stated above, because she is involved in so many activities it is difficult for her to manage her

time and make time for practicing her instrument. When she does practice, it is not in the same methodological order as in Bella's practice. Rebekah described this: "My focus just goes out the window when I'm by myself; I don't have anyone keeping me on track." Perhaps Dr. Thomas put it best: "I believe her improvement's directly related to the amount of work she puts into it." He described that, this being true for all students, when Rebekah does not practice as much, she does not show progress; however, when she really works hard at her instrument, she shows progress greatly and quickly.

Rebekah has spoken several times about how stressed out she becomes from being so busy and having so much on her plate; however, she seems to thrive in that high stress level. Many college students seem to go through this: they become involved in many activities and organizations and become stressed, but then experience the most success when in this state. Ruth, Rebekah's mother, described this: "Band – whether you're in an ensemble or the marching band or whatever – band keeps you busy, and that's a good thing because it's good for her personality type. She likes to be busy. So really, the more she has on her plate, the better she is, because she works well under that stress load." Rebekah enjoys having so much going on, and while it is stressful at times, she works best in that environment. The key to this is balancing and managing her time.

Causes of contextual stress/anxiety

Also in contrast from Bella, Rebekah experiences contextual stress and anxiety from her school responsibilities, rather than from social situations. Each individual task and responsibility she has might not be stressful by itself, but when grouped with everything else she has on her plate, it becomes a major source of stress. Thus, when she

does become busy, she doesn't practice as much. During these times when she tries to practice her instrument it becomes frustrating because the repertoire seems unreachable. This is common for many music majors who are involved in a variety of activities. Rebekah described this: "I just get so busy and sometimes I get so frustrated with my instrument and I'm just like, 'whatever.' I'm always good for ensemble rehearsals, but my private practice, I just get so frustrated." She also experiences performance anxiety; she does not like playing her instrument by herself in front of people. Rebekah said: "I'm a really nervous person and nerves just get the best of me all the time."

Outcomes of contextual stress/anxiety

When Rebekah is overwhelmed with school and all of her activities, her tendency is to talk to the people who are close to her, especially her mother, friends, and applied instrument professor. Rebekah described several episodes of calling her mother to vent about everything going on. Ruth, her mother, always reassures and encourages her to keep going. Dr. Thomas also described her doing this: "I feel like every once in awhile she has a need to talk about things outside of music, just to get them off her chest, but that's pretty minimal, for the most part." It comes as no surprise that Rebekah, being an extraverted and social person, feels the need to reach out to others and talk about what is stressing her out. In regards to her performance anxiety, Rebekah described having a physical reaction. She becomes nauseated, and has learned that it is best to refrain from eating before juries and solo performances. This is also common for many musicians, and it seems she has learned to deal with it well.

Rebekah is social and involved in activities all over campus, outside of the School of Music. She enjoys spending time with her friends and sharing her musical experiences with them. At times her involvement can hinder her musical progress, but she has improved in her balancing and time management skills. Rebekah has worked hard throughout her college career, and continues to do so. She enjoys the multiple facets of college life and shows much success in it.

Chapter 5: Discussion

This study was designed for the purpose of examining the lives of two students who are majoring in music at a university. These two students appear to be very similar on paper: they play the same instrument, are both female, the same age, and are pursuing the same degree. However, these similarities are almost all the two participants have in common. One student, Bella, has a diagnosis of Asperger's Syndrome, and I wanted to see how her diagnosis impacts her college career, and if it poses extra challenges to her, as opposed to other music students, such as Rebekah. The research questions were:

1. What, if any, extra work does Bella have to do in order to have as much success as other music majors, such as Rebekah?
2. How does AS make Bella's experience as a music major different from that of other music majors, such as Rebekah?

Before answering the first question, it is necessary to define "success." Bella and Rebekah both view personal success as working hard to achieve personal goals. Throughout college they have shared similar goals: attaining and maintaining high grade point averages and improving personal time management skills. In addition, they have both had performance goals on their instruments, although Bella's goals have been perhaps more ambitious than Rebekah's. Rebekah has also had goals of involvement on campus. Whatever the goal at hand may be, both students define "success" as working hard to achieve that goal.

To answer the first question, Bella does not necessarily have to work *more* than Rebekah and her other peers to achieve her goals; she simply works differently. In fact, it

is possible that Bella's diagnosis of AS makes it easier for her to attain her goals of high levels of performance, both academically and musically. Bella works very well alone – she has attested to being efficient when it comes to studying and writing papers for academic classes. In addition, she spends hours on end practicing her instrument – this is done alone, in her apartment or in a practice room at the School of Music. It is possible that this alone time with her instrument could be a kind of refuge for Bella – of course she enjoys working to perfect her craft, but perhaps she also finds joy from it because of the time away from fellow students. In addition, this is made easier because Bella does not experience distractions from social obligations and other activities on campus.

Rebekah, like many other music students, is involved in many activities on campus, and also spends much of her time with friends. She enjoys this time with her peers, and seems to feed off of it. However, for Bella this is not the case: seemingly another characteristic from her diagnosis, she does not get involved on a deep personal level, and is therefore not distracted by social obligations. In turn, this gives Bella more time to work towards accomplishing her goals. Interestingly, while these characteristics of AS make it easier for Bella to *work* towards success, she is driven by non-AS-related factors. She simply loves achievement; she seems to feed off of it. While Bella does practice her instrument more than Rebekah, and perhaps many of her peers, it is not because she *has* to in order to match their level of success; it is because she enjoys it and wants to become as perfect as possible.

In addition, Bella learns differently. She needs teachers to be direct, specific, and concrete. This is also an aspect of AS: abstract and vague instructions elude Bella. When professors in academic classes give non-specific instructions for assignments, she is not

sure what the teacher expects because the instructions are vague. Similarly, in music lessons she needs concrete language to communicate how she should execute musical expression, which in itself is abstract. She knows this is necessary for her, and informs her teachers of this unique learning need. They show willingness to work with her, and she has obviously succeeded.

It should be pointed out once more that Bella does not seem to have to work *more* than Rebekah; she simply works *differently*. While Bella does put forth more work in the sense of practicing her instrument than Rebekah, it is because she enjoys it, and not because she has to in order to be at the same level as her peers. Her diagnosis of AS does present unique learning needs, as discussed above, but she appears to have figured out how to harness her learning potential by working well with her instructors. Her diagnosis also makes it possible for her to put forth the time and effort necessary to attain her goals. While it imposes challenges, the diagnosis of AS does not hinder Bella's college experience in a way that negates her success.

To answer the second question, Bella's college experience does not seem to be starkly different from that of Rebekah. Their shared high levels of hard work throughout their university careers have already been described in detail, as well as their levels of success. Perhaps the main difference between the two students' experiences is the level of social involvement. Rebekah, like many of her peers in the music world, spends much of her time with friends, whether recreationally or as part of other activities on campus. She receives much of her fulfillment from these interactions with peers. Contrastingly, Bella receives much of her fulfillment from her hard work and successes; she does not place as much value in spending time with peers outside of class and rehearsal. This could be

caused by a combination of characteristics of AS and her own personality traits. As earlier discussed, AS causes deficits in communication and social interaction. However, Bella seems to overcome these challenges often because she has figured out how she communicates best with other people. Therefore, it seems that this lack of social activity stems from an introverted personality, which is not a direct result of AS.

Interestingly, it does not appear that a diagnosis of AS has made Bella's college experience extremely different from that of Rebekah and her other peers. Yes, it poses unique challenges, which Bella has worked hard to overcome. Yes, Bella has different interests from her peers; however, this appears to be more because of her unique personality, and not because of her diagnosis. Ultimately, she seems to receive just as much fulfillment as Rebekah from her university experience, which is most important.

Limitations of Study

There were many factors which influenced the data collection for this study. The main factor was time and scheduling. As all participants have very busy lives, it was difficult to schedule interviews that worked with their schedule and with my own; despite this difficulty, it worked out. However, I originally wanted to conduct more observations in addition to the interviews: I thought observing Bella and Rebekah in private lessons with Dr. Thomas, in addition to in ensemble rehearsals, could have contributed to creating rich data. However, because I have been student teaching this semester, and because of the scheduled times of these events, this was impossible. In addition, the time frame in which the data needed to be collected and analyzed was very limited.

Because this is a case study, focusing upon one person with a diagnosis of AS and one person without a diagnosis, it is impossible to generalize the results. While Rebekah does appear to be quite similar to many of her peers in the music world, there is, of course, no one else quite like her. Similarly, there is no one just like Bella. As discussed in the review of literature, every person with a diagnosis on the autism spectrum is vastly different from one another: two people with the same diagnosis that Bella has can have completely different personalities, challenges, and college experiences. The results of this study give insight to Bella and her teachers, and hopefully help her peers to understand her as well. However, another college student with AS majoring in music who plays the same instrument as Bella might have a completely different life than Bella.

Implications for Students

Bella and Rebekah have both shown to be good examples of what it takes for a music major to experience success and fulfillment at the university level. While they both have extremely different personalities, activities, and lives in general, they have one important thing in common: they set goals and do what it takes to achieve them. Both students work differently, but another important similarity is that they both know *how* they work best, and what they need to do in order to make things happen. For example: Bella knows she needs information presented in concrete and specific ways in order for her to process it best; Rebekah knows she needs to cut back on social activity in order to work most effectively. While Bella's diagnosis affects the way she learns and the way she works, it does not affect her *ability* to do so. Thus, this study teaches that all college

students can find success as long as they tune into their own personal needs and work in the best possible way for themselves. Luckily for Bella and Rebekah, it did not seem to take them a long time upon arrival at their university to figure this out; they seem to have learned how to be successful students from the very beginning. Other college students who have a more difficult transition into higher education should take a lesson from these two students.

Implication for Teachers

Dr. Thomas proved that any student can be taught, with a good teacher. Bella has a unique learning need, and if Dr. Thomas had not learned about it or tried to differentiate his instruction to meet her needs, she would have fallen by the wayside. Yes, Bella is an extremely hard worker and probably would have still found success in performance in college. However, her student-teacher relationship with Dr. Thomas would have suffered, and she would not have reached her full potential. Because he works hard to meet the needs of his student, she learns and gains the most she can from his teaching. All teachers should follow in Dr. Thomas' example. Students are too easily forgotten and left to learn on their own because teachers do not work to apply their instruction to the learning styles of their students. With a little extra reading, creativity, and effort, teachers can make a world of difference for their students. Dr. Thomas did this, continues to do so, with Bella. All teachers should show this much care for their students' learning and fulfillment of potential.

This study definitely informed me as a pre-service music teacher. I have always been taught in theory that all students can learn, and that it is the job of the teacher to

make that happen. However, this is my first time to actually see a real-life version of this process, and it has been eye-opening. I now feel much better-equipped to enter into the teaching world and effectively educate a wide variety of learners in music. Perhaps all pre-service teachers should take a lesson from Dr. Thomas.

References

- Conway, C., Eros, J., Pellegrino, K., & West, C. (2010). Instrumental music education students' perceptions of tensions experienced during their undergraduate degree. *Journal of Research in Music Education*, 58(3), 260-275
- Ciccantelli, L. (2011). Critical factors in successful navigation of higher education for students with Autism Spectrum Disorder: A qualitative case study. University of Akron.
- DSM-V: What changes may mean (n.d.) In *The Autism Research Institute* website. Retrieved from: http://www.autism.com/news_dsmV
- Elder, L., Caterino, L., Chao, J., Shacknai, D., De Simone, G. (2006). The efficacy of social skills treatment for children with Asperger Syndrome. *Education and Treatment of Children*, 29(4)
- Farrell, E. (2004). Asperger's confounds colleges. In *The Autism Experts* website. Retrieved from: <http://autismexpertshore.com/Asperger'sConfoundsColleges.pdf>
- Heck-Sorter, B. (2012). A qualitative case study exploring the academic and social experiences of students with autism spectrum disorder on their transition into and persistence at a 4-year public university. California Lutheran University. ProQuest Dissertations and Theses, p. 221
- Jellison, J. E., Brooks, B. H., Huck, A. M. (1984). Structuring small groups and music reinforcement to facilitate positive interactions and acceptance of severely handicapped students in the regular music classroom. *Journal of Research in Music Education*, 32(4).
- Kern, P., Wakeford, L., Aldridge, D. (2007). Improving the performance of a young child with autism during self-care tasks using embedded song interventions: A case study. *Music Therapy Perspectives*, 25(1).
- Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass.
- Nelson, R. N. (2011). An exploration of secondary level instrumental music educators' receptiveness to select philosophical writings. Louisiana State University
- Patton, M. Q. (2002). *Qualitative research & evaluation methods, 3rd edition*. Thousand Oaks, CA: Sage Publications
- Stake, R. E. (2010). *Qualitative research: Studying how things work*. New York: Guilford Press.

Szentmiklosi, J. (2009). Self-determination among community college students diagnosed with Asperger's Syndrome: A qualitative case study. University of Central Florida.

US Department of Health and Human Services. (2011). A Parent's Guide to Autism Spectrum Disorder (Publication No. 11-5511). Retrieved from the National Institute of Mental Health website: Retrieved April 18, 2014, from www.nimh.nih.gov

Wristen, B.G. (2013). Depression and anxiety in university music students. *UPDATE: Applications of Research in Music Education*, 31(2), 20-27

Appendix A: Guiding Questions for Case Students

1. Tell me about your first memorable experience with music.
 - What do you remember to be the most enjoyable about music?
 - What do you enjoy most about music now?
2. At what age did you start playing your applied instrument?
 - Why did you choose that instrument?
 - Did you learn any other instruments at a young age?
3. Do you prefer performing or listening to music?
 - Why?
4. How do you incorporate music into your everyday life?
5. How does it make you feel to play your instrument when practicing individually?
 - In ensemble rehearsal?
 - In private lessons?
 - In performances?
 - Which of these practicing/rehearsing settings do you prefer?
6. How do you feel about the social aspects of rehearsing with your peers?
 - Social aspect of working with a teacher?
 - Social aspect of being a future teacher?
7. How do you get along with peers in your major and ensemble?
 - Do you often talk with them before/after/during rehearsals?
 - If so, on a scale of 1-10 with 1 being the lowest and 10 being the highest, how comfortable do you feel during this? Explain.
 - Do you spend free time with them outside of class/rehearsal?

- If so, on a scale of 1-10 with 1 being the lowest and 10 being the highest, how comfortable do you feel during this? Explain.
 - Also if so, what do you do together?
- 8. Tell me about any effective music teachers you have had in the past, or currently have.
 - What about him/her/them was/is effective?
 - Why do you think this works best for you?
- 9. Can you describe your practice habits for me?
 - On average, how much do you practice a day?
 - Do you do all of your practicing in one chunk of time, or do you spread it out over the course of the day?
- 10. Did you always know you wanted to attend a university?
 - What made you choose Southern Miss?
 - What was the transition from high school to college life like for you?
- 11. Did you always know you wanted to major in music?
 - Why did you choose music as a major?
 - What are your long-term professional and musical goals?
- 12. What are your current plans and/or dreams after graduation?
- 13. What have been your greatest challenges since the start of your college career?
 - What are some things you do to help you succeed in school?
 - Who or what has helped you?
- 14. What have been your greatest successes in college?
 - How do you think you have come to achieve these?

- Who or what has helped you?

Appendix B: Guiding Questions for the Applied Instrument Professor

1. How has the student's musical abilities improved over her time at USM?
2. How has the student's extra-musical abilities improved with musical instruction over her time at USM?
3. When explaining concepts and ideas to the student, does she react in a way that indicates understanding and comprehension? How so?
4. How satisfactory are her results from your instruction?
5. How do the student's reactions to instruction compare to the reactions of your other students?
6. How have you had to alter your teaching approach in order to effectively teach this student (if applicable)?
7. How responsible/studious do you believe this student is?
8. Do you believe this student's learning process is different from that of your average student? Explain.
9. Describe for me any differences you might see in the practice habits and musical abilities in this student, compared with your other students.

Appendix C: Guiding Questions for the Mothers

1. When did the student first begin to show an interest in music?
2. How long has this student been involved in music lessons and/or classes?
3. Can you describe your involvement with your child's music education?
4. Describe for me your perceptions of your child's social involvement within music activities/ensembles.
5. Do you notice any obvious differences between your child and her musical peers?
(Differences in behavior, musical ability, etc.)
6. In your opinion, how well did your child handle her transition into college?
 - Was success immediate, or was it rough at first?
7. How openly does your child discuss with you:
 - Challenges
 - Successes
 - Social activities
 - Musical practice
 - Emotions from above-listed experiences

Appendix D: Guiding Outline for Video Reflective Journals

Over the course of the next week, please sit down three different days and briefly record a reflective journal while discussing the below prompts.

Day One – Success

- Discuss academic/performance-related successes you have had recently.
- When you succeed in a small goal, do you celebrate? Discuss the emotions you have felt recently after accomplishing something.

Day Two – Challenges and Stress

- Discuss academic/performance-related challenges and stressors.
- Discuss social-related challenges and stressors.
- What emotions do you typically feel when stressed out?
- What kind of behaviors do you typically exhibit when stressed out?
- Discuss how you handle the stress and overcome your challenges.

Day Three – Short-term Goals

Discuss any short-term goals you may have now and how you plan on accomplishing them.

Appendix E: Human Subjects Review

The goal of this research project is to gain insight into the life of a college student majoring in music who has Asperger's Syndrome. The information gained from this study will help the teachers of this student reach the student more effectively in teaching, as well as help outsiders be able to understand the student better.

Procedure

The researcher will interview the student, as well as the teachers, peers, and family members of the student. These interviews will be audio-recorded and then transcribed into text format. Another student who has AS but in a different major, and his or her family and friends, will also be interviewed. Also, another music major and his or her teachers will be interviewed. The researcher will also observe the students in individual practice sessions. During these observations the researcher will jot notes to be used later. The student with AS will also be asked to keep reflective journals every day for three-day periods: once around mid-terms and once at the end of the semester. In this journal the student will be asked to record any school-related challenges, whether social or academic, as well as successes. In addition I will ask her to record any short-term goals she may have at the time, and write down any goals she may have recently accomplished.

Subjects

The subjects will include the two college students, their college-aged peers, their teachers, and their parents. Depending on availability, the parents may have to be interviewed via telephone.

Subject Selection

The researcher's adviser already knew the student who is to be studied. The teachers, peers, and family members to participate will be selected after discussing with the student the people who are most involved in his or her life.

Location

The interviews will take place in locations where the participants feel most comfortable; possible in coffee shops, etc. The observations will take place mostly in rehearsal halls and his or her private lesson teacher's office.

Benefits

The teachers of the student being studied will benefit from this study by gaining a better understanding of the student. The student will benefit by being better understood by his or her teachers.

Risks

The subject may experience social discomfort with the researcher's presence during observations. The researcher will try to emulate a friendly attitude and not be a distraction.

Informed Consent

Long Consent Form (Student Participants)

Consent is hereby given to the study titled: “We are the same but different: The lives of two college music majors.”

1. Performance Sites: The University of Southern Mississippi
2. Contacts: The following investigators are available for questions about this project: Josie Cannon (972-754-7642; Josephine.cannon@eagles.usm.edu); Dr. Amanda L. Schlegel (601-266-5754; Amanda.Schlegel@usm.edu)
3. Purpose: The purpose of this study is to gain insight into the uniqueness of the life of college students majoring in music.
4. Participants: Two junior-level undergraduate students who are majoring in music at USM and play in the same studio.
5. Number of Subjects: 2
6. Study Procedures: The participants will be interviewed, observed, and will be asked to write in a reflective journal everyday over the duration of the study.
7. Benefits: The student will benefit by being better understood by teachers and family. In addition, it is possible that the student will gain better insight into herself and know how to better help herself in her busy college life.
8. Risks/Discomforts: No known risks are involved. The student might experience uncomfortable feelings of awkwardness at times during interviews, but the researcher will try to accommodate for that. The feeling might present itself in observations, knowing that someone is watching her, but the researcher will try to be discreet and distant.
9. Right to Refuse: Participation in this study is voluntary. At any time, the subject may withdraw from the study without penalty or loss of any benefit to which the subject may otherwise be entitled. Refusal to participate will not impact participant grades, class standing, or relationship to USM and its faculty members.
10. Privacy: The study is confidential. All participants will be given a pseudonym in the final thesis.
11. Financial Information: Subjects will not receive financial compensation for participation and will not incur financial cost.

“Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to **Josie Cannon** (972-754-7642; Josephine.cannon@eagles.usm.edu) or **Dr. Amanda L. Schlegel** (601-266-5754; Amanda.Schlegel@usm.edu) This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.”

A copy of this form was given to the participant.

Participant Signature: _____ Date: _____

Long Consent Form (Applied instrument teacher)

Consent is hereby given to the study titled: “We are the same but different: The lives of two college music majors.”

1. Performance Sites: The University of Southern Mississippi
2. Contacts: The following investigators are available for questions about this project: Josie Cannon (972-754-7642; Josephine.cannon@eagles.usm.edu); Dr. Amanda L. Schlegel (601-266-5754; Amanda.Schlegel@usm.edu)
3. Purpose: The purpose of this study is to gain insight into the uniqueness of the life of college students majoring in music.
4. Participants: Applied instrument instructor who teaches both student participants
5. Number of Subjects: 1
6. Study Procedures: The participant will be interviewed, and his private instruction of the two student participants will be observed.
7. Benefits: The teacher will benefit by better knowing how to accommodate the unique needs of the student participants and understand their perspectives as college students majoring in music.
8. Risks/Discomforts: No known risks are involved. The participant will simply be interviewed and observed in his teaching environment.

9. Right to Refuse: Participation in this study is voluntary. At any time, the subject may withdraw from the study without penalty or loss of any benefit to which the subject may otherwise be entitled. Refusal to participate will not impact participant grades, class standing, or relationship to USM and its faculty members.
10. Privacy: The study is confidential. All participants will be given a pseudonym in the final thesis.
11. Financial Information: Subjects will not receive financial compensation for participation and will not incur financial cost.

“Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to **Josie Cannon** (972-754-7642; Josephine.cannon@eagles.usm.edu) or **Dr. Amanda L. Schlegel** (601-266-5754; Amanda.Schlegel@usm.edu) This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.”

A copy of this form was given to the participant.

Participant Signature: _____ Date: _____

Long Consent Form (Mothers)

Consent is hereby given to the study titled: “We are the same but different: The lives of two college music majors.”

1. Performance Sites: The University of Southern Mississippi
2. Contacts: The following investigators are available for questions about this project: Josie Cannon (972-754-7642; Josephine.cannon@eagles.usm.edu); Dr. Amanda L. Schlegel (601-266-5754; Amanda.Schlegel@usm.edu)
3. Purpose: The purpose of this study is to gain insight into the uniqueness of the life of college students majoring in music.
4. Participants: Parents of the student participants
5. Number of Subjects: 2-4
6. Study Procedures: The participants will be interviewed. Because of their distance from Hattiesburg, the interviews will be conducted via telephone or video chat (such as Skype), and will be audio recorded.
7. Benefits: The parents will benefit from this study by gaining more insight into their children’s lives, thereby becoming even better support systems for them.
8. Risks/Discomforts: No known risks are involved. The participants might experience uncomfortable feelings of awkwardness at times during interviews, but the researcher will try to accommodate for that.
9. Right to Refuse: Participation in this study is voluntary. At any time, the subject may withdraw from the study without penalty or loss of any benefit to which the subject may otherwise be entitled. Refusal to participate will not impact participant grades, class standing, or relationship to USM and its faculty members.
10. Privacy: The study is confidential. All participants will be given a pseudonym in the final thesis.
11. Financial Information: Subjects will not receive financial compensation for participation and will not incur financial cost.

“Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to **Josie Cannon** (972-754-7642; Josephine.cannon@eagles.usm.edu) or **Dr. Amanda L. Schlegel** (601-266-5754; Amanda.Schlegel@usm.edu) This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the

Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.”

A copy of this form was given to the participant.

Participant Signature: _____ Date: _____



INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 13092608

PROJECT TITLE: **We are the Same but Different: The Lives of Two College Music Majors**

PROJECT TYPE: **Thesis**

RESEARCHER(S): **Josephine Cannon**

COLLEGE/DIVISION: **College of Arts and Letters**

DEPARTMENT: **Music**

FUNDING AGENCY/SPONSOR: **N/A**

IRB COMMITTEE ACTION: **Full Committee Review**

PERIOD OF APPROVAL: **10/15/2013 to 10/14/2014**

Lawrence A. Hosman, Ph.D.
Institutional Review Board