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**RELATIONSHIPS AMONG MIDDLE SCHOOL STUDENTS' MUSIC
POSSIBLE SELF BELIEFS AND THEIR MUSIC PARTICIPATION**

A Dissertation in

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by

Debra L. Campbell

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Committee Page

The dissertation of Debra L. Campbell was reviewed and approved* by the following:

Joanne Rutkowski

Professor of Music Education

Dissertation Adviser

Chair of Committee

Coordinator of Music Education

Anthony Leach

Associate Professor of Music

Linda Thornton

Associate Professor of Music Education

Rayne Sperling

Associate Professor of Educational Psychology

Keith Thompson

Professor Emeritus of Music Education

Special Signatory

*Signatures are on file in the Graduate School

ABSTRACT:**Relationships Among Middle School Students' Music Possible Self Beliefs and Their Music Participation**

Adolescence is a time when many students elect to withdraw from musical organizations. These youth may not see themselves playing an instrument or singing as adults. "Possible selves" is introduced to elucidate students' ideas of "what they might become, what they would like to become, and what they are afraid of becoming" (Markus & Nurius, 1986, p. 954). These self-perceptions provide a conceptual link between cognition and motivation. The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' participation in music endeavors. The primary research question was: What is the nature of the relationships among middle school students' music engagement and their *music possible self* perceptions? The research question was further analyzed by current and future *possible self* perceptions and music participation.

Eighth grade general music students ($n = 199$) completed a questionnaire based on current and future *music possible self* perceptions as well as their current music participation. Students who had a strong *music possible self* were more likely to envision positive musical futures than students who had lower *possible self* perceptions. Significant differences existed between girls and boys. Girls were more likely to participate in singing activities and had stronger *music possible selves* than boys. Encouraging youth to see themselves as musicians in the future may impact their continued participation in musical organizations during adolescence.

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CHAPTER I

Adolescence is a time of growth and transition when children question and reevaluate their previous interests and beliefs. However, one interest that appears to continue and even intensify from childhood is music. Adolescents listen to music a large portion of their day (Roberts & Christenson, 2001; Zillmann & Gan, 1997) and consider it an important part of their lives (Roberts & Henriksen, 1990). Their musical tastes are analogous with group identification (Macdonald, Hargreaves & Miell, 2002) and these interests may play a role in their development (Ebie, 2004; Horton, 2002; Kurdek, 1987; Larson, 1995; Roberts & Christenson, 2001; Schwartz & Fouts, 2003). Although adolescents listen to and frequently interact with music, participation in school music programs seems to decline during the teenage years. When commenting on school music programs, John J. Mahlman, the executive director of MENC: The National Association for Music Education, lamented “(a) strange thing frequently happens to many music students somewhere between childhood and adulthood. They stop playing and singing music” (Mahlman, 2004, p. 71).

Many teachers and researchers have been interested in the reasons for adolescents’ disenfranchisement with school music participation. Consequently, research studies have focused on reasons why students become involved in school music (Abeles, 2004; Davidson, Moore & Sloboda, 1998; Duke, Flowers & Wolfe, 1997; McCarthy, 1980; Neill, 1998; Rife, Shnek, Lauby & Lapidus, 2001; Roys, 1983; Sichivitsa, 2004; Stewart, 2004) and many articles in practitioner’s journals (viz., *Music Educator’s Journal*) have focused on techniques to motivate students’ participation in elective music organizations (Barresi, 2000; Delorenzo, 2003; Demorest, 2000; Mahlmann, 2004;

Peterson, 2002; Rutkowski, 2000). Even with these efforts, the relatively small number of adolescents who participate in school music programs remains a concern. Adolescents' motivation to participate in musical endeavors, both in school and out of school, served as the underlying interest for this study.

One theory of motivation that has been explored in various contexts is called *possible selves*. *Possible selves* is described as a mechanism of identify exploration (Dunkel, 2000), especially suited to identify the self-view of adolescents (Knox, et. al, 1998), an important self-regulatory behavior (Hsu, 2001) and a means to promote change (Oyserman, 2002). This key to motivation in academic subjects may also have relevance in a music context. Therefore, *possible selves*, a theory that has not been investigated in music, served as the theoretical framework for this study. The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' participation in musical endeavors. In order to clarify this theory, a discussion of *possible selves* ensues followed by additional rationale for the current study.

Possible Selves

In what is considered the foundation study, Markus & Nurius (1986) described *possible selves* as self-knowledge that remains unexplored. "Possible selves represent individuals' ideas of what they might become, what they would like to become, and what they are afraid of becoming, and thus provide a conceptual link between cognition and motivation" (Markus & Nurius, 1986, p. 954). A musical "*hoped for*" *possible self* might be to sing with a voice like their favorite singing star, perfectly in-tune, receiving accolades from others. Adolescents may hope to receive praise when accompanying singing on a guitar at a social gathering or playing an instrument at a school concert.

They may envision performing karaoke or playing computer music programs such as Rock Band® with approval from others. On the other hand, a *music “feared” possible self* might be to receive ridicule from others after singing or because of their music listening habits.

Among the many types of self-knowledge used to set goals, information about one’s possibilities becomes motivating in adolescence. While Markus & Nurius (1986) found that *possible selves* were linked to motivation and change, others have elaborated on the finding. For example, Leondari, Syngollitou & Kiosseoglou (1998) found that teenagers who imagined themselves successful in the future and who had well-elaborated specific positive *possible selves* were more successful academically in comparison to others. When Anderman, Anderman & Griesinger (1999) examined relationships between *possible selves* and achievement goals, they found that “present and future selves are related to achievement and motivation during early adolescence” (p. 11). After Oyserman, Terry & Bybee (2002) provided an intervention to highlight the relevance of school to attaining one’s *possible self*, they found that students who participated in the intervention displayed positive changes in their *possible self* perceptions and engagement in school. Perhaps in a music context, students who have well-elaborated *possible self* perceptions would be more motivated to participate in musical endeavors than students who do not see its future utility. Consequently, youth’s views of their self in music appear important to investigate. By determining how students envision their musical future, teachers may begin to understand present engagement or lack of engagement in musical endeavors.

Adolescent Interest in Music

Students' music participation may be related to their perception of musical success and/or failure. Marlatt (2004) identified ten categories for music success (i.e., affect for music, musical ability/musical knowledge, effort, practice, music participation, musical talent, environment/background, private lessons, personal commitment and ease of task) and six categories for music non-success (i.e., affect for music, musical ability/musical knowledge, practice, music participation, effort and environment/background). By developing programs that encourage students to perceive music participation positively, both in-school and outside of school, children may develop musical behaviors that support a lifetime of music participation and appreciation.

For example, Demorest (2000) created a program to help adolescent boys perceive singing in a positive light by providing chances to witness a variety of male role models who showed an interest in singing. Boys of different ages interacted and performed together. Teachers of participating students found that participation was "a tremendous boost for their programs to have something special that only the 'guys' do" (p. 40). Demorest noted that participation was particularly valuable when boys took part as sixth graders. "Their interest in choir is heightened just at the time when they may be deciding whether or not to continue with their singing" (p. 41). Demorest offered other suggestions, such as spending a day singing with older male choir members, to help elementary and middle school boys see their musical possibilities. Perhaps factors that contributed to motivation for these male students were their vision of possibilities (i.e., what they might become, what they would like to become, and what they are afraid of

becoming). When youth are able to interact with others with whom they can identify, they may be able to share concerns and begin to envision their future as a singer.

The lack of a positive musical role model may be especially detrimental to males. When North, Hargreaves and O'Neill (2000) surveyed 2465 adolescents about their involvement and impressions of musical activities, the researchers found that "males were more concerned than females with the external impression created by their music listening...females were more concerned than males with how music listening could aid their emotional needs" (p. 6). Because males were more concerned than females with how playing music might impress people, perhaps males give up participation in school musical activities because they are concerned with the external impression created by participation. When males do not see adults engaged in musical activities, especially activities youth value, they may decide to participate in other pursuits. Endeavors, enjoyed by familiar adults, may seem more attractive to youth. *Possible selves* is especially important to investigate during adolescence because youth are transforming in many different ways (e.g., thought process and physical maturity). These changes and youths' assessment of developments influence their future patterns of behavior.

Adolescence as a Time of Accelerated Growth

While adolescence is a time of transition and growth, males and females experience different growth patterns, particularly in their voices (Berk, 1997; Caissy, 1994; Conger & Galambos, 1997; Huber, et al, 1999). The disparity in adolescent vocal changes for males and females are "highly correlated with the development of primary and secondary sexual characteristics associated with puberty" (Cooksey, 1999, p. 14) and progress at different times. Any voice change may impact the ability to participate in singing.

Consequently, the adolescent voice change is a noticeable biological development with the possibility of affecting current and future musical learning. Males experience a large growth spurt in their vocal tract between the ages of 12 and 14 years followed by a smaller, steady increase in vocal tract size to age 16 or 18 (Huber and others, 1999). During this change, the male voice deepens as the larynx enlarges and the vocal cords lengthen resulting in vocal cracking or squeaking (Caissy, 1994). The female also experiences voice changes but the maturation is typically completed by age 12 with a very slight decline in vocal pitch frequency until age 18 (Siple, 1995). As a result, the earlier period (viz., during late childhood) of female vocal change may occur at a time when they are more at ease with themselves. Because the voice change is later for adolescent males, the timing may impact their comfort with musical participation differently than voice change does for females.

While the voice is mutating, adolescents may feel very self-conscious about physical changes as well as the sound of their changing voice (Berk, 1997; Caissy, 1994; Conger & Galambos, 1997; Steinberg, 1996). These natural changes may cause alterations in the development of vocal consistency (Emerich, Sataloff, and Spiegel, 1997). In addition, vocal changes may lead to frustration contributing to decreased participation in vocal music. If males and females are asked to sing and find that singing is difficult for them, they may believe that they do not have the aptitude for music, compelling them to pursue a subject that seems easier. During early adolescence, males are most vulnerable because their voices are experiencing tremendous growth whereas the female voice growth rate is beginning to slow. The resulting embarrassment for males may help to explain gender differences in students' participation in music class.

Perhaps if students had a vision of a musical future, where they could sing with a good voice, the present self would not be as uncomfortable. Maybe adolescent females can imagine singing in the future because their vocal changes are not as pronounced and occur earlier, resulting in a present self that is vocally satisfying. Adolescent males' voices, on the other hand, are dramatically changing. Consequently their present self is vocally unsettled and uncomfortable perhaps leading males to cease participation in school or formal music activities that involve singing.

The focus of this study is on adolescents' desire to participate in musical endeavors. By understanding youth's growth and psychological status, teachers and researchers may be able to construct strategies to reach a greater number of students. Perhaps these strategies will also help to increase music participation in a variety of contexts as well as breadth of musical awareness. Specifically, this study is concerned with students' perception of their musical self and possibilities in relation to their participation in music.

Making Connections

By connecting music learning to adolescents' sense of purpose and view of the future, their present learning may be enhanced and their present participation facilitated. Lev Vygotsky (1896-1934) developed a sociocultural cognitive theory focusing on the origins and transformation of cognitive functioning and believed that the key to adolescent psychological development is interests that are not acquired but developed through interaction with the environment. Erik Erikson (1902-1994) believed that motivation for human behavior is also social and develops throughout the life span. Erikson (1968) proposed eight stages of development. Adolescence, the fifth stage, is characterized by identity versus identity confusion. To Erikson, identity is a coherent

conception of the self, consisting of goals, values, and beliefs. Identity confusion occurs when adolescents are not able to adequately explore many roles and when a positive career path is not defined. According to Erikson, self-expression is a very important part of developing an identity because without opportunities to express themselves, adolescents will strongly resist authority. Music activities are important because they provide a chance for self-expression thus informing the adolescent's sense of identity. By exploring adolescents' search for an identity, cues to their music participation may become apparent.

Identity Formation

The foundation for identity formation is provided by self-understanding, with self-concept and self-esteem serving as the evaluative components. As adolescents try to define and describe their attributes, their self-understanding is based, partially, on various roles and categories (i.e., a student, a female, a choir member, a family member, a movie fan). Youth can comprehend that their role as a student may be different than their role as a son or daughter. Students who do not participate in musical activities may not form a constructive musical identity that could be elaborated in the future. Marcia (1966, 1980, 1994) divided the search for an identity into two phases, crisis and commitment. During the crisis (exploration) phase, youth decide between meaningful alternatives. When youth show a personal investment in what they are going to do, they are in the commitment phase. In this process, adolescents need to explore and develop a future vision. These cycles may happen throughout a lifetime and are important for positive identity development (Archer, 1989).

Personal Identity

As adolescents look at themselves, they make self-evaluations in many different domains such as academic, athletic, musical, and physical which inform the self-concept and are important for identity formation. VanderArk (1989) proposed a model of self-esteem that included music as an important component of an individual's self-image. Harter (1990) explained that many characteristics contribute to self-esteem, including the opinion of significant others. "Acknowledgment from peers in the public domain seems more critical than the personal regard of close friends, because close friends, by definition, provide support, and their positive feedback may not be perceived as necessarily self-enhancing" (Harter, 1990, p. 368). This facet of self-esteem may explain why academic domains or areas where only close friends acknowledge eminence are not regarded as highly as domains in which individuals are projected in a positive limelight acknowledged by outsiders. When individuals other than immediate friends acknowledge a skill or special competence, an adolescent's self-esteem will be enhanced. In addition, perhaps students need to experience future possibilities from outside their immediate circle. Conceivably, by witnessing others engaging in musical behaviors when the opinions of acquaintances are important, adolescents may be encouraged to think about future possibilities. When these ideas are validated by acquaintances, youth's self-esteem is typically enhanced.

Social Identity

In addition to personal identity development, a sense of social identity guides behavior. "When personal identity is salient, behaviour is based on individual characteristics only....When social identity is salient, behaviour is based upon an

acknowledgement of one's own and others; group membership" (Macdonald, Hargreaves & Miell, 2002, p. 137). Through the process of social comparison, individuals are motivated to act in ways securing a positive evaluation of the "in-group". Music may help to differentiate groups because "a major appeal of music to adolescents lies in its ability to help them form positive social identities" (Macdonald et al., 2002, p. 137). Musical behavior is guided by individual identity needs and group identity needs. The social context is integral to understanding musical identity and in turn students' musical participation.

Media Influences

As adolescents search for their identity, media may play an important role in attitude formation (Larson, 2001a). Through their research with 179 children (ages 8-13), Anderson and Cavallaro (2003) examined the impact of the media on children's choices of heroes and role models. When asked to name a figure they looked up to, respondents described a person they knew more often than someone they did not know such as a media character. Children believed that unfamiliar media figures may do "bad things" when they are not being observed. Same-gender role models were chosen that were found relevant and with whom they could compare themselves. "Overall, children most frequently (34 percent) named their parents as role models and heroes. The next highest category (20 percent) was entertainers" (p.185). Anderson and Cavallaro concluded that "educators could capitalize on children's need for guidance to expose them to a greater variety of role models...A variety of potential heroes and role models allows children to appreciate themselves and the diversity in others" (p.188).

As adolescents look for credible heroes and the heroes from their early years seem distant (French and Pena, 1991), current musical role models may be inconsistent with future self images. In many cases, images of popular musicians are tied to drug and alcohol abuse. Their illegal behavior seems to eclipse musical accomplishments in the media (e.g. Michael Jackson, a pop musician was indicted for child abuse; Tupac Shakur and Notorious B.I.G., hip hop stars, died in gang related violence and were suspected of drug abuse; Sid Vicious, a punk superstar and bass player, was charged with murder and drug abuse). Even though negative images seem to be in the headlines for many entertainers, there are some positive images of amateur musicians who are also high profile individuals such as Dr. Condoleeza Rice (2008 Secretary of State, pianist), Dr. Alan Greenspan (Federal Reserve Board Chairman from 1987 through 2006, a jazz musician), Walter Hewlett (Hewlett-Packard executive, performer on ten different instruments), William Jefferson Clinton (Forty-second president of the United States, saxophone performer) and Mike Huckabee (2008 presidential candidate and Arkansas governor, guitar performer). Even though these individuals may be good amateur musical role models they may seem distant to teens: They are older and represent “the establishment”. “For teenagers who would like to identify with their peers, the images television portrays are remote” (Singer & Singer, 2001, p. 16). Even though musicians of the past were not always positive role models, there was not as much publicity about their lives as there may be in the early 21st century. Consequently, adolescents may seek sources outside of the media for emulation.

Adult Influences

Because life in the 21st century is busy and fast paced, adults may not be participating in as many musical activities as previous generations, particularly adults who are busy working and raising their children. Therefore, adolescents may not be exposed to positive musical adult role models (i.e., adults important to them who are participating in musical activities). As a result these students may not envision themselves participating in a wide variety of music experiences in the future. This lack of a musical future self vision may contribute to motivational deficiencies in adolescents. Teachers and researchers have tried to help students envision a musical future. For example, Sindberg (2005) implemented a six-year, commissioning project where students experienced the process of commissioning an instrumental work, working with the composer, and premiering the work with classroom activities connecting aspects of the commissioned piece. Because parents and community members were included in the project, students could interact with adults in a musical situation while envisioning using music in their adult future.

When Campbell (2002) studied the relationships among students' perceptions of their own musical attitudes and others' musical attitudes, youths' perceptions of their parents' musical attitudes had a stronger statistically significant relationship to their own musical attitudes than their perceptions of music teachers' attitudes, classroom teacher's attitudes, other relatives' attitudes, or peers' attitudes. Perhaps some of the subconscious processes that Freud (1968) described are in evidence. "(P)sychic processes which, despite the fact that they are intensive and show vigorous activity, remain far removed from consciousness" (p. 69). Students' self-perceptions of musical roles may be strongly

influenced by their parents' interaction with music. As Freud (1968) suggested, conscious processes may act as a result of subconscious processes that have developed from environmental situations and in turn inform future processes. Many youth may not encounter familiar adults interacting with music resulting in skepticism about musical involvement.

For short-term concerns, such as questions about social matters, dress styles, musical tastes, and leisure activities, adolescents are more likely to conform to their peers' opinions than their parent's opinions. However, regarding long-term questions such as educational or occupational plans along with values, religious beliefs, or ethics, teenagers are primarily influenced by parents or other adults (Brittain, 1963; Smetana & Bitz, 1996; Tisak, Tisak, & Rogers, 1994; Young & Ferguson, 1979). The influence of adults, other than parents, increases in importance as adolescents begin to make important decisions about their future. As a result, it would be important for these adults to demonstrate music participation in their everyday lives. "Through the emergence process, then, people's cognitive-affective systems may become populated with a wide variety of goals, traits, and values, each providing a platform for specific acts in the course of social interaction" (Nowak & others, 2002, p. 324). Students who experience the utility of engaging in musical behaviors may plan to continue those behaviors in their future thereby setting musical goals now.

Establishment of Personal Goals

During adolescence, when traits and values are attributed to musical goals, individuals develop an action plan containing long and short term objectives. "Distal motivations of actions are tied directly to the proximal regulatory processes that guide

them” (Hawley & Little, 2002, p. 192). Students consider their foremost interests and abilities from the past, as well as in the present, and their potential for the future as they begin to set goals. “Goal setting and developing such motivational and behavioral projects are motivating because they attach utility to a number of activities such as doing one’s best in high school, going to high school, or keeping up physical training” (Lens, Simons & Dewitte, 2002, p. 225). By having important future goals, students may delay gratification and relinquish immediate (but less important) rewards and pleasures. “Learning to wait for desired outcomes and to behave in the light of expected future consequences is essential for the successful achievement of long-term, distant goals” (Mischel, 1986, p. 414). If a student would like to become a music professional (e.g., performer, teacher, creator), goals should be set in early adolescence. In addition to professional goals, adolescents who would like to pursue music as an avocation (e.g., play an instrument in a college/community ensemble or garage band, sing in a select choir or karaoke) typically develop their musical skills during early adolescence in order to succeed with these future plans.

Future Oriented Goals

In order for students to formulate effective goals students should have a vision of their possibilities and the self-efficacy (i.e., task-specific self-confidence) to execute the task. Students who have an orientation towards the future may experience higher achievement than students who do not see the future utility of their classes (DeVolder and Lens, 1982; Raynor, Atkinson, & Brown, 1974). These students plan for the future by setting short term (proximal) goals. As a result their self-efficacy and persistence for completing a task are enhanced (Stock & Cervone, 1990). If middle school students do

not imagine their future musical possibilities, they may not create proximal goals that increase self-efficacy and persistence for task completion. Consequently these students may discontinue participating in musical groups or neglect practicing their music which could lead to a poor perception of abilities.

Skill Perception

Cooper (2001) found that positive perception of skill was important for children who study musical instruments. Adult pianists who enjoyed lessons started to play an instrument as children, continued to take lessons as adults and played for family, church activities and choirs. These pianists enjoyed playing because they felt special, liked being part of a group, and developed a sense of self-efficacy. In contrast, pianists who did not enjoy lessons reported nervousness, embarrassment, and lack of skill. Perhaps unsuccessful students did not set proximal practicing goals because they did not envision a future playing the piano, either as a vocation or avocation. Cooper (2001) advocated setting short term goals to foster success in piano playing and found that “(c)hildren who have these experiences may be more likely to continue to play [piano] into adulthood” (p. 166).

Music Participation

As students set goals and practice outside of school, they may also set goals for musical engagement inside of school. However, many teachers have found that their students neglect to set musical goals that in turn effect their participation in musical organizations. Even though music is important to adolescents, can help them study/develop healthy lifestyles and is essential to identity development, many adolescents withdraw from school musical organizations during the middle school years.

“Middle and or junior high school music teachers often hear ‘I hate music class’ from the same students who live most of their adolescent years with a headset glued to their ears” (Rutkowski, 1993, p. 221). From a list of 11 school subjects, music was early adolescents’ least favorite subject (Ross, 1998). In 1997, The National Center for Educational Statistics published the National Assessment of Educational Progress (NAEP) Arts Report Card. Eighth grade students in public and private schools were surveyed about their participation in school musical organizations. According to this sample, 18% percent played in a band, 3% played in an orchestra and 22% sang in a choir. However, 92% of the students reported that they listened to a musical tape, CD or record. A disconnect between in-school and outside-of-school musical participation seems to exist.

Because various students enjoy listening to music but are not involved in school musical organizations, many studies have focused on the reasons why students become involved in school music. These studies include: factors for student participation in choral programs (Neill, 1998), factors for student participation in band/instrumental programs (McCarthy, 1980; Stewart, 2004), effect of orchestral/school partnerships (Abeles, 2004), music participation (Roys, 1983; Sichivitsa, 2004), satisfaction with lessons (Rife, Shnek, Lauby, & Lapidus, 2001), characteristics of teachers (Davidson, Moore, & Sloboda, 1998; Duke, Flowers, & Wolfe, 1997). Many articles on motivating students to participate in elective music organizations have been written for practitioner’s journals such as the *Music Educator’s Journal* (Barresi, 2000; DeLorenzo, 2003; Demorest, 2000; Mahlmann, 2004; Peterson, 2002) with various reasons for student failure and success cited. Important considerations discussed were various teacher

attributes (Barresi, 2000), interaction with more knowledgeable others (Demorest, 2000), and concentration on the skill and effort of students (Peterson, 2002).

The Role of Teachers

Teachers may play a key role in motivating students. Consequently, effective teacher behaviors have been investigated (Davidson, Moore, Sloboda, & Howe, 1998; Duke & Henninger, 2002; Klinger, Campbell, & Goolsby, 1998; Kratus, 2001; Madsen, 2003; Sehmann, 2000; Siebenaler, 1997). Lautzenheiser (1992) reports that“(t)he only absolute certainty of any motivation in our group is to put the responsibility on the one person whom we can control-ourselves!” (p. 67). Without citing a research base, Dr. Lautzenheiser related many different techniques for teachers to use in order to motivate their music students. However, one point that he did not acknowledge was the need to show students what they could be doing in the future with their musical knowledge and skills. School music programs considered “ideal” by classically trained music teachers may not be motivating to students who do not perceive such programs as meeting either immediate or future needs. These programs may not help students develop a vision of their future musical involvement, a musical *possible self*.

In Relation to Other Experiences

In her book, *In Search of Music Education* (1997), Estelle Jorgensen urged seeing the possibilities for music education as a life-long rather than just a school-age pursuit. “It requires rethinking the role of music education in conserving and reshaping aspects of music and education and providing a clear vision for the future” (p. 92). For music education to be effective, educators need to consider music’s relation to society and

develop a multicultural, multimusical approach that connects both school and outside of school music experiences (Kelly & VanWeelden, 2004; Reimer, 2000).

In order to meaningfully connect music experiences, adolescents need information presented in a way that facilitates adolescent learning. Since social affiliations are very important to adolescents, perhaps these relationships are also motivational in music. Moore and others (2003) found that the lack of social contact and peer support along with high intensity but isolated instrument practice served to stifle childhood musicians and led to burnout. On the other hand, Morrison (2001) discussed the musical ensemble culture as having an important social dimension. “We might say that the time spent with ‘others’ is far greater in the performance culture than in many other aspects of real life” (p. 26). Rehearsals take place during class time in addition to before or after lunch, school and other activities. However, student participation seems to end at high school graduation. Even though students love music and/or music making, students may stop making music after graduation because graduation “signals the loss of a student’s place within a familiar and reinforcing social structure” (Morrison, 2001, p. 28).

Developing Perceptions

Perhaps students do not realize that they could continue to participate in a musical social structure after high school graduation because they have not developed a musical *possible self* perception. Possibly the high school ensemble was the only musical culture that students experienced aside from popular music listening. While young persons may continue their listening habits because listening defined them as adolescents and they observed adults listening to music, they may fail to acknowledge that adults can participate in music organizations similar to the ones in school. As a result, youth may

continue listening to music but cease any school participation with music because they do not perceive school musical engagement as a possible “adult activity”.

Nonetheless lifelong musical learning is of great importance (Cooper, 2001; Jellison, 2000; Mahlmann, 2004). Reimer (2003) discussed the many dimensions of musical understanding including music and its relation to feeling, the meaning of music, and the special experience of music. He lamented that “(w)e serve very few students, with very few options, with restricted kinds of music and a limited number of ways to develop musical creativities and intelligences” (Reimer, 2003, p. 297). Perhaps youth do not continue their school music participation because they see the types of curricular offerings as irrelevant to their vision of musical experiences in which they will continue during their lifetime.

Mark (1992) inferred that a cause for lack of participation in school musical organizations may be the content offered. “It is one of the ironies of history that the professional band, now a thing of the past, is recreated and emulated in schools, while the symphony orchestra, that is held in esteem by society, is not as prevalent in the schools” (p. 264). Perhaps students see school music as a thing of the past and cannot relate to it. Outside of school, students may not see people engaging in the types of musical experiences that are offered in schools today. Ross (1995) suggested that attempts to modernize the music curriculum have failed. “There can be little doubt that music out of school is a vitally important part of the lives of most teenagers, and that we should perhaps focus on the disjunction between music at school and music at home, which appears to widen rapidly in early adolescence” (North, Hargreaves & O’Neill, 2000, p. 2).

Perhaps the golf is widening because students see others listening to music and peers interacting with “popular” music but these experiences do not represent a breadth of musical engagement. If students were exposed to adult music making and could see themselves making music in this way in the future, perhaps they would see the utility of practicing and participating in school musical organizations today. These “*possible self* perceptions” are important because they provide an interpretive and evaluative context for the current view of self and function as incentives for future behavior. With the general concern about participation in school musical organizations during the middle school years, perhaps students’ *music possible selves* need to be investigated. In addition, investigation of adolescents’ *music possible selves* may assist in a redesign of the music curricula to more appropriately prepare students for the musical futures they desire.

Statement of Problem

Perceptions may lead to actions. If students do not see themselves as musicians in the future they may stop participating in musical organizations (both inside and outside of school) in order to develop skills for roles that they consider possibilities. “In the solitude of their rooms, with friends, watching television, listening to music, and interacting with family and significant others, adolescents look for models, try out possible behaviors, and form future life expectations” (Fave & Bassi, 2000, p. 1). In order to form future music life expectations, students may need to experience a connection between what is happening in or outside of school with possibilities for future musical expression. School music programs may not provide a good basis for “future visioning”. The opportunities for music involvement available in most schools may be perceived as dissimilar to opportunities generally available to adults in the communities. Even though a view of the

future is deemed important (Mahlmann, 2004; Reimer, 2003), research has not determined the nature of the relationship between music participation and students' future expectations or if there is a relationship between a students' musical self-perception and their vision of the future. Although gender differences have been investigated regarding instrument choice, vocal growth and age concerns, they have not been explored in relation to adolescent students' perceptions of their future expectations in music.

Research Purpose and Questions

The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' participation in musical endeavors. Since participation can take place inside or outside of school, a physical location for music participation was not specified. However, since music participation typically means singing, playing an instrument, listening and/or creating, students' *music possible selves*, in vocal/choral, instrumental and overall musicianship contexts, were quantified and compared with reported hours of music participation to reveal relationships. The primary research question was: What are the relationships among middle school students' music participation and their *music possible selves*? The research question was further analyzed by the two dimensions of *possible selves* (i.e., current and future), context (i.e., vocal/choral, instrumental, overall musicianship), and gender resulting in the following sub questions:

1. What are eighth grade students' *now and future possible selves* in overall musicianship, as well as, in vocal/choral and instrumental music contexts?
2. How much time do eighth grade students report singing, playing an instrument, and participating in overall musicianship activities?

3. Considering students' overall perceptions of their musicianship, as well as their perceptions in the vocal/choral and instrumental context, what is the nature of relationships among eighth grade students' *now possible self* perceptions, *future possible self* perceptions, and music participation?
4. Does gender play a role in the above relationships?

Definitions

The following terms were defined for use in this study: *possible selves*, music *possible selves*, music self-concept, musical context, school music participation, outside-of-school music participation, overall musicianship activities, overall music participation, vocal/choral activities, and instrumental activities.

Possible Selves

Markus and Nurius (1986) defined *possible selves* as representing "individuals' ideas of what they might become, what they would like to become, and what they are afraid of becoming" (p. 954). For the purposes of this study, *possible selves* were further designated as either now, future or feared. *Feared possible selves* are characteristics that individuals dread and would like to avoid. *Now selves* are self-perceptions of the current self while *future possible selves* are potential visions of the self at a future time period.

Music Possible Selves

A music *possible self* is a person's self-conception, now and in the future, within the musical domain. These perceptions are musical hopes and fears that are further distinguished by the musical context (i.e., choral, instrumental or overall musicianship). For this study, the construct of musical *possible selves* was operationalized via the Music *Possible Selves* Questionnaire.

Music Self-Concept

Reynolds (1992) defines self-concept broadly including perception of self (i.e., attitudes, knowledge, and feelings) regarding abilities, appearance, and social relationships. For the purposes of this study, music self-concept was also defined broadly as perceptions of self (e.g., attitudes, knowledge, feelings, ability, interest) but limited to a specific setting (viz., vocal/choral, instrumental, overall musicianship) within the music domain.

Musical Context

According to the online Encarta Dictionary, context is the “circumstances or events that form the environment within which something exists or takes place”. For the purposes of this study the context is limited to musical circumstances or events.

School Music Participation

Activities sponsored by the public school will be the source of information about school music participation. Band, orchestra and choir experiences, as well as general music class activities are included. These activities may take place during the school day, before or after school.

Outside-of-School Music Participation

Musical activities in which students engage that are not sponsored by the school district will be considered “outside-of-school” music participation. These activities may include those sponsored by community and church organizations (e.g., choirs, bands, and orchestras), voice and instrument lessons or activities organized by students themselves. Students may also arrange, compose, practice and interact with music in a variety of ways outside of school. All of these activities will be considered.

Overall Musicianship Activities

For the purposes of this study, overall musicianship activities are singing, playing instruments, creating music, listening to music, studying music, and participating in musical ensembles.

Overall Music Participation

Overall music participation is defined as time spent involved in overall musicianship activities that are a variety of behaviors including singing, playing instruments, creating music, and listening to music, both in-school and outside-of-school.

Vocal/Choral Activities

Vocal/Choral activities are defined as any activity in which the participant is singing. These activities could be accomplished alone or with others, in-school or outside of school, organized or spontaneous.

Instrumental Activities

Instrumental activities are defined as any activity in which the participant is playing a musical instrument of any kind. These activities could be alone or with others, in-school or outside of school, organized or spontaneous.

Limitations

Music possible selves were investigated with a sample of students participating in an eighth grade general music class. The accessible population represented all of the eighth grade students from one school district where all students are required to take general music. Some of these students were also in school music ensembles, such as band, orchestra or choir. Younger or older middle school students were not participants. In addition, these students were generally white and middle class. Although the results

may be true of many early adolescents, they cannot be generalized to all early adolescents without further investigation.

Possible selves may be one aspect of motivation for middle school students but should not be perceived as the only component. Subsequent research may examine *possible self* perceptions in relation to other key musical motivation factors.

Data were collected through a self-reported questionnaire. Therefore, the results are subject to the students' perceptions at the time queried and their motivation to complete the task.

CHAPTER II: REVIEW OF LITERATURE ON POSSIBLE SELVES

The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' interest in music endeavors. "Possible Selves represent individuals' ideas of what they might become, what they would like to become, and what they are afraid of becoming" (Markus & Nurius, 1986, p. 954). Since 1986, many research studies have been conducted and theories developed concerning *possible selves* and its role within the self-concept. However, these studies have not been completed in a music context. In order to situate the current study, research related to *possible selves* in various contexts will be reviewed along with implications for future research. The *possible self* research tools used are particularly important because they form the starting point for the design of the *possible self* instrument used in the current study. Consequently, this chapter begins with a discussion of the foundational study (Markus & Nurius, 1986) followed by a review of *possible self* research tools used in subsequent studies. After the information about research tools, research related to *possible selves* in various contexts along with implications for future research ensues.

Foundational Study (Markus, H. & Nurius, P. 1986)

In the foundational study, Markus and Nurius (1986) described *possible selves* as a "critical domain of self-knowledge that remains unexplored" (p. 954). Their article detailed the theoretical background, the nature and function of *possible selves* along with its role within the self-concept as the "cognitive components of hopes, fears, goals, and threats" (p. 954) and is reviewed below.

The rationale for *possible selves* was advanced through the results from two research studies. The first study involved college students (N=210) who were asked about

the role of possibility in their self-concept. In order to gain a general idea about affective and motivational states, subjects completed the Affect Balance Scale (Derogatis, 1975), the Rotter Locus of Control Scale (Rotter, 1966), the Rosenberg Self-Esteem Scale (Rosenberg, 1965), and a Hopefulness Scale (Beck, Weissman, Lester & Trexler, 1974). These scales, designed to assess general expectations and feelings about the future, were completed before the *possible selves* questionnaire.

The *possible selves* questionnaire was based on an earlier study with a different group of college students who were asked what was possible for them. The following categories were formed (examples are in parenthesis): general descriptors or adjectives (selfish, creative, intelligent), physical descriptors (good-looking, blind, wrinkled, athletic), life-style possibilities (active social life, being health conscious, a cancer victim, alcohol dependent), general abilities (able to fix things, able to cook well, able to influence people, knowledgeable about art or music), possibilities reflecting various occupational alternatives (business executive, supreme court justice, artist, taxi driver, police officer) and possibilities directly tied to the opinions of others (being appreciated, loved or popular). Analysis of data indicated that most of the items were meaningful to the majority of respondents. Subjects indicated that they thought about the past and the future a great deal of the time. A positive bias was noted because more of the positive items were considered possible than negative items.

Criterion variables, such as positive and negative affect, hopelessness, esteem and locus of control were regressed on various self components (past selves, now selves, ever-considered selves, and probable selves) in separate models. "Each of the self components was a significant predictor for esteem, and for global predictions about the

future; and probable selves contributed significantly to the explanation of positive affect, and personal control” (p. 959). Students believed that they were likely to change in the future. “These data suggest that individuals can reflect on their possible selves and that these selves are not identical with descriptions of their current or now selves” (p. 959). A strong positive correlation was found between items endorsed in the past and those endorsed as currently descriptive but the relationship between items ever considered and items currently descriptive was significantly lower. Only the negative past selves had substantial relation with the selves imagined as possible. “Thus, to the extent that individuals admit to something negative as a past self, they seem to believe that such a characteristic might also describe them in the future” (p. 959). Variance in an individual’s current affective and motivational state may be explained by dimensions other than the current self.

The purpose of the second study described in this article was “to evaluate the relative contribution of *possible selves* to these measures of the individual’s current affective and motivational state” (p. 959). More specifically, the researchers sought to “evaluate whether in explaining current affective and motivational states, possible selves would provide additional explanatory power beyond which the now selves could offer” (p. 959). Respondents completed the same measures as the respondents in the initial study. Analysis of results indicated that knowing the probability of certain *possible selves* helped to explain current negative affect. “All of these possible self components were found to contribute significant additional variance to the explanation of all the dependent measures” (p. 960).

Conceptions of possibility are an important form of self-knowledge reflected in relationships, decision making and individual differences. “Possible selves can then be seen as personalized cognitive carriers of some of the dynamic aspects of personality” (p. 966). *Possible selves* were also linked to motivation and change. Researchers called for future empirical work investigating how *possible selves* operate within the self-system in various contexts.

Possible Self Research Tools

In order to measure *possible selves*, the *possible self* questionnaire (PSQ, Markus & Nurius, 1986) and the *possible self* instrument (PSI, Cross and Markus, 1991) were developed and adapted several times. The context and population of each study were very diverse necessitating modifications of the original instruments. These research instruments and adaptations are reviewed in the following section.

Possible Self Questionnaire (PSQ)

In the foundational study, Markus and Nurius (1986) used the *possible self* questionnaire (PSQ) with college students to identify their possibilities. In the questionnaire, 150 possibilities were listed in 6 categories. For each item, respondents were asked if the statement ever described them, now or in the past. If the statement was ever considered a *possible self*, respondents were asked how probable the *possible self* was for them and how much they would like the *possible self* to be true. Validity and reliability of the PSQ was reinforced by several additional studies. For example, Markus and Wurf (1987) reported good test/retest reliability over a one week period of time and Dunkel (2000) reported good split half reliabilities using the PSQ with college undergraduates.

Robinson and Davis (2001) adapted the PSQ by limiting the focus of *possible selves* to participants' *occupational possible selves*. Participants were low-income adult women (ages 18-59) who were asked to: list up to six *hoped-for* and up to six *feared occupational possible selves*; rate the likelihood of attaining each *possible self*; rate how much they hope for or fear each self; and indicate whether they have seen the self modeled by someone that they know personally. Participants were also asked to describe what they were doing to achieve their most *hoped-for* and avoid their most *feared possible self*.

Even though *possible self* studies using the PSQ changed format and focus, most participants were adults. However, when Aikins, Bierman and Parker (2005) were interested in the transition to junior high school from elementary school, their research participants were youth (ages 11-13 years). The influence of pre-transition friendships and self-system youth characteristics were examined. As one of the pre-transition measures, researchers asked participants to describe five junior high *possible selves*. The wording for the interview was adapted from the PSQ. Following the open-ended interview questions, participants were given six social vignettes describing possible junior high challenges followed by several questions about expectations, feelings and problem/coping estimations in each situation. Answers were rated on a 5-point scale that ranged from "yes definitely" to "no definitely not".

Possible Self Instrument (PSI)

Another important development in the assessment of a person's *possible self* perceptions was constructed by Cross and Markus (1991). The "*possible self instrument*" (PSI) was originally developed to investigate the *possible selves* of adults (ages 18 – 86).

Following a definition of *possible selves*, participants were asked to list all of the hoped-for *possible selves* that they could currently imagine. *Feared selves* were introduced next and participants were asked to list current *feared possible selves*. In the third step, participants were asked to indicate the two most important *hoped-for selves* and the two most important *feared selves*. For these most important selves, subjects were asked to rate how capable they felt in accomplishing (or preventing) the *possible self* and how likely the possibility was to come true using a 7-point scale (1 = not at all capable/likely, 7 = completely capable/likely) and list what was done/not done in the last month to make this *possible self* come true.

An open-ended questionnaire, modeled closely after the PSI, was used by Hooker and Kaus (1994) to examine health-related *possible selves*. The description of *hoped-for* and *feared selves* was slightly changed along with the question sequence. *Hoped-for selves* were explained and questioned first, followed by *feared possible self* inquiries. For analytic purposes, an additional category (i.e., health salience) was created from the initial two categories. However, researchers found that “there were too few participants who listed their most important hoped-for self as health related ($n = 28$) to conduct a regression analysis with this subsample” (p. 129) and suggested sampling participants who would be more likely to have positive health goals such as rehabilitation patients or health club members in future studies. Perhaps if the questions were directed towards participants’ *possible self* beliefs in a specific domain, researchers could obtain usable information from a general population.

Garcia, Lissi, Egan-Dowdy, Davila, Matula & Harris (1995) studied the gender and ethnic differences in the *possible selves* of college students. The population was

college educated as in the Cross and Markus (1991) and Hooker and Kaus (1994) studies. However, Garcia and others used a diverse ethnic population while previous studies (Cross and Markus, 1991; Hooker and Kaus, 1994) used a predominantly white population. In addition to the inclusive population, the focus of the Garcia, et al. (1995) study was another difference. Respondents were asked to think specifically about *possible selves* in the realm of academics. In previous studies (Cross & Markus, 1991; Hooker and Kaus, 1994) participants were not directed to a specific *possible self* domain that became a problem for specific analysis.

Garcia et al. (1995) adapted the open-ended protocol from Cross & Markus (1994). Respondents were asked to list three academic hoped-for and three *academic feared selves*. Following the listing, students rated how important or concerned they were about achieving the self, how efficacious they felt about attaining or avoiding the self, and to estimate the likelihood that the self would describe them in the future. The open-ended format seemed to work well for students. Almost all of the students were able to report at least two hoped-for and two *feared possible selves*. However, “domains generated by students differed dramatically from those typically found in conventional self-concept inventories” (p. 7). In addition to the traditional self-concept themes of ability and performance, themes relating to effort, study habits, motivation, and affect were also identified and varied by gender and ethnicity. The differences “seem to be a promising foundation from which to further explore the beliefs regarding: the likelihood of attaining (or avoiding) that self; the importance of attaining (or avoiding) that self; and in the efficacy one feels for attaining (or avoiding) that self” (p. 7). Garcia and others

(1995) urged the examination of differences in goal-directed behavior by levels of perceived likelihood, importance, and efficacy.

Whaley (1998) examined *possible selves* across stages of exercise involvement with middle-aged women (35 - 59 years old). The instrument used in this study was similar to the one used by Hooker and Kaus (1994) with an additional section. After subjects completed the section on *hoped-for possible selves*, they completed a section dealing specifically with exercise behavior. The same process was repeated for *feared possible selves*. The added sections, dealing with exercise behavior, were pilot tested to develop a list of *exercise possible selves*. Ten women, representative of a wide variety of exercise behavior, listed all of their *possible selves* in the exercise domain. A list was compiled and shared with a second group of ten women, who chose the top three *hoped-for* and *feared possible selves* from the lists. The most commonly cited *possible selves* specific to the exercise domain were used in the final instrument. The resulting questionnaire was administered to a third group of five individuals to provide feedback on the clarity of instructions and approximate completion time needed. Minor changes, such as putting some instructions in bold print, were made before the full study began.

Using another adaptation of the PSI and the PSQ, Guinan (1997) examined the relationships among perceived stress, *possible selves*, and physical activity using a phone interview technique. Participants ranged in age from 62 to 82 years and had signs of knee osteoarthritis. After a brief introduction, the interviewer asked subjects to list their *possible selves*. The interviewer read back the list of *possible selves*, asked for changes or additions and an indication of the three most important selves. For each of the three most important selves, the subject answered three questions following the Hooker & Kaus

(1994) protocol. In addition, the interviewer asked if the subject did anything in the past month that made this *possible self* less likely to come true. Following the hoped-for questions, the interviewer repeated the procedure using *feared possible selves* as the content. After the open-ended survey was completed, subjects responded to a 32-item closed-ended questionnaire adapted from Marcus and Nurius (1986). Words and phrases that described *possible selves* were read to subjects. After each description, subjects were asked to answer two questions on a scale of one (not at all) to seven (very much) concerning how much and likely the *possible self* would be descriptive in the future. Reliability of the closed-ended questions was very good using a one week, test-retest format. The combination of open-ended and closed-ended questions was a significant adjustment. The phone interviews were appropriate for subjects who may experience pain while writing but may not be necessary and/or effective with a different population.

Knox, Funk, Elliott & Bush (1998, 2000) used the *possible selves* approach to identify categories of adolescent self-concept that correlate with self-esteem. Participants (85 males and 127 females) were predominantly Caucasian from five high schools and ranged in age from 14 to 19. Subjects completed the PSI and the Self-Perception Profile for Adolescents Global Self-Worth Scale (Harter, 1988). Instructions for the *possible self* questionnaire were modified for use with younger participants but otherwise exhibited few changes. The self-generated hoped-for and *feared possible selves* lists were coded into mutually exclusive categories using inductive content analysis (Patton, 1990). Two independent raters evaluated the data with very good inter-rater agreement for *hoped-for* and *feared possible selves*. [i.e., Using Landis and Koch's 1977 scale for interpreting values, the inter-rater agreement was "almost perfect".] Knox et al. (1998) concluded that

the PSI was “an approach that may be particularly suited to identify the self-views of adolescents” (p. 71).

Anderman's Possible Self Instrument

Anderman, E. M. and Anderman, L. H. (1998, 1999) examined the role of present and *future academic selves* through two studies. In the first study, the relationships among present selves, *future selves* and grade point average were examined with seventh grade participants who were mostly European American. The participants from two middle schools completed items about their *present* and *future selves* in the academic and social domains. Using a 5-point Likert-type scale subjects were asked to evaluate the extent to which descriptors, such as good student, competitive, characterized them (1 = not at all to 5 = very much). Additional information included socioeconomic status as determined by parent education, seventh grade GPA (grade point average in English, mathematics, science and social studies), gender and ethnicity.

In the second study, using an urban sample, Anderman and Anderman (1998, 1999) examined the relationships among *present selves*, *future selves*, mastery goals and performance-approach achievement goals with sixth, seventh and eighth grade participants. The administration procedure was the same as the first study. The measure of *present* and *future selves* contained a series of 10 descriptors and students were asked to determine how much the descriptor described them now and how likely it was to describe them five years from now using a Likert-type scale (1 = not at all like me to 5 = very much like me).

Oyserman's Possible Self Instrument

Oyserman and Markus (1990) hypothesized that youth, varying in the severity of their delinquent behavior, could be distinguished by their *possible selves*. The most delinquent youth would display less balance between their expected and *feared possible selves* than their less problematic peers. In order to test this hypothesis, four groups of students with various degrees of delinquency were studied. Youth (aged 13 – 16) were interviewed twice within three months by seven trained interviewers. The subjects completed several measures. The first questionnaire was an open-ended self-concept measure where students were asked to list three hoped-for, three expected and three *feared* selves for next year after being provided with a short explanation of the questions. Next year selves were chosen because pilot testing revealed that these adolescents had difficulties generating specific selves for a more distant future. The open-ended questions yielded content measures for *expected*, *hoped-for* and *feared* selves. *Expected or hoped-for possible selves* were: *positive intrapersonal selves*, *positive interpersonal selves*, jobs, school or school related extracurricular activities, material goods, and any negative selves. *Feared selves* were categorized as: negative intrapersonal selves, negative interpersonal selves, poverty, do poorly in school or extracurricular activities, crime, drugs, and death.

The second questionnaire was a closed-ended self-concept measure. For each of the 16 self-descriptors, respondents were asked to rate the extent to which it was: currently self-descriptive, probable future self-descriptive or desired/hoped-for in the future self-descriptive. Self-descriptors were common to all sub samples. Eight were positive and eight were negative. The 5-point Likert scale was condensed to a 3-point

scale to control for language differences between white and black students. The categories of strongly agree and agree were condensed to one point. Likewise the categories of strongly disagree and disagree were condensed to one category. The remaining category was a midpoint. These categories resulted in six self-concept subscales: positive current self, negative current self, positive hoped-for self, negative hoped-for self, positive probable self, and negative probable self. Rosenberg's (1965) Self-Esteem and Optimism for the Future measure were also included in the questionnaire. Analysis of results from open-ended questionnaires indicated that adolescents had no difficulty describing what is possible for them in the future and the responses were diverse. A relationship between *possible selves* and performance was found.

In order to facilitate youth's abilities to imagine themselves as successful adults and be able to connect future imagines to current school involvement, a 9-week after-school, small group, activities-based intervention was implemented and studied by Oyserman, Terry & Bybee (2002). Low-income African American youth in their last year of middle school were the subjects for this study. The two groups (*viz.*, youth who did and did not receive the intervention) did not differ significantly at baseline on grades. *Possible selves* were assessed with open-ended probes following a previously developed script (Oyserman & Markus, 1990). Students were asked to generate four or more *hoped-for* and *feared possible selves* using the following probes: "Next year, I expect to be..." and "Next year, I want to avoid being..." Most self-descriptions focused on school. After writing their *possible selves*, students indicated the selves that they were currently working on and wrote what they were doing to either attain or avoid the possibility.

In order to investigate the relationship between *possible selves*, academic performance, motivation and self-esteem, Leondari, Syngollitou & Kiosseoglou (1998) used a free response *possible self* instrument (Ruvolo and Markus, 1992). The subjects were a random sample of high school students (14-15 years old) from schools located in a residential neighborhood of lower and lower middle class families. Subjects completed the Rosenberg's Self-esteem Inventory (Rosenberg, 1965), the Achievement Motivation Questionnaire (Myers, 1965), and a *possible selves* questionnaire. The *possible selves* questionnaire followed the format of Ruvolo and Markus (1992). "Subjects were instructed to imagine themselves in the future either in a success or in a failure situation and write a short essay describing it" (p. 220). For analysis, *possible selves* were coded into seven content categories (i.e., general and vague with stereotypical images of positive *possible selves* and success due to hard work, clear specific *possible selves* with success due to hard work, general vague stereotypical images of positive *possible selves* and success due to luck, clear specific positive *possible selves* with success due to luck, complete resignation and pessimism with failure due to bad luck, reference to failure but with hints of optimism and a supportive environment and failure in specific goals due to bad luck). Results indicated that "a substantial number of subjects produced vivid descriptions of specific positive selves" (p. 221) while negative self descriptions were less elaborated.

Summary of Research Tools

Instruments developed from previous *possible self* research have been self-report measures. The original *possible selves* questionnaire (Markus & Nurius, 1986) featured general categories. Hooker and Kaus (1994) found that it was important to limit the scope

to specific subject matter. Consequently, questionnaires have included prompts focused in specific domains [e.g., academic (Garcia, et.al., 1995); health-related (Guinan, 1997; Hooker & Kaus, 1994; Whaley, 1998); occupation (Robinson & Davis, 2001); transition (Aikens, Bierman & Parker, 2005)].

None of these instruments found were specific to music, but several of the previously developed instruments provided models for the current study. The use of a five point Likert-type scale (Guinan, 1996; Anderman & Anderman, 1998, 1999; Oyserman & Markus, 1990) was adapted with descriptors (strongly agree to strongly disagree) from the Oyserman & Markus (1990) closed-ended measure. The use of statements about present and future self from Anderman (1999) also provided a basis for the instrument development in the current study. A more detailed description of the research instrument developed for the current study is included in Chapter IV.

Possible Selves

Because *possible selves* have not been studied in the music context, a review of prior research in diverse domains is warranted. These studies situate the current study within the present body of literature concerning *possible selves*.

Academic Achievement and Competence

To further define *possible selves* in a specific context, a major portion of the work has focused on various academic fields and achievement within those fields. The following studies represent some of the major advancements in this field.

Inglehart, M. R., Markus, H., Brown, D. R., & Moore, W. (1987)

Inglehart and colleagues (1987) hypothesized that the more a person focused on one possible professional self, the better future academic achievement connected with

this profession would be. In addition, when a person sees a future career as the most satisfying and attractive of all possible careers, his/her achievement would be enhanced. Longitudinal data were collected, via a self-administered survey, from medical students (N = 250) starting in their last year in high school. The independent variables were the degree to which students: focus on medicine as their only career, see medicine as a satisfying career and see their chosen medical specialty as attractive. Academic achievement, the dependent variable, was measured by grade point averages and scores from the National Board of Medical Examinations.

Researchers found that the students choosing only one possible professional self before entering the program had higher scores on the dependent measures than students choosing two professional selves. Subjects choosing two professional selves scored higher than students choosing three *possible selves*. Subjects who saw their specialty as the most attractive scored higher (on the dependent measures) than students who saw their specialty as highly attractive. Similarly, the subjects who viewed their specialty as highly attractive scored higher than students who rating their specialty as attractive.

In conclusion, the researchers found two separate aspects of *possible selves*, a cognitive (structuring aspect) and an energizing aspect. Both of these aspects contributed to predicting the academic achievement of students four to six years after their *possible selves* were initially measured.

Cross, S. E. & Markus, H. R. (1994)

The relationships among an individuals' self-schema, *possible self* perceptions and performance in a specific domain were investigated with two studies. The research participants for both studies were students selected from a pool of 1,500 introductory

psychology college students. All subjects completed the Rosenberg (1965) self-esteem scale and a pre-selection questionnaire as part of their course research requirements. For the pre-selection questionnaire, subjects were asked to rate their ability to solve problems and the importance of being able to solve problems. Subjects were divided into two groups (i.e., schematic individuals felt that they had logical ability which was important and aschematic individuals who believed the opposite). Additional selection was based on the number of mathematics courses a student had taken and the amount of time that students spent solving puzzles.

The purpose of the first study was to demonstrate that despite equal ability, schematic and aschematic students react differently to a task requiring problem solving ability. Subjects completed the Life Orientation Test (LOT, Scheier & Carver, 1985) to measure optimism and the Logical Reasoning Test (LRT) which consisted of 25 questions from the analytic section of the Graduate Record Exam practice test (GRE; Graduate Record Examinations Board, 1987). After completing LOT and LRT, participants were queried about their response to the reasoning test and whether a series of *possible self* descriptors (i.e., logical, analytical, rational, unreasonable, unscientific, irrational) were possible or not possible. The analysis of data indicated no statistically significant differences between schematic and aschematic individuals in self-esteem as measured by LOT or in reasoning perception as measured by LRT. “(S)chematic students were not globally more self-confident or optimistic than the aschematic students” (p. 427). Even though their self-esteem and reasoning perception were similar, students reported different responses to the situation. “(S)chematic students reported that they thought the test was easier and more enjoyable than did the aschematic participants ($p <$

.01). Schematic participants also reported feeling more control of the results of their test ($p = .05$)” (p. 427). When the endorsements of *possible self* terms were analyzed, schematic students endorsed more positive logical descriptors as possible than aschematic peers. The differences with negative *possible self* terms were not statistically significant.

Latency of responses was assessed through the use of computer technology. When indicating that negative logical terms were “possible for me”, aschematic individuals responded significantly faster than schematic participants. Other responses were not significantly different. Researchers concluded that “the schematic students were not more positive in their responses in general, but rather they responded selectively to those terms that were consistent with the logical problem-solver self-schema” (p. 428-9). Researchers concluded that groups differed in test enjoyment and perception of difficulty even though they performed similarly on a test of problem solving ability.

In a follow-up study, researchers were interested in students with negative *possible selves*. “Could negative possible selves cause them to reduce effort on a later problem-solving task?” (p. 429). In the second study, students completed the LRT from the first study (now termed LRT-1) and an alternate version (LRT-2). The LRT-2 consisted of an additional 25 questions from the analytic section of the Graduate Record Exam practice test (GRE; Graduate Record Examinations Board, 1987). Approximately, two months after completing LRT-1, students were randomly assigned to feedback conditions, negative or no feedback. Students were told either that they were in the 47th percentile for all college students or received no feedback. After receiving feedback in small groups, students completed the LRT-2.

There were no significant differences between schematic and aschematic students on LRT-1. However, more action-related items were endorsed by schematic students than by aschematic students. “(S)chematic participants perceived that they were better able to focus their attention on the questions, persisted with difficult questions, and had fewer anxiety- and failure- related cognitions” (p. 431). There were no statically significant differences between the performance on the LRT-2 after failure feedback by schematic and aschematic individuals. However, aschematic individuals with no feedback performed significantly worse than all of the other students. Researchers concluded that “persons aschematic for logical reasoning ability were more dependent than schematic persons on failure feedback to motivate performance in the domain of the self-schema” (p. 434).

In conclusion, researchers demonstrated that “self-schema, which gives form, direction, and self-relevant meaning to one’s logical reasoning ability, is an important element in individuals’ beliefs about and reactions to their performance in that domain” (p. 434). The self-schema helps a person be more sensitive and responsive to relevant stimuli, facilitating quick appraisal of a situation and preparation of effective and appropriate skills/strategies. Self-schemas provide a foundation for development of ability *possible self* perceptions. A *possible self* may connect a network of experiences, strategies, and self-knowledge. “In this way, the possible self may link effective steps and strategies for solving reasoning problems with beliefs about one’s ability and competence in the domain” (p. 435). Worry and anxiety may be dispelled by a positive future view. At the same time, performance may be influenced.

Garcia, T. & Pintrich, P. R. (1995)

The role of *possible selves* in perceptions of competence and self-regulation was investigated in a domain-specific context. Participants were seventh grade, middle school students (141 female, 146 male) from a working-class suburb of a Midwestern city who completed two self-report questionnaires with domain-specific questions addressing four academic subject areas (mathematics, English, science, and social studies). In order to assess *possible selves*, students were asked to think about themselves five years in the future. These questions were in the “What I Could Be Like” *possible self* questionnaire. Two subscales from the junior high school version of the Motivated Strategies for Learning Questionnaire (MSLQ, Pintrich & DeGroot, 1990) were used to assess self-efficacy for learning and self-regulation strategies.

In order to predict self-efficacy in mathematics, six self-schema components (the likelihood, importance, and efficacy for positive possible math self-schema and the likelihood, importance, and efficacy for the negative possible math self-schema) were entered. The only significant predictor of self-efficacy was perceived likelihood of a good math student *possible self*. “(T)he perceived likelihood of the good math student possible self explains a unique portion of the variance in perceived mathematics competence” (p. 7). Importance of being a good math student and self-efficacy were the only significant predictors of self-regulation.

In the science domain, the only significant predictor of self-efficacy was perceived likelihood of being a poor science student. The more students believed that they could be a poor science student, the lower the self-efficacy for science. Significant

predictors of self-regulatory strategies were one's self-efficacy in science and one's sense of the instrumentality for attaining a good science student *possible self*.

For social studies, self-efficacy was more strongly related to negative *possible self* variables than to positive *possible self* variables. High levels of self-efficacy were linked to “attaching high importance to the possibility of becoming a good social studies student; perceiving the possibility of becoming a poor social studies student as low; and reporting high levels of efficacy for avoiding becoming a poor student” (p. 8). In addition, the importance of attaining a good student *possible self* in social studies had a positive effect on self-regulation.

To summarize, when hoped-for *possible selves* were seen as highly likely, students exhibited a greater self-efficacy in mathematics, English and science. When students perceived *feared possible selves* as high in likelihood, they were prone to have low levels of self-efficacy across all four academic subject domains. “(S)elf-efficacy in a domain had the strongest effect on self-regulation; nevertheless, *possible selves* explained a unique portion of the variance in self-regulation above and beyond the effects of perceived competence” (p. 8). By valuing a *possible self* or maintaining a sense of efficacy for attaining (or avoiding) the *possible self*, self-regulation may be enhanced. When threats to self-efficacy in a domain emerge, *possible self* images may help to buffer the effects. “This buffering effect can be interpreted as a corollary of the fact that possible selves help provide new incentives for the individual. By projecting oneself into the future, one need not be limited to what one is at the present” (p. 9). Garcia and Pintrich encouraged domain-specific research in this area with younger students focusing on methodological issues. Because, most of the research before 1995 was completed with

adults, they questioned the use of open-ended questions that might not be appropriate for use with younger students. Researchers concluded by suggesting that additional studies be completed on the role of *possible selves* in student learning and motivation.

Leondari, A., Syngollitou, E. & Kiosseoglou, G. (1998)

Researchers examined the relationships among *possible selves*, academic performance, motivation, and self-esteem in this study with a random sample of 289 high school students (14-15 years old). Academic achievement was measured by grade point average (GPA). Subjects also completed several questionnaires including Rosenberg's Self-esteem Inventory (Rosenberg, 1965), the Task Persistence Questionnaire and were asked to write a short essay about the future describing a success and a failure situation.

The *possible selves* descriptions were coded into seven content categories including combinations of positive, negative, success through luck, success through hard work, vague and clear descriptions. Most of the subjects indicated that success was due to personal effort. There were no gender differences in relation to positive *possible selves* or motivation. However, while females outperformed males in academic achievement and task persistence, females had substantially lower self-esteem.

Subjects who imagined themselves successful in the future and who had well-elaborated specific positive *possible selves* were more successful academically in comparison to the other groups. Students with clear descriptions depicting success because of hard work were more likely to have higher academic achievement as measured by GPA and showed more persistence on tasks than other students.

This study was documented in the form of a brief report. It was not detailed enough to make evaluations about the data because only the analysis was presented. The method and results were not reported.

Anderman, E. M., Anderman, L. H. & Griesinger, T. (1999)

The *present* and *future academic selves* of middle school students and their goal orientation were investigated in two studies. In the first study, relationships among *present selves*, *future selves* and academic achievement were examined. Seventh graders (N = 315) completed the Patterns of Adaptive Learning Survey (PALS, Midgley, Maehr, & Urdan, 1993) which contained various aspects of motivation from the goal theory perspective (i.e., mastery goal orientation is focused on task mastery or improvement while performance goal orientation is centered on being more competent when compared to others). In addition *present* and *future selves* in the academic and social domains were also assessed along with socioeconomic status (SES).

Differences in *present* and *future academic* and *social selves* were statistically significant predictors of change in grade point average (GPA). When the *present academic self* was higher than the *future academic self*, GPA increased. When *present social selves* were higher than *future social selves*, GPA decreased.

In the second part, relationships among demographic variables, *present* and *future selves*, mastery and performance achievement goals were examined. Students (N = 220) from sixth, seventh, and eighth grades completed questionnaires in November and again in May of one academic year. Demographic variables included grade level, gender, and ethnicity. The only statistically significant predictor of achievement goals for the present self was ethnicity. African-American students were somewhat more likely to endorse

performance goals than non-African-American students. Students who viewed themselves positively academically in November were more likely to endorse both performance and mastery goals in May.

The demographic variables revealed a different pattern in the *future selves* model. Lower SES students and African American students reported lower *future good student selves*. Younger students reported higher *future bad student selves* than older students. Performance goals were related positively to *future good student self* and to being African-American. *Future bad student* measures were not related to performance or mastery goals.

Both *present good student* and *future good student self-concepts* were related to achievement goals. *Present good student selves* were related to both mastery and performance goals. However, *future good student selves* were only related to performance goals.

Markus and Nurius (1986) conceived *possible selves* as *hoped-for* and *feared* selves. However, in the Anderman, et al., study, *possible selves* were operationalized as *present* and *future selves* in the good student/bad student sense. Analysis indicated “that present and future selves are related to achievement and motivation during early adolescence” (p. 11).

Kerpelman, J. L., Shoffner, M. F. & Ross-Griffin, S. (2002)

The primary goal of this research study was to understand the thinking of African-American mothers and daughters. Mother’s and daughter’s opinions of the daughter’s expected *possible self* perception were contrasted, along with strategies for achieving goals. The participants were 22 African-American mother-daughter pairs who lived in a

rural region of the Southeast. Following the reading of a paragraph about *possible selves*, mothers and daughters were interviewed separately. Each interview was audio taped and subsequently reviewed by two coders to determine the types of expected selves described and the specific strategies being employed to achieve these goals.

Analysis of interviews indicated that most mothers and daughters expected the daughter to be “educated, employed, responsible, and independent yet socially connected” (p. 5). Career and family roles were important to daughters and they could describe their *future possible selves* in detail. The strategies most likely to be employed by daughters to reach their academic goals were to keep up their grades, be personally motivated and focused, and help locate financial resources. Mothers’ reported main strategies included encouraging and supporting daughters to achieve, monitoring homework, saving money, and investigating colleges. The mother’s level of education was the only demographic variable that appeared to make a difference in strategies. Mothers with no college education had fewer, less elaborated strategies than mothers with college experience.

To statistically compare the beliefs of mother-daughter pairs on a set of *possible selves* representing different domains, Q-sort methodology (Brown, 1993; McKeown and Thomas, 1988; Stephenson, 1953) was implemented. Items were drawn from the *Possible Selves* Questionnaire (Markus, 1987) and sorted, by mother-daughter pairs, into 9 columns. The columns ranged from “most expected” to “least expected”. Pairs expected the daughter to be a high school graduate and did not expect the daughter to be unhealthy, incompetent, in prison, on welfare, or a high school dropout. However, the expectations of older daughters were stronger than those of younger daughters in relation to personal

attributes such as organization, creativeness, helpfulness, intelligence, being a good student and motherhood. The expectations of younger daughters were stronger than older daughters for qualities related to life circumstances such as religion, being rich and famous, careers as a business owner or being a lawyer. The younger daughters had a broader array of careers as the daughters' expected self than the older daughters.

Adolescents were able to elaborate on their *possible self* expectations and develop strategies for obtaining their goals. Although there were differences according to the age of the daughters, the younger daughters expressed more career possibilities suggesting that as they go through adolescence possibilities are narrowed. It would be important for adolescent girls to develop a wide range of possibilities. In addition, it may be that older daughters realize that one strategy for success may be to develop personal attributes related to a given field. Perhaps younger adolescents are still exploring different occupational/life futures while older adolescents have either identified a path and are engaged in strategies for realization.

Packard, B. W. & Nguyen, D. (2003)

The purpose of this study was to examine the stability and change of the science career-related *possible selves* in women. Participants ($N = 41$) took part in an intensive summer science and math-related academic program during early adolescence and currently had either recently graduated from high school or just completed their 1st or 2nd year of college. Semi-structured interviews were conducted to collect information about current career plans, factors contributing to their career decision, significant adult relationships, significant experiences or events and their estimate of the costs and benefits of their decision.

Data were analyzed using a qualitative procedure. Of the 41 participants, 30 were still pursuing science, math, engineering or computer technology. Only six participants maintained their original career aspirations throughout adolescence, crediting the continuity with their interest in the subject. However, the 30 students who continued in science, math, engineering or computer technology fields credited their decisions to actively exploring and experiencing their possibilities. Interaction with others through summer programs, work-related internships and other programs was valuable.

“Essentially adolescents can create, develop, or imagine possible selves through interactions with the significant adults in their environments” (p. 261). Limitations of this study include the modest sample size and background of the participants. However, Packard and Nguyen stated important implications for practice. “Young adults require systematic opportunities for self-reflection and career exploration to make informed decisions” (p. 262). Career exploration is recommended throughout the K-12 years, so that while students are learning about important subject matter, they are also encouraged to think about their *future selves*. “Helping young people to see the explicit connection between mentoring and their own possible selves can increase the likelihood of career exploration and intentional engagement in career-related activities, and serve to facilitate positive career development” (p. 262).

Packard and Nguyen described connections between exploration and eventual career decisions. During adolescence, students explore their future possibilities and make decisions in other areas of their lives. If exploring and experiencing help students to decide on a career path, perhaps exploring and experiencing will also help students to

decide on a *possible self* in other areas of their lives such as leisure time activities, coping strategies, and a self-concept outside of the chosen career path.

Summary of Academic Achievement and Competence Literature

Possible selves in an academic context have been studied with college students (Inglehart & others, 1987; Cross and Markus, 1994), high school students (Kerpelman, 2002; Leondari, 1998), and middle school students (Anderman, 1999). Cognitive and energizing aspects of the *possible self* predicted academic achievement (Inglehart & others, 1998; Kerpelman & others, 2002). Students who imagined themselves as successful in the future had well-elaborated *possible selves* and were successful academically (Leondari, 1998). However, Kerpelman (2002) also found that younger girls articulated more possible careers than older girls did suggesting that as students go through adolescence they narrow their possibilities. Packard and Nguyen (2003) articulated the importance of exploration and developing *possible self* perceptions in various contexts to facilitate positive career development. Adolescence may also be an important time for students to imagine their possibilities in domains that may or may not be related to their career aspirations as they search for their identity.

Identity

One of the major tasks during adolescence is the search for an identity. Self-conception is important for identity formation (Santrock, 2003) and forms the basis for *possible self* conceptions. The studies reviewed in this section relate to the importance of *possible self* perceptions in the establishment of an identity.

Kalakoski, V. & Nurmi, J. (1998)

The purpose of this study was to explore Finnish adolescents' identity exploration and commitment related to future education, occupation, and family. In Finland, students attend elementary school for six years starting at age seven. They continue to secondary school for 3 years (grades 7 through 9) and subsequently choose between senior high school for 3 years or vocational school for 2 to 3 years (10th through 12th grades). The study compared students who were about to make a transition into a new school with students who had a few years until they needed to cope with a transition and related decisions. Levels of exploration were measured separately in education, occupation, and family.

The secondary school participants were 7th graders (29 boys, 35 girls) and 9th graders (23 boys, 35 girls). The senior high school students were 10th graders (30 boys, 37 girls) and 11th graders (20 boys, 35 girls). All students from one urban school district in the Helsinki metropolitan area were invited to participate and accented. Approximately one month before the end of the school year, these typical Finnish adolescents completed two questionnaires, exploration/commitment and a future plans/background questionnaire). According to their future plans, students who planned to go to senior high school were separated from students who planned to attend vocational school. Other background variables included age, gender, grade level and parental level of education.

The exploration and commitment variables were moderately related to future education, occupation and family. Statistically significant main effects for grade were exploration and commitment of future education as well as exploration of occupation. Secondary school 9th graders and senior high school 11th graders reported higher levels of

educational exploration than did 7th graders. Higher levels were also detected in exploration concerning a future occupation in 9th graders than in 7th graders. In addition, 9th graders reported higher levels of commitment to future education than adolescents from other grades reported. “Overall, the results indicate that adolescents showed the highest level of exploration concerning education, the next highest for occupation, and the lowest for family” (p. 41).

Grade differences in identity exploration and commitment were related to family variables in a linear fashion (i.e., significantly higher among 11th graders than among 7th graders). In addition, a statistically significant main effect for gender in family exploration was detected (i.e., girls indicated higher levels of exploration than boys). The level of exploration for boys, concerning education, was higher than occupation which was higher than future family. Girls’ level of exploration related to education and occupation was not significantly different but exploration levels concerning future education and occupation were higher than exploration concerning a family.

The level of commitment was different according to grade. Commitment related to future family was higher among 11th graders than other students. Secondary school students (i.e., 7th and 9th graders) and high school students (i.e., 10th graders) displayed higher levels of commitment to future education than to future occupation and higher levels of commitment to their future education than to family-related topics. High School students who were in 11th grade exhibited the highest level of commitment in future education and family. The level of commitment concerning future education was higher than commitment concerning future occupation.

When preparing for an educational transition these subjects reported exploration related to the future (i.e., education and occupation). “Thus, it seems that institutional transitions provide a basis for the onset of identity exploration in the related domains of future life. Adolescents also reported a high level of commitment related to future education in a situation in which they were faced with an educational transition.” (p. 42).

Concerning the future family, a linear increase was uncovered with age and exploration/commitment which fit the maturation hypothesis about identity development. This linear increase may be expected because no major changes were anticipated in the family during this time period. During transitions, identity seems to progress differently according to the domain. “The results further demonstrated that exploration and commitment that related to education and occupation were in focus during middle adolescence, whereas the oldest participants also showed a high level of commitment to family-related issues” (p. 43). Adolescents showed high levels of exploration and commitment related to education. However, high levels of exploration but not commitment were related to occupation. “It may well be that, although exploration related to both education and occupation is reasonable during middle adolescence, commitment to a future occupation becomes important only after leaving school” (p. 43).

Girls explored family-related issues more than did boys but no gender differences in educational and occupational content areas were found. However, when the content areas were compared to each other, girls showed higher levels of exploration related to future education and occupation than to family related issues.

Data were limited to cross-sectional and age-group comparisons. A longitudinal study would provide additional evidence. The sample was not randomized, relatively

small, culturally and racially homogenous. The authors believed that the extent to which adolescents reported exploration and commitment decisions were closely related with the challenges and structures provided by their developmental environments (i.e., an institutional transition). “The major challenge for future research is to identify and investigate those interactive patterns between the developing individuals and their environments that underlie adolescent identity development” (p. 45).

Dunkel, C. S. (2000)

The fundamental hypothesis for this study was that “the generation of possible selves act as a mechanism of exploration in the identity construction process” (p. 521). Participants ($N = 277$) were undergraduate psychology students who took part in the project in exchange for extra credit. Participants completed an identity classification questionnaire (i.e., EOM-EIS-2) and a *possible selves* questionnaire. The EOM-EIS-2 (Adams, Bennion & Huh, 1989) is a 64-item instrument that includes 16 statements representative of identity statuses. Reliability and validity was moderate to good in previous studies (Adams, et al., 1989; Hall et al., 1998). Following completion of the questionnaire, students were separated according to five different identity classifications (i.e., achieved, moratorium, foreclosed, diffused, low profile). The *possible selves* measure (Markus and Nurius, 1986) consisted of 130 items in 6 domains. The scale was divided into positive, negative and neutral statements. Reliability was reported by Markus (1987) and validity by Markus and Nurius (1986).

Analysis of data indicated that the Moratorium and Foreclosure groups endorsed significantly more positive *possible selves* than the Diffusion and Low profile groups. The Moratorium group also endorsed more neutral and negative *possible selves* than the

other four groups. These results are consistent with expectations. Identity exploration was associated with the generation of *possible selves*. The Moratorium group displayed a greater balance between positive and negative *possible selves* than the other groups. “However, contrary to predictions, the Achieved group did not endorse significantly more *possible selves* than the Foreclosed and Diffused status groups” (p. 524).

A likelihood score was obtained by summing the individual scores of all *possible selves* endorsed and dividing by the total number of *possible selves* endorsed. No significant differences were found between groups in the likelihood scores for negative or neutral *possible selves*. However, on the positive *possible selves* category, the Achieved group had a higher average than the Diffusion and Low Profile groups. The Foreclosed group had a larger average than the Diffusion group. Identity commitment was associated with an increase in the belief that a person’s positive *possible selves* are likely to be realized. “(A) mechanism of identity exploration is the production of possible selves ... Thus the constructive process of creating one’s own identity may begin with the generation of future possibilities” (p. 527). Additional studies are needed to further examine changes in *possible selves* through time.

Summary of Identity Literature

As youth move into later adolescence, *possible self* perceptions seem to be important in identity exploration and commitment (Dunkel, 2000). In addition, hoped-for *possible selves* may act as goals and identity commitment may solidify these goals. It would be important for early adolescents to develop a range of hoped-for *possible selves* that are believed as possible to facilitate life-long learning in a specific domain. Kalakoski and Nurmi (1998) encouraged identity development research during

adolescence in different life domains because “identity seems to progress differently in concert with the various transitions related to each domain” (p. 43). Even though younger adolescents were not as interested in exploring career choices as older adolescents, they were interested in educational decisions, both committing and exploring. It would be important to understand adolescent identity development in relation to domains, such as music, where there are different types of transitions occurring (viz., physical changes in the voice).

Age Differences in Possible Selves

Although many *possible selves* studies have used adults and older adolescents as research participants, the development of *possible self* images may be very important for early adolescents. “(P)ossible selves may plausibly evolve during the development of personal identity. In addition, previous studies (e.g., Knox, et al. 1998; Oyserman, et al., 1995) have suggested that predicted self-conceptualization patterns were found in middle school students” (Hsu, 2001, p. 45). The following studies illustrate the need for further information about the development of self-conceptualizations in early adolescents.

Hart, D., Fegley, S. & Brengelman, D. (1993)

Two studies were presented dealing with children and adolescents’ self-concepts. Differences among *current self-concepts* and *future self-concepts* were the focus of the first study while the focus of the second study was the relationships among *present selves* and *past selves*.

In the first study, the 82 research participants were children, pre-adolescents, and adolescents, from white, lower-middle-class and middle-class families in a large urban school district. A trained research assistant interviewed each participant in school by

asking the following questions: “What kind of person are you? How would you describe yourself as a person? and How would you describe yourself five years in the future? What kind of person will you be when you get five years older?” (p. 268). The responses were audio recorded and later transcribed. Descriptions of *current* and *future self* were coded and assigned to a content category (i.e., physical, size, active, social, psychological).

Results indicated a difference between the *current* and *future self*. “Children and adolescents were more likely to describe the current self than the future self with descriptors from categories of typical activities, positive personality, negative personality and preferences” (p. 268-9). The *future self* was more likely described in terms of relationship and status than the current self especially with adolescents. “(T)here are few differences among children and adolescents in the extent to which relationships and status are referred to, but in anticipating the *future self*, adolescents are more likely than children to rely on descriptors in this category” (p. 269). In the general physical category, girls expressed significantly more characteristics than boys.

Age-related trends were noted by linear decreases with age in physical descriptor use and in percentage of total characteristics in the general physical and size categories. Linear increases with age were detected in positive personality and positive cognitive categories. “Children and adolescents in this study were more likely to think of themselves now than of themselves five years in the future in terms of activities (‘playing the trombone’, ‘going camping’), personality characteristics (both positive and negative such as ‘friendly’ or shy’) and preferences (‘like going to the movies’)” (p. 271). Projections into the future, especially for pre-adolescents and adolescents, contained

references to relationships and social status (e.g., have a boyfriend, be popular).

Researchers suggested that perhaps the results would be different if subjects were asked directly whether personality characteristics ascribed to their current self would also apply to their *future self*. However, analysis of results “suggest that projections of the self into the future are not merely reflections of the current self, and that important differences can be detected through the use of free description tasks” (p. 271).

The subjects in the second study ($N = 88$) were predominantly white children and adolescents (grades 5, 7, 9, 11) from middle-class families in a small suburban school district. Questionnaires were completed during two sessions in the classroom. In the first session, students were asked to write important characteristics of their self currently, four years ago, two years ago and two years in the future. At the second session, all students received a paper with six columns. Each subjects' descriptors were in the first column with the remaining five columns titled: current self, four years ago, two years ago, two years in the future and four years in the future. Students were asked to rate the descriptors on each line (viz., 0 = not usually, 1 = sometimes and 2 = most of the time). The data contained in the matrix was analyzed for disparities, measured by the magnitude of the relationship between self-concept and *future* or *past selves*, and for content (i.e., the content coding scheme used in the first study).

Greater disparity was observed between the *current self* and *past selves* than between the *current self* and *future selves* of adolescents. Boys perceived a greater disparity between now and four years ago than girls. Similarly, adolescents perceived greater disparity between their *now selves* and four years in the future than between their *now self* and two years in the future. “(A)dolescents see much change in themselves from

the past, but see relatively little change occurring in the future...older adolescents see less discrepancy between the current self and future selves than younger adolescents” (p. 275).

Relationships among disparity scores were calculated. The relationship between the two past selves was statistically significant and fairly strong, as well as between the two *future selves*. “These associations indicate that the extent of perceived change in the self from four years in the past to the present is highly predictive of the perceived change in the self from two years in the past” (p. 275-6). The same association occurs with the change in the self from two to four years. “However, perceived change in the self from the past to the present is not a good predictor of predicted change in the self from present into the future” (p. 276). The only significant relationship between a *past self* and a *future self* was between the self two years ago and the self two years in the future. “This suggests that the projection of changes in the self into the future is not guided by perceptions of change in the self from the past to the present” (p. 276).

The second set of analyses focused on whether different content categories are over or under-represented in relation to the temporal self. “A negative representativeness score that is significantly different from zero indicates that descriptors of the type found in the particular category are more likely to be found in the temporal than in the current self; positive representativeness scores significantly greater than zero indicate just the opposite” (p. 276). Analysis of positive representativeness scores in terms of capabilities indicate that adolescents are less likely to think of the past self than the current self but more likely to think of the *future self* than the *current self*. For positive personality, intellectual and emotional categories, the current self is described more frequently than

past selves, but *future selves* have more of these characteristics than the *present self*.

“Finally, adolescents see themselves shedding negative personality characteristics from the past to the present, and from the present into the future...these findings indicate that adolescents believe that during the past four years they have been abandoning negative personality characteristics and acquiring new capabilities and positive personality, intellectual and emotional characteristics, a process that is expected to continue into the near future” (p. 276). The percentage of the total descriptors in the positive attractiveness and positive cognitive categories decreased with age while the percentage of descriptors in the general psychological, positive emotional and negative emotional categories increased with age.

In conclusion, adolescents’ description of their self in the future is more similar to their current description than their past description. Change in the self is positive as children and adolescents “become more capable and physically attractive, develop better personalities and mature intellectually and emotionally, while simultaneously shedding undesirable personality, cognitive and emotional characteristics” (p. 278). Adolescents view their life as typified by change that is desirable and beneficial.

Taken together these studies present an account of *past* and *future selves* that are different representations from the current self. Researchers suggest that projections of the self are important for understanding children and adolescents and their approach to disappointments. Someone with past successes may expect future successes even if they are experiencing present difficulties. On the other hand, students with negative past events may be better served by constructing a positive future view.

When taken in the context of the current study, perhaps students who view their musical futures in positive terms may be better equipped to deal with the difficulties (i.e., voice change) experienced during adolescence. By envisioning a positive future, youth may be able to persevere current difficulties.

Anderman, E. M., Hicks, L. H. & Maehr, M. L. (1994)

The purpose of this study was to examine the changes in self-concept across the transition from elementary to middle school. Students ($N = 313$) completed the Patterns of Adaptive Learning Survey (PALS, Midgley, Maehr, & Urdan, 1993) during one class period at the end of fifth grade (elementary school) and again one year later at the end of sixth grade (middle school). Only data from students who completed both questionnaires were used for analysis. Teachers completed questionnaires detailing strategies used to motivate individual students. Students were divided into two groups according to the results of the Cognitive Test of Basic Skills (CTBS). Those students who scored above the 50th percentile were “not at risk” and the rest were “at risk”.

Analysis of data indicated that present and *possible selves* declined over the transition. The decline was greater for males than females. At-risk students had lower present and *possible selves* than “not at risk” students at both times. Mastery goals were positively related to present and *possible selves* in both 5th and 6th grades. However, self-efficacy was a predictor of present and *possible selves* in 5th grade but not in 6th grade. Performance goals were positively related to *possible selves* in 6th grade (middle school) but not in 5th grade (elementary school). Researchers concluded that “students may come to hold the belief during the middle grade years that to be successful in the future one has to compete and outperform others” (p.9). Further longitudinal research was advocated.

This study delineates some ways in which children change as they approach early adolescence. It would be important to investigate the thought processes of students at this age in order to facilitate their learning in diverse contexts.

Anderman, E. M. & Anderman, L. H. (1998)

This report included two studies examining the role of *present* and *future academic selves*. In the first study, the relationships among *present selves*, *future selves* and grade point average (GPA) were examined with seventh grade participants ($N = 315$) who completed items about their *present* and *future selves* in the academic and social domains from a goal theory perspective. The PALS questionnaires (Midgley, Maehr, & Urdan, 1993), administered in the students' classrooms by trained graduate students, consisted of a series of descriptions (ex. good student, smartest in class). On a 5-point Likert-type scale subjects were asked to evaluate how much the statement described them (1 = not at all to 5 = very much). Additional information included socioeconomic status as determined by parents' education, seventh grade GPA (grade point average in English, mathematics, science and social studies), gender and ethnicity.

Reliable scales representing *present* and *future positive academic selves*, as well as *present* and *future social selves* were formed. However, reliable *poor academic self* scales (present and future) could not be formed. Differences between *present and future selves* were determined by subtracting *future self* scores from *present self* scores (i.e., a high positive difference score indicated having a higher *present self-concept* than a *future self-concept* and a low negative difference score, a lower *present self-concept* than *future self-concept*). The mean difference score for *academic and social selves* was low and negative which indicated that the *present self-concept* was lower than the *future self-*

concept. In order to predict changes in GPA, difference scores were used in regression analyses. Analysis of data indicated, “that differences between one’s present and future academic and social selves are statistically significant predictors of change in GPA” (p. 7). GPA increased when present academic selves were higher than *future academic selves* but decreased when *present social selves* were higher than their *future social selves*. When differences between *present and future selves* were controlled, ethnicity was not a significant predictor of change in GPA, whereas, SES was related positively to increases in GPA.

In the second study, using an urban sample, Anderson et al. (1998, 1999) examined the relationships among demographic variables, *present selves*, *future selves*, mastery goals and performance-approach achievement goals. The sixth, seventh and eighth grade participants ($N = 220$) completed a measure of *present and future selves* and items assessing mastery and performance-approach goal orientations (PALS; Midgley et al., 1998) as in the first study.

LISREL VIII was used to examine the factor structure. For each *present and future self* measure, three independent factors emerged representing *good student present self-concept*, *bad student present self-concept* and *social present self-concept*. Reliable scales for *present and future social selves* could not be formed. Using students’ seventh grade GPA as the dependent variable, the measures of *present and future selves* were used as predictors in multiple regression analyses. Statistical controls were gender, ethnicity and SES. For *present selves and future selves*, significant predictors of GPA were *academic self*, *social self*, gender, and ethnicity. For *future and present selves*, GPA was related positively to seeing oneself as a good student and being female. In contrast

GPA was related negatively to seeing oneself as popular and being a member of a minority group. SES was not related to GPA in either model.

The relations between *present and future selves* on change in GPA between sixth and seventh grade was examined through regression analyses. Students' GPA from sixth grade was included in the regressions as covariates. Analysis of data indicated that for present selves, improved GPA was predicted positively with a positive (seventh grade) *academic self-concept* and being female. Improved GPA in the *future selves* model was related positively to having a positive *academic future self* and being female. Ethnicity and *social self-concept* were not significant predictors of changes in GPA. "Thus in summary, increases in GPA between the sixth and the seventh grades were associated with a view of the self as being a "good student" both in the present and in the future, whereas changes in GPA were unrelated to perceptions of one's social self concept" (p. 8).

Summary of Early Adolescent Identity Literature

Middle school students appear to show a greater disparity between their *possible self* conceptions of the past and present than between the present and the future (Hart, 1993). In addition adolescents described the future more than children did. As they approach adolescence, students' thought processes change as competition and outperforming others becomes important (Anderman, et al. 1994). Changes in GPA seem to be related to an academic "good student" view but not to social self-concept perceptions (Anderman and Anderman, 1998). These studies further support the importance of an adolescent's self-concept in relation to performance.

School Involvement

Students who remain involved in school are often less likely to have delinquency issues. An important key in encouraging school involvement may be the students' *possible selves*.

Oyserman, D. & Markus, H.R. (1990)

Youth vary in the degree of difficulty they have making the transition from childhood to adulthood. Oyserman and Markus (1990) hypothesized that youth, varying in the severity of their delinquent behavior, can be distinguished by their *possible selves*. The most delinquent youth display the least balance between their expected and *feared possible selves*. In order to test this hypothesis, students with various degrees of delinquency were studied. Lower-middle-class to working-class youth from Detroit (N = 238), aged 13-16, were the subjects. The youth were placed in four sub groups, distinguished by their degree of known delinquency and interviewed twice within three months by seven trained interviewers.

Subjects also completed several measures. The first questionnaire was an open-ended self-concept measure where participants were asked to list three *hoped-for*, three *expected* and three *feared* selves for the next year after being provided with a short explanation of the questions. *Expected* or *hoped-for possible selves* they listed fell in the following categories: positive intrapersonal selves, positive interpersonal selves, jobs, school or school related extracurricular activities, material goods, and any negative selves. *Feared selves* were categorized as negative intrapersonal selves, negative interpersonal selves, poverty, doing poorly in school or extracurricular activities, crime, drugs, and death.

The next questionnaire was a closed-ended self-concept measure. For each of the 16 self-descriptors, respondents were asked to rate the extent to which the descriptor was currently self-descriptive, probable future self-descriptive or desired/hoped for in the future self-descriptive. Six self-concept subscales emerged (i.e., positive current self, negative current self, positive hoped-for self, negative hoped-for self, positive probable self, and negative probable self). Rosenberg's (1965) Self-Esteem and Optimism for the Future measure was also included in the questionnaire.

Self-reported delinquency information was gathered in the second interview. Delinquent acts during the past 12 months were assessed using a self-report delinquency questionnaire. The frequency of delinquent acts being committed was ascertained with responses from never to more than five times.

Analyses of covariance (ANCOVA) were used to help determine how *possible selves* varied with differences in level of official delinquency. The dependent variables were the *possible selves* measures (open and closed-ended), optimism for the future and global self-esteem. The independent variables were age, sex and race. The stratifying variable was represented by the degree of official delinquency. Analysis of results from open-ended questionnaires indicated that adolescents had no difficulty describing what is possible for them in the future and the responses were diverse. A frequent expectation for all groups was that they would "be happy" and "have friends" but there were differences in achievement-related responses. "Across the four groups, from public school youth to training school youth, there is a decrease in the percentage of youth expecting to get along in school, and an increase in the percentage of youth expecting to have cars or nice clothes and expecting negative selves" (p. 117).

The hoped-for *possible selves* produced more homogeneity in open-ended responses. All groups indicated they hope to “have friends” with equal frequency. “Having a job” and “getting along in school” were also *hoped-for possible selves* in all groups. However, the content of *feared possible selves* from the open-ended questions was a more diverse set. The most frequently generated response that students feared in the least delinquent group was “not getting along in school.” For the other three groups the most frequently generated response was the fear of being criminal.

Differences in balance among *possible selves* were observed between the groups studied. Balance was important because a given *possible self* has “maximal motivation when it is offset or balanced by a countervailing possible self in the same domain” (p. 113). The two most officially delinquent groups had less balance than the two least delinquent groups.

Self-reported delinquency data collected 2-3 months following the initial questionnaire were only available for two of the groups. The more delinquent youth claimed “depressed,” “alone,” or “a junkie” as expected selves. The officially non-delinquent youth generated achievement-related selves, expecting and hoping to get along in school but fearing not getting along or failing. Researchers concluded that students must be able to create a *possible self* that gives personal meaning and substance to a goal. The student must envision or conceive of finishing school to achieve that goal. If s/he also fears not finishing school motivational resources will be enhanced.

The correlational data from this study imply a relationship between *possible selves* and delinquency. However, the differences in content and structure of *possible selves* should not be interpreted to cause delinquent behavior without further study. An

important finding in this study is the relationship between *possible selves* and performance.

Oyserman, D., Terry, K. & Bybee, D. (2002)

The goal of this study was to provide an intervention that would highlight the relevance of school to attaining one's *possible self*. A small group, activities-based intervention was focused on "enhancing youth's abilities to imagine themselves as successful adults and connecting these future imagines to current school involvement" (p. 313). The voluntary after-school program lasted nine weeks and involved three cohorts of urban African American middle school students (N = 208) during three years of data collection. Baseline data were collected during the fall and year end data in the spring. During the first year, parent sessions were held.

Connection to school, *possible selves*, and effort in school were measured using several means. For connection to school, school bonding items were used from Cernkovich and Giodano's (1992) school bonding scale and concern about school items were revised from the academic subscale in Fleming's and Courtney's (1984) Feelings of Inadequacy Scale. Balanced academic *possible selves* were assessed with open-ended probes (Oyserman and Markus, 1990a, 1990b; Oyserman and Saltz, 1993). The responses were content coded by counting the number of times youth described school-focused goals in terms of positive expectation balanced by a relevant concern or *feared self*. To assess plausible strategies for attaining *possible selves* "students marked those *possible selves* they were currently working on and wrote what they were doing to try to attain (or avoid negative) possible selves" (p. 320). Answers were coded on a 0 (no strategies) to 4

(detailed, concrete, reasonable strategies) scale. Effort in school (i.e., avoiding getting into trouble and attending school) was assessed by self-reported measures.

The results from students who participated in the intervention were compared to students who did not participate. There was no evidence of pre-existing differences between intervention and control groups. At the end of the year, intervention and control groups differed on each of the measures. For effort in school, intervention youth reported a greater sense of school bonding and more concern in doing well in school. Intervention youth reported more balanced *possible selves* and more plausible strategies. Analysis of the self-report of school behaviors revealed that the intervention helped boys reduce the frequency they were sent out of the class for misbehavior. By the second report, intervention youth had higher attendance than the control group.

Researchers concluded that “a short group-based intervention can effectively bolster academic possible selves and improve engagement” (p. 323). Several factors were listed as attributing to the success of the program. These points include: changing *possible self* perceptions in the everyday social environment, including peers in the process, developing connections at the individual’s own pace through activities shared with a group, and by integrating genders so that they create a space for themselves. Analysis of the data indicated that the intervention “had positive effects for school engagement, school behaviours and possible selves” (p. 324).

Summary of School Involvement

The studies on school involvement concerned middle school students and their behavior. Oyserman and Markus (1990) found a relationship between *possible self* perceptions and performance. Youth in the least delinquent group had achievement-

related fears and expectations where delinquent youth did not. When Oyserman, Terry & Bybee (2002) planned an intervention for youth to change their perceptions they found positive effects on school engagement, school behavior and *possible self* perceptions. These studies further establish a link between student perceptions and performance in a school setting.

Health Related

Academic achievement and school involvement are important issues for students. From early adolescents experiencing puberty to older adults experiencing Alzheimer's, people of all ages are also concerned about their health. "Self-knowledge dictates one's immediate perceptions and experiences, future goals, and ultimately, psychological wellbeing" (Frazier, Cotrell & Hooker, 2003, p. 1). The studies in this section are included to illustrate the disparity of results depending on the context.

Hooker, K. & Kaus, C. R. (1994)

The role of *possible self* perceptions in a person's self-regulatory processes was investigated. The participants were 87 middle-aged adults and 84 young adults who completed Likert-type measures of health behaviors, health value and *possible selves*.

Possible selves was assessed using an open-ended questionnaire modeled closely after the measure used by Cross and Markus (1991). Participants were asked to: list their *hoped-for* and *feared* selves, identify the most prominent, and respond to questions concerning the identified selves. A measure of health behaviors consisted of ten behaviors commonly used in health behavior research while the health value scale was developed Lau, Hartman, and Ware (1986).

Analysis of results indicated that young and middle-aged adults could report on their *possible selves*, *hoped-for* and *feared*. Middle-aged adults had significantly more *health-related possible selves* than young adults across the three *health-related possible self* categories. Health values, perceived self-efficacy, and number of goal-oriented activities in which students were engaged were significant predictors of *feared health-related possible self* avoidance. Researchers concluded “these data suggest that having a health-related possible self, particularly a feared one, may be associated with higher health behavior scores” (p. 130).

These findings indicate that for both young and middle-aged adults in the health domain, *feared selves* were more salient than *hoped-for selves*. Researchers suggested that “achieving positive health goals may be stronger motivationally than striving to avoid negative health outcomes” (p. 131). To obtain additional information about health-related self-regulatory processes, researchers suggested “sampling participants who would be more likely to have positive health goals” or providing data on more specific groups of adults (p. 131). Besides the limitation imposed by the sample (i.e., did not have many *hoped-for possible selves*), the homogeneous nature of the sample limited generalizability. In the future, researchers suggested that more diverse groups of participants and multiple construct measures (e.g., measures that do not depend on self-reports) would be desirable.

Whaley, D. E. (1998)

The purpose of this study was to examine *possible selves* identified by female middle-aged adults at different stages of exercise involvement (i.e., precontemplation, contemplation, preparation, action, and maintenance). Participants were middle-aged

women (viz., 35-59 years of age) who were either employed by Oregon State University or a spouse of an employee. Three measures were used in this study: the stage of exercise scale (SOES) to determine differences in exercise behavior, exercise self-efficacy scale developed by Marcus, Selby, Niaura and Rossi (1992) and a *possible selves* instrument similar to the one used by Hooker and Kaus (1994). For the *possible selves* questionnaire, participants were asked to list *possible selves*, identify most important hoped-for self and answer a series of Likert-scale questions. Next, participants were asked to select a *possible self* from their list that was most closely associated with exercise behavior, explain the connection and answer additional questions. The final section of the *possible selves* questionnaire included an exercise-specific *possible self* and participants responded to similar questions. The entire process was repeated with *feared possible selves* with follow-up questions concerning plans to avoid the feared selves.

Analysis of data indicated that women in each stage of exercise behavior could list *exercise possible selves*. Although not statistically significant, the average number of hoped-for selves tended to increase when the levels of exercise behavior increased. “Feared selves decreased progressively as exercise behavior increased and became longer term” (p. 52). Women described more *hoped-for selves* than *feared selves*. The ratio between *hoped-for* and *feared selves* changed with increasing levels of exercise (i.e., non-exercisers had slightly fewer *hoped-for* and slightly more *feared selves* than their long-term exercising peers).

The intent of this study was to explore the utility of using *possible selves* as a tool for intervention studies. “(W)e do not know how readily possible selves in a particular content domain, (i.e., physical) can be changed or adapted...soliciting exercise-related

possible selves from current exercisers might be extremely useful in designing intervention programs” (p. 91). Longitudinal studies were also suggested to investigate changes over time and in a variety of contexts. A query was introduced about the length of the questionnaire and possible changes. Seven possible participants returned the questionnaire unanswered because they said it was too long. Focusing directly on exercise *possible selves* without the open-ended questions in the beginning may be a solution.

Penland, E. A., Masten, W. G., Zelhart, P., Fournet, G. P. & Callahan, T. A. (2000)

The purpose of this study was to examine the relationships among *possible selves* (c.f., negative and positive), depression, and coping styles of university students. The participants were 287 student volunteers who received course credit for participation and completed the following three questionnaires: Beck Depression Inventory (BDI, Beck et al., 1979), Coping Strategies Inventory (CSI, Tobin, Holroyd & Reynolds, 1984), *Possible Selves* Questionnaire (PSQ, Markus & Wurf, 1987). Volunteer subjects completed the CSI based on the most stressful event that had occurred in their lives in the past year. The correlation between BDI and PSQ scores was statistically significant. When subjects reported more symptoms of depression they also reported fewer *possible selves* and more negative *possible selves* than non-depressed individuals who had higher expectations of a positive future suggesting “that cognitive structures regarding a positive potential self may be a protective factor against depression” (p. 967).

When coping skills were compared, depressed individuals, with negative self images, tended to disengage themselves from solving problems while non-depressed subjects, with high positive *possible selves*, tended to cope with problems in an active

manner by engaging. “(A)n elaborate possible self-schema may act as an incentive to make changes in one’s life or environment” (p. 967).

Hsu, C. H. (2001)

The purpose of this study was to investigate the relationships among current self-perceptions, future potential perceptions, academic achievement, and exercise achievement with early adolescents. The 14-15 year old subjects ($n = 166$) represented Taiwanese students in typical classes (i.e., student non-athletes) and sports-gifted classes (i.e., athletes) who completed demographic, academic *possible selves* and exercise *possible selves* questionnaires.

Academic *possible selves* were assessed with two scales. The first scale was modified from the “hoped-for” *possible self* section of the *Possible Selves Instrument* (PSI) in Whaley’s (1998) study. A clear statement was presented with four follow-up questions. The questions addressed likelihood, perceived self-efficacy, outcome expectancy, and importance of the *possible self* indicated in the statement. The second scale was the Anderman et al. (1999) *possible self* instrument used to assess adolescents’ *present and future selves* in the academic domain. Adolescents’ exercise *possible selves* were measured by a modified PSI (statements with exercise *possible self* content were substituted for academic content) and a modified exercise scale (based on the Anderman, et al., 1999).

Analysis of data indicated significant differences between participants’ athletic status and their parents’ educational levels. Parents of student non-athletes had higher educational levels than the parents of student athletes. Student athletes spent more time on exercise and less time on academic tasks than student non-athletes. Male students

spent more time on exercise and less on academic tasks than did female students.

However, additional gender differences were not detected. “(T)he researcher suggests that the effect of gender differences on self-concept may exist in some domains, whereas on *possible selves*, which is a comprehensive and long-term self-concept, gender differences were not a factor” (p. 85).

There was a strong, significant relationship between *present and future academic selves* and between *present and future exercise selves*. However, the correlations between the *exercise and academic domains* were considerably lower and not statistically significant.

A multiple regression analysis was conducted to evaluate how well *present selves and future selves* predict middle school students’ academic achievement. Academic achievement was significantly related to *academic possible selves*. The relationship between exercise achievement and *exercise possible selves* was also significant. “The results of this study suggest that, because possible selves...are more strongly related to individuals’ performance, a satisfied performance may also reinforce individuals’ specific possible selves. Consequently, a reciprocal relationship occurs between possible selves and performance” (p. 86).

The study was limited to perceptions of *hoped-for possible selves*. Students did not explore “*feared selves*” in the exercise or academic domains. Hsu theorized that *feared selves* may be difficult to detect in adolescents and may have a greater influence with older subjects. The use of grades based on paper and pencil tests as an appropriate basis for exercise achievement was an additional limitation. The participants were Taiwanese middle school students, who may have different academic/exercise attitudes

than students from other cultures, providing difficulties for generalizability. However, “(t)he findings offered evidence to suggest that the relationship between possible selves and achievement during early adolescence is predictable and domain-specific. When considered together, these findings suggest that possible selves may not only play a significant part in early adolescents’ achievement but may also be an additional source of self-regulating behavior” (p. 90).

Summary of Health Related Literature

Adults were research participants in most of the health-related studies reviewed (Hooker & Kraus, 1994; Penland, et al., 2000; Whaley, 1998). However Hsu (2001) used 14- and 15 year olds as research participants. Hooker and Kaus (1994) found that *future feared selves* were more salient than *hoped-for selves* in the health domain but Hsu (2001) found that *feared selves* may be difficult to detect in adolescents. Whaley (1998) suggested eliminating open-ended questions to make the questionnaire shorter. The long length of the questionnaire was offered as the reason why some participants did not finish. Hsu (2001) studied the relationships among current *possible selves*, *future possible selves*, academic achievement and exercise achievement with middle school students. She concluded that *possible selves* are domain specific and may be an important part of self-regulating behavior in early adolescence.

Gender Differences in Possible Selves

In the studies reviewed in Chapter II, researchers have found differences between males and females in academic achievement (Leondari, 1998), task persistence (Leondari, 1998), *possible selves* (Anderman, 1994, 1998), and response to feedback (Kerperman & Pittman, 2002). However, Leondari and others (1998) found no gender

differences in relation to positive *possible selves* or motivation in 14- and 15-year-old students. The following studies investigated gender differences in relation to self-concept, identity and *possible self* perceptions.

Knox, M., Funk, J., Elliott, R. & Bush, E. G. (1998, 2000)

The purpose of this study was to identify the domains of self-concept that were related to middle adolescent self-esteem. Participants (85 males and 127 females) were predominantly Caucasian adolescents in grades 9 through 12 from five high schools. “Because the ability to consider hypothetical or possible selves develops at adolescence and may significantly impact global self evaluations, the possible selves approach may be particularly useful for the assessment of the self-views of this age group” (1998, p. 66).

Subjects completed *possible self* questionnaires, modeled after Cross and Markus (1991), and the Self-Perception Profile for Adolescents Global Self-Worth Scale (Harter, 1988). Instructions for the *possible self* questionnaire were modified for use with younger participants but otherwise displayed few changes. The number of *hoped-for* and *feared possible selves* ranged from 1 to 19. Likelihood ratings for the total sample ranged from 1 to 7. Likelihood of *feared possible selves* was normally distributed and ranged from 1 to 7. The differences between males’ and females’ global self-worth scores were not statistical significant.

Perceived likelihood of *hoped-for possible selves* was related with females’ and males’ self-esteem scores. “Likelihood ratings within the self-oriented personal descriptors *hoped-for possible selves* category had the highest correlation with female self-esteem” (p. 71). This category included responses that suggested a sense of satisfaction, happiness, or security and consisted of self-descriptive qualities that did not

relate to ability. Females' self-esteem was also associated with likelihood ratings within the educational hoped-for *possible selves* category. "(T)he more likely females believe educational hopes to be, the higher their self-esteem will be" (p. 72).

Perceived likelihood of *feared possible selves* was negatively associated with self-esteem for females but not for males. Upon further analysis, two *feared possible self* categories (i.e., physical appearance, relationships/interpersonal functioning) were identified as being negatively associated with females' global self-esteem. "(G)irls' self-views may be most closely related to their ability to avoid perceiving themselves as unattractive, as opposed to their ability to achieve their ideal physical attractiveness" (p. 73).

Global self-esteem for boys was only associated with one *possible self* domain, relationships/interpersonal functioning. Knox et al (1998) believe that this finding is consistent with the importance of peer relations during adolescence. Feeling at ease in social situations may contribute to a male's self-esteem.

Knox and others felt that the *possible selves* approach was a valuable approach to use in the description of adolescents' self-concept and self-esteem. "The free-response format of the protocol used in the present study allowed the identification of domains that may not be addressed by traditional self-esteem measures" (1998, p. 74). The composition of self-esteem for males was different than for females suggesting that "self-esteem during mid-adolescence is more highly multidimensional for girls than for boys...as the maturational process progresses into adolescence, the self-concept becomes more highly differentiated" (1998, p. 74).

The results of this study were preliminary in nature. Replication was called for in order to enhance generalizability and additional implications. Knox and others suggested that efforts focused on general success and recognition may not be as effective with females as efforts “addressing hopes related to education, occupation, financial and material functioning, and relationships, as well as fears related to physical appearance and relationships” (1998, p. 75). Additional research was requested using the *possible selves* approach to specify the composition of male and female adolescent self-views.

This last discussion may be especially applicable to music education because musical efforts are generally related in terms of a successful performance or recognition of ability attributes. Perhaps by focusing on attributes of music education related to areas such as education (i.e., “well-rounded student”) and relationships (i.e., being able to express emotions), adolescents may incorporate music in their self-views.

Anthi, K. S., Dunkel, C. S. & Anderson, B. (2004)

Gender differences were investigated in both identity and *possible self* contexts. Participants ($N = 149$) were introductory psychology students (aged 18 to 25 years old) who participated in the study in exchange for extra credit by completing two questionnaires. The *Possible Selves Inventory* (PSI, Cross & Markus, 1991) was used to measure *possible selves* perceptions. The Ego Identity Process Questionnaire (EIPQ, Balistreri, Busch-Rossnagel, & Geisinger, 1995) was used to measure identity dimensions (i.e., exploration, commitment) across eight domains (i.e., occupation, religion, politics, values, family, friendships, dating, gender roles).

An ANOVA analysis with factors (gender and identity status) and dependent variable (the number of hoped-for interpersonal *possible selves* generated) revealed no

significant effect. When the dependent variable was replaced by the number of *feared interpersonal possible selves* a significant effect for gender was generated. Females generated more *feared interpersonal possible selves* than males. For the third set of analyses, the dependent variable was the balance between *hoped-for* and *feared interpersonal possible selves*. There was a main effect for gender. Females exhibited more balanced *interpersonal possible selves* than males. In the analyses with dependent variables of *feared selves* or *balanced selves*, the main effect for identity status was not significant, nor was the interaction. “The results of the current study indicated that there was no relationship between identity status and interpersonal possible selves...the pattern of results suggests weak support for theories of identity that posit substantial gender differences” (p. 151).

Summary of Gender Related Literature

Differences between the *possible self* perceptions of males and females have been detected in specific contexts. The composition of self-esteem was different for males and females (Knox, 1998, 2000). Females generated more *feared* and *balanced interpersonal possible selves* than males. Knox (1998, 2000) suggested that self-concept may become more differentiated as students mature. Girls who mature faster than boys may show earlier differences. Perhaps differences were not apparent with the college students in the Anthis (2004) study because men and women are developmentally at the same stage. It would be important to investigate gender differences in future investigations with early adolescents to uncover changes in the self-concept.

Chapter Summary

Research in *possible selves* over the past two decades has evolved from general to more specific investigations as researchers urge domain specific investigations. In 1995, Garcia found that *possible selves* may have an effect on self-regulation within a specific domain. In addition, *possible selves* are composed of two aspects (Inglehart, 1987), a cognitive component and an energizing element and both aspects may be used to predict achievement. However, the cognitive (structuring) component was more important in predicting satisfaction. Inglehart and others (1987) found that medical students were successful when they focused on one *possible self* and found it to be desirable. Perhaps if students focused on a *possible self* in music and found it desirable they would be more successful in music than students who do not have such a vision.

Although the predominance of studies featured adults as research participants, others have featured adolescents (Anderman, 1998, 1999; Dunkel, 2000). Dunkel (2000) pointed out that *possible selves* are a mechanism of identity exploration and Knox, et al. (1998) described *possible selves* as “an approach that may be particularly suited to identify the self-views of adolescents” (p. 71). In addition, *possible selves* may serve as a means to promote change (Oyserman, 2002) and be an important self-regulatory behavior (Hsu, 2001). As adolescents are exploring and changing, their *possible self* views in music may be an important mechanism to increase self awareness.

Knox (1998, 2000) suggested that an adolescent’s self-concept may become more differentiated as students mature. Girls and boys grow at different rates which may explain differences in adolescent self-concept. Differences may not be as apparent with college aged students as in the Anthis (2004) study. It would be important to investigate

differences between males and females to clarify any findings in a music context especially when dealing with a context fraught with physical limitations such as evidenced with the changing voice. Perhaps Leondari and others (1998) did not find differences because they were looking at academic contexts where physical restrictions are not readily apparent. In addition, many researchers (Anderman, 1994, 1998; Kerperman & Pittman, 2002; Knox, 1998, 2000; Leondari, 1998) have found differences between girls and boys necessitating future investigation.

During adolescence, individuals are searching for an identity. An element of this search is a conception of *possible selves*, both hoped-for and feared. Although many domain specific investigations have been conducted with youth, *possible selves* has not been studied in a music context. In order to determine *music possible self* perceptions about the present and future, both hoped for and feared, it would be important to investigate *possible selves* in a music context.

In order to complete this investigation, a music *possible selves* tool was necessary. Previous *possible self* tools (i.e., PSQ, PSI) elicited limited information in general (Markus & Nurius, 1986) and specific contexts [academic (Garcia, et.al., 1995); health-related (Guinan, 1997; Hooker & Kaus, 1994; Whaley, 1998); occupation (Robinson & Davis, 2001); transition (Aikens, Bierman & Parker, 2005)]. In order to bring out students' extensive music self-perceptions, a new tool was required. For the current study, students responded to music self-concept statements on a five-point Likert-type scale like in the Oyserman & Markus (1990) closed-ended measure. Previous studies (Guinan, 1996; Anderman & Anderman, 1998, 1999; Oyserman & Markus, 1990) contained self-concept statements in specific domains. For the current study, music self-

concept statements formed the basis for these statements. Music self-concept literature was investigated and reviewed in Chapter III.

CHAPTER III: RELATED RESEARCH IN THE MUSIC DOMAIN

The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' participation in musical endeavors. In this review of literature, studies related to adolescents' motivation, self-concept, participation and gender differences in musical endeavors are presented. These studies, briefly summarized, further establish the need for the present study.

Two research tools were developed for the current study (i.e., a music *possible selves* tool and a music participation tool). The *possible selves* measure was derived from self-concept literature. Therefore, a review of the music self-concept tools used in each study was included. Additionally, reviews of music participation tools formed the foundation for the new participation measure; these are included below as appropriate. This chapter concludes with a review of literature detailing adolescent gender difference which aided in the development of the research tools and helped to elucidate findings.

Motivation in Music

Students' motivation to participate in musical ensembles and activities has been an important area of research for many years. Several music education researchers have used attribution theory to investigate motivation. Attribution theory maintains that student' perceptions of the reasons for success and failure effect future behaviors. Because *possible selves* is another aspect of motivation, it is important to understand how motivation theories have been accomplished in a music context. By understanding the implications of attribution research in music, the current study may be elucidated.

Asmus, E.P. (1986)

The purpose of this study was to understand the motivational elements in reasons that students cite for success and failure in music using attribution theory. Students (N = 589) who were in grades 4 through 12 were enrolled in music classes. During regular music classes, students completed a form including background items and were asked to state reasons why some students do well or do not do well in music. Three judges classified each response using the Weiner two-dimensional conceptualization of attribution theory.

Through a one sample chi-square test, the attributed causes of success or failure in music were investigated across four attribution categories. Most of the time, students attributed the causes of success or failure to internal reasons such as ability. However, success or failure in music was also attributed to internal-unstable causes such as effort and student persistence.

Attributions due to response mode, gender, grade level and school were tested using a three-way repeated measures multivariate analysis of variance (MANOVA). A significant difference was found between attributions from students doing well in music and those who did not do well in music. When comparing persons who do well and persons who do not do well in music, more stable attributions (i.e., ability, effort) were cited for why some do well in music and more unstable reasons (i.e., luck, task difficulty) were stated for why some do not do well in music. A shift between effort related attributions to ability related attributions seems to take place around the sixth and seventh grade. "These are grades when teachers often have trouble keeping students involved

with music” (p. 275). Asmus suggested that teachers encourage students to adopt effort related attributions.

Asmus, E.P. & Harrison, C.S. (1990)

The relationships among music aptitude and motivational factors were investigated with Undergraduate Nonmusic Majors during a general education music class. Subjects completed the College Music Aptitude Profile (CMAP, Schleuter, 1978) to determine their levels of music aptitude as well as two motivation measures. In the first motivation measure, students were asked to indicate the importance of five factors that motivate students to achieve in music (i.e., effort, background, classroom environment, musical ability, affect for music). The magnitude of motivation in personal commitment, school music and music compared to other activities was assessed using the second motivation measure.

Significant relationships were found among motivation variables (i.e., effort, background, classroom environment, affect for music) and magnitudinal variables (i.e., personal commitment, school music) but not aptitude variables. Specifically, motivation for school music was related to effort, family background and classroom environment. While, personal commitment was related to effort and affect for music. “The expected relationship between music motivation and musical aptitude, which assumed that people with aptitude in an area would tend to be motivated to achieve in that area, was not supported by this study” (p. 264).

Legette, R. M. (1998)

The purpose of this study was to determine causes to which public school students attribute success or failure in music. Subjects were elementary through high school

students enrolled in music classes including instrumental, vocal, and general music subject areas. The Asmus Music Attribution Orientation Scale (Asmus, 1986c) was completed during weekly music lessons. When causal attributions (i.e., effort, background, class environment, musical ability, affect for music) were compared, music ability was the most important causal attribution cited followed by effort for all students. There were significant differences between males' and females' mean responses within each subscale and female means were higher. Student responses within each school district differed significantly. Students attending city schools placed more importance on effort and musical ability than those attending county schools who perceived that class environment was a more important causal attribution. When school grade levels were compared, music ability and effort were again listed as the leading causal attributions increasing with each grade level.

Analysis of results indicated that “students tend to place more importance on ability and effort as causal attributions for success or failure in music” (p. 109). The information about the participants did not indicate whether or not music instruction was by choice or not. Perhaps one of the reasons that ability and effort increased in importance with age was that older students perceive themselves as having more ability because they are involved in music while others are not participating.

Austin and Vispoel (1998)

The purpose of this study was to investigate 7th grade students' beliefs about the causes of success and failure in classroom music. Study participants represented most of the students enrolled in classroom music in one school in a Midwestern United States community. Students completed standardized music achievement tests (Colwell, 1969)

and questionnaires assessing demographics, music self-concept and attributional beliefs during two class periods. The music self-concept measure was a modified version of Schmitt's Self-Esteem of Music Ability scale (SEMA, 1979). The attribution questionnaire was based on Vispoel and Austin (1995).

Descriptive statistics were used to explain outcome and attribution category differences. Success was attributed to teacher influence, peer influence, family influence, luck, ability, metacognition, persistence, effort, strategy use, interest and task difficulty. Students were less likely to endorse these attributions as explanations for failure. Responses to the failure attributes were highly variable.

Attributional beliefs were strongly linked to music self-concept and achievement. Students with high music self-concept and achievement scores endorsed ability as a reason for success but not for failure. Family, teacher and peer influences were rated strongly for success. When taking into account the patterns of attribution endorsement, Austin and Vispoel concluded that "attributions may operate differently in music than in other achievement domains" (p. 40).

Duke, R. A., Flowers, P. J. & Wolfe, D. E. (1997)

The purpose of this study was to determine whether or not teachers, students and parents agreed on the benefits of piano instruction. The relationships among aspects of children's lives and their musical experiences were examined along with the perceptions of teachers, parents, and students regarding the benefits of keyboard study. A stratified random sample of students were chosen to participate based on age, gender, ethnicity, socioeconomic status, length of piano study and teacher from different regions of the

United States. Each student, teacher and parent completed questionnaires related to piano study and life in general.

Most of the children participated in music outside of school including making music at worship, with friends, and in a rock/rap group. The background of these parents also included musical experiences. “Many parents who had studied piano as children continue to play in the home (55% of mothers and 18% of fathers)” (p. 56).

When asked about their aspirations for the future, a majority of parents wanted their children to be happy, healthy and to like to work. Students and parents expected the student to go to college but only a very small number of parents expected their children to become performing artists. “This seems important because it provides an indication that very few of the parents in this sample view piano study as preparation for a career in music” (p. 64). Children indicated that they began to study piano because they wanted to learn to play or because their parent(s) decided for them. Few students were inspired by performers they had heard or seen. In addition, not many students wanted to learn because they had friends who also took piano lessons. When asked how long piano lessons would continue teachers and parents responded as long as the student wants to take lessons. When asked what factors should determine when to stop lessons, students and teachers most frequently selected when students have learned enough to be able to play independently of the teacher. The majority of respondents indicated that students would continue to play piano as adults.

According to their parents, the frequency in which students performed in front of others (formally and informally) varied from once or more each week to fewer than two times a year. Students performed in their homes, teacher’s studios, friend’s homes,

relative's home, at school, at church and a variety of other places. Very few students expressed negative attitudes about playing the piano and many expressed clearly positive attitudes about playing. However, students' responses varied from adults when asked about what they liked to play the most. "Only 36% of students selected 'music that my teacher gives me' as their favorite music to play, but 49% of parents and 54% of teachers chose this response" (p. 66-67). Even though students had a positive attitude about piano and piano study, only a small percentage indicated that all children should learn to play and over half of the teachers indicated that they did not believe that all children should learn to play the piano.

When asked about changes in behavior attributed to piano study, one third of the parents and students believed that students watch less television. "According to parents' reports, 83% of students who study piano watch less than 2 hours of television each day; 61% watch less than 1 hour each day; and 13% do not watch television at all on most days" (p. 82). Older students reported more frequently than younger students that piano study helped them to relax. The youngest students (under age 9) and the oldest students (over age 15) reported that piano study provided personal pleasure more frequently than did students in the middle grades (10 – 14 year olds). "Large numbers of parents and students also attributed positive changes in students' confidence and responsibility to the study of piano" (pp. 75-76). Nearly all children, parents and teachers, believed that piano study is worthwhile, enjoyable and produces positive results regardless of ability. Many of these parents had a musical background where they studied music privately and participated in school music groups as children.

The majority of respondents believed that piano study contributed to development of personal discipline, concentration, confidence, responsibility, and self-esteem. “Most parents and educators would agree that these personal characteristics are some of the most important requisites for happy, motivated, successful children and adults” (p. 80). The role of parents and opportunities for these students seems to be a consistent motivational factor. In addition, ability was not believed to be a central factor for motivation which contradicts previous studies (Asmus, 1986; Austin & Vispoel, 1998; Legette, R. M., 1998). Perhaps because motivation for music is different than other academic areas as suggested by Austin and Vispoel (1998), attributional motivation may not reflect multi-dimensional effects.

Klinedinst, R. E. (1991)

The ability of eleven factors (i.e., musical aptitude, scholastic ability, math achievement, reading achievement, general music teacher rating, attitude toward music, self-concept in music, music background, motivation to achieve in music, socioeconomic status, instrument adaptation) to predict achievement and retention in beginning instrumental students was investigated. The participants for this study were fifth-grade students who were in their first year of instrumental study ($N = 205$). The three phases (i.e., initial data collection, instructional period, student achievement assessment) in this study lasted a total of 32 weeks. Students completed assessments of the following variables: musical aptitude (Intermediate Measures of Music Audiation, Gordon, 1982), scholastic ability and academic achievement (Stanford Achievement Test, Gardner, Rudan Karlson & Merwin, 1982), attitude (Attitudes Toward Music Scale, Hedden, 1982), self-view (Self-Concept in Music Scale, Svengalis, 1978), musical background

(Music Background Inventory, Svengalis, 1978), achievement motivation (Asmus, 1987), and socioeconomic status (Hollingshead, 1957).

Classroom music teachers rated each student's potential for success in instrumental music. Student physical characteristics in relation to playing specific instruments, as well as, student instrumental music achievement and progress were evaluated using a researcher-designed rating scale. At the end of the instruction period, student achievement was measured using a researcher-constructed performance assessment. The performances were tape-recorded and independently rated by three adjudicators.

Reading achievement, math achievement and scholastic ability had the strongest relationship with performance achievement with these first year instrumental students. Music aptitude accounted for less than 10% of the variance in ratings of student performance achievement. Socioeconomic status, self-concept in music, reading achievement, scholastic ability, and math achievement were significant predictors of student retention. Student retention was more accurately predicted than student dropout. "Although it would appear that attitude towards music, self-concept in music, and home musical background have little relationship to student achievement and retention, the three variables have a strong interrelationship indicating that students from musical homes tend to have positive attitudes towards music and possess a good self-concept regarding music" (p. 235). In addition, motivation to succeed in music may be influenced by these three variables.

Summary of Motivation in Music

Many studies focusing on motivation in music (Duke & others, 1997; Klindinst, 1991; Austin & Vispoel, 1998) have found that students attribute success to social relationships (viz., teacher, peer or family influences). Others (Asmus, 1986; Legette, 1998) found that students attributed success and failure to ability and effort. Asmus & Harrison (1990) found that motivation for school music was related to effort, background and class environment. However, Asmus (1986) also found a shift from more effort attributes in 6th grade to ability attributes in 7th grade which was interesting in light of the increasing influence of social relationships in early adolescence. Additionally, Klinedinst (1991) found a strong interrelationship among self-concept, attitude and home background. Family and peers may influence students' music self-concept which in turn may provide a new lens for their perception of events.

Attributional beliefs were strongly linked to music self-concept and achievement (Austin & Vispoel, 1998). In relation to the current study, attributional beliefs may have a direct relationship with *possible self* beliefs. When students perceive that they have low musical ability and lack a history of family musical involvement, they may have a negative view of their possibilities. Perhaps by considering students' view of their possibilities, motivation may be encouraged from a different (but related) perspective.

Music Self-Concept

While some motivation theories are concerned with students' attributions of success and failure, *possible selves* are current and future self-perceptions distinguished by context (e.g., past studies have focused on *possible selves* in athletics or academic subjects). Although there have been many studies completed in diverse situations (e.g.,

in-school, outside of school, at-risk teenagers, adults with specific health problems), *possible selves* has not been examined in a music context. Consequently, a measurement tool was not created targeted at *possible selves* in a music context. Therefore, music self-concept literature was reviewed in order to understand the potential music *possible selves* of young adolescents and develop a collection tool.

Related Research

In a review of literature on Self-Concept, Reynolds (1992) stated that “(t)he wealth of educational literature regarding self-concept contrasts sharply with the scarcity of research regarding music education and self-concept” (p. 1). Self-concept has been frequently defined as perception of competence in a limited context (i.e., band or an instrumental ensemble). In addition, the term, music self-concept, is not well-defined and limited in scope. Several authors believe that self-concept is a multi-faceted construct (Scheirer & Kraut, 1979; Marsh & Shavelson, 1985; Vispoel, 1996). Consequently, self-concept literature that was comprehensive and could be used with a general population of adolescents (i.e., as opposed to a specific context like band or choir) was difficult to find. Through studying self-concept in music and its measurement, *possible selves* could be operationalized through a *possible self* measure developed for use in the present study.

Schmidt (2005)

Within the context of instrumental music, academic achievement motivation orientation, self-concept and attitude were investigated with 300 band students in grades 7 through 12. Participants completed a survey that elicited information concerning student background and demographic information, commitment, self-concept and motivation variables. Self-concept items were adapted from Asmus and Harrison’s

(1990) measure. Teachers were also asked to rate student performance achievement and overall effort.

High, positive correlations were found between self-concept and commitment to band. Moderate, positive correlations were found between self-concept and mastery, intrinsic and individual orientations. Self-concept was also moderately related to teachers' ratings of performance achievement. Using a factor analysis, with motivation variables, self-concept had relatively strong representation with learning/task orientation (i.e., commitment to band, intrinsic, mastery, and cooperative orientation) and individual orientation.

Overall, instrumental students placed less emphasis on competitive and ego orientations while reporting success defined by mastery and cooperative orientation. Relationships between motivation variables and demographic variables were low or nonsignificant. Older students had relatively higher scores on intrinsic or mastery orientations than younger students who tended to have higher scores on competitive, ego and avoid failure orientations.

The self-concept measure, adapted from Asmus and Harrison's (1990) measure, elicited ratings on information such as being an excellent music student and instrumental performance ability. Even though some words were changed when used with students in grades 7-12 instead of college students, the measure was not pilot tested. The important outcome from this study in relation to the current study is that there was a relationship between self-concept and commitment to band. Students who felt that they were excellent music students and confident in their ability to perform on an instruments also believed

that band was an important part of their life and were willing to work hard in band.

Perhaps these students also had a positive music *possible self* in the instrumental context.

Steele, J. R. & Brown, J. D. (1995)

Steele and Brown (1995) were interested in how teens use mass media and related popular culture materials in their daily lives. The informants were 25 early adolescents, 20 middle adolescents and 5 late adolescents who completed a self-administered questionnaire, a personal journal and an interview. In addition, information from the Birmingham Center for Contemporary Cultural Studies (Johnson, 1987; Lave, et al., 1992), practice theorists (Bourdieu, 1977, 1990; Willis, 1977) and the Neocultural-Historical School of Psychology (Holland & Valsiner, 1988; Valsiner, 1991, 1993) were amalgamated using a combination of qualitative methods to form the Adolescents' Media Practice Model. In this model, everyday life was characterized by a continuous process of cultural production and reproduction between the known and the new of which the media played an integral part. However, identity formation, which has been described as the central task of adolescent development, anchored "the model, explaining more variation in practice than any other component" (p. 3). Media selection, interaction and application were constantly being shaped by identity.

Steele and Brown summarized their research results by explaining that adolescents are active in their media use. "Adolescents' sense of who they are and who they may someday want to become plays a central role in their use of media—affecting what media are attended to, how intensely and to what effect—while at the same time feeding forward and changing the sense of self in the process (identity)" (p. 12-13).

Media influence is also very complex because it is interwoven into the context of daily life.

Generalizability was prevented because of the qualitative nature of the data. However, the findings are valuable because of the comprehensive nature of the data collection (i.e., multiple sources and methods) and selection of research participants (informants) representing a cross section of possible adolescent media users with different ages (14 through 22 years), ethnic backgrounds (European American, African American, Native American, Hispanic) and socioeconomic backgrounds.

In this study, youth interacted with the media in various ways while working to form, express and define their identity. Music was a valuable part of this search. This study was important because it illustrated the complex nature of music in the lives of adolescents. However, the data gathering mechanism was not appropriate for the current study because, although identity anchored the model, it was considered only in relation to the use of music in the media. More comprehensive data was needed for the current study including adolescents' interaction with music during school and outside of school, singing, performing and creating.

Vispoel (1993)

After reviewing self-concept literature and previous self-concept measures, Vispoel (1993) developed and validated an Arts Self-Perception Inventory (ASPI). Content categories included skill comparisons, confidence, inclination to welcome or avoid tasks, learning facility, evaluative statements, natural ability, skill and typical performance perceptions, along with projections about future performance. Two categories were not included because the intent of each subscale was to measure

perceptions of overall competence rather than levels of confidence. “Items about interest or enjoyment of activities within a given subject area, although frequently included in previous self-concept inventories, were excluded from the ASPI” (p. 1024).

Sixty items were developed for each category within the four subscales (music, art, dance, drama) and reviewed for clarity and relevance. A subset of 22 items (half positively- and half negatively-phrased) for each subscale was retained for pilot testing. The test sample comprised 7th grade students ($N = 205$) who completed the 88-item pilot form of the ASPI, a self-description questionnaire, and a background information questionnaire. Preliminary analyses were completed to reduce the number of items for each subscale. “Items for each subscale then were selected to have unique content, means reasonably close to the scale midpoint, large standard deviations, high corrected item-scale correlation” (p. 1028). Ten statements were selected in the music domain.

The internal consistency estimates and low inter-factor and inter-subscale correlations combined with the confirmatory factor analysis demonstrated that ASPI reliably measured four dimensions of self-concept (i.e., music, art, dance, drama). Responses also formed a consistent pattern of relationships with external criteria. Each subscale had a higher correlation with interest, ability ratings, grades and accomplishments in the same arts-related area and a lower correlation with other dimensions of self-concept. Vispoel concluded that the study “provides strong evidence that early adolescents can reliably appraise and distinguish among their skills in four major arts-related domains and that the ASPI is an effective tool for measuring these perceptions” (p. 1032).

Sanders, P. D. & Browne, L. A. (1998)

Sanders and Browne (1998) investigated the relationships among musical self-concept, enrollment in music courses, grade point average, gender, listening enjoyment, enjoyment of making music, ensemble experience and musical lesson experience. Participants were undergraduate non-music majors (46 female, 34 male) enrolled in one or more elective music courses that completed two questionnaires (i.e., Music Subtest of the Arts Self-Perception Inventory, Vispoel, 1993; Music Background Questionnaire). Approximately 69% of the students were previously in choir while 50% were previously in band/orchestra, and 41% studied voice and/or an instrument privately. About 47.5% of the participants were enrolled in lecture classes (i.e., introductory music history, world musics) and the rest were enrolled in performance-based classes (i.e., voice, piano and/or chorus). Results indicated that important predictors of musical self-concept were enjoyment making music, years of instrumental experience, years of choral experience and type of class (i.e., lecture, performance). These four variables accounted for over half of the total variance in music self-concept scores with “enjoys making music” being the best predictor.

Although caution was urged when inferring causation from correlation, researchers suggested that “it seems likely that satisfying musical experiences will help to enhance music self-concept and that, in turn, high music self-concept will encourage students to seek out enjoyable music-making experiences” (p. 83). Future research may include domain-specific music self-concept studies because they “may provide important clues to the unique nature of musical experience that cannot be answered by examining overall self-concept” (p. 84). By identifying areas that may be reinforced in music

education programs, students' musical self-concept may be enhanced. "This may yield suggestions for improving retention in school music programs and developing more positive attitudes about music performance and listening" (p. 84).

Summary of Music Self-Concept Research

Attribution theory has been used in several studies to explain reasons for students' actions in regards to musical motivation. Attributional beliefs were strongly linked to self-concept and achievement test scores (Austin & Vispoel, 1998). However, piano teachers, parents and students derive satisfaction out of playing the piano which is not linked to ability (Duke, Flowers & Wolfe, 1997).

Perhaps by widening the scope of the research to additional ways in which youth can be involved in music, researchers may begin to understand the complex relationship between youths' self-concept and their participation in music endeavors. Vispoel (1993) found evidence that adolescents could appraise and distinguish among their skills in four arts-related domains and these self-perceptions had a high correlation with interest and accomplishments. In addition, his Arts Self-Perception Inventory (ASPI) was developed to assess self-concept dimensions excluded from existing self-concept instruments. However, the music dimensions of self-concept were very widely defined. Valuable information may be obtained by breaking down the music self-concept into sub-domains. This information may be important to investigating student participation in a variety of musical experiences. Domain-specific self-concept research was supported by Sanders and Browne (1998) who found that important predictors of music self-concept were interactions with music (e.g., instrumental, choral, enjoyment).

Since music self-concept plays an important role in adolescent development (Steele & Brown, 1995) and a positive music self-concept may lead to increased music participation (Steele & Brown, 1995; Sanders & Browne, 1998), research into the complex nature of music self-concept is desirable. By demystifying this relationship, perhaps music teaching may be enhanced resulting in more engagement by students in musical learning.

Measuring Music Self-Concept

Although Steele and Brown (1995) established the importance of music identity to adolescents, the instruments were not appropriate for use in the current study. However the comprehensive nature of the ASPI (Vispoel, 1993) was suitable for the current study. In addition ASPI was used by Sanders and Browne (1998). Sanders & Browne urged domain-specific research within the musical self-concept that was a change from general self-concept used in a musical context. However, perhaps research in sub-domains of music (i.e., instrumental, vocal/choral) would also be valuable because a students' self-concept in vocal may be different than their self-concept in instrumental music. For the current study, tools that have been used to measure music self-concept were reviewed.

Many investigations have included music self-concept as a variable. However, most of these have used self-concept in a limited sense. The following section includes information about the measurement of music self-concept followed by a summary. In order to investigate music self-concept, educators often select observation or case study methodologies or use major self-reporting instruments such as the Coopersmith Self-Esteem Inventory (Coopersmith, 1967), the Tennessee Self-Concept Scale (Fitts, 1965), or the Piers-Harris Children' Self-Concept Scale, (Piers, 1984). Nevertheless, these

instruments do not include sufficient items assessing self-concept in music. However, the Self-Concept in Music (SCIM) by Svengalis (1978) and the Self-Esteem of Music Ability Scale (SEMA) by Schmitt (1979), are instruments directed towards assessing self-concept in music.

Self-Esteem of Musical Ability (SEMA)

The Self Esteem of Musical Ability (SEMA) scale was developed by Schmidt (1979) to assess perceptions of musical ability (e.g., skills and abilities of musically talented people; behaviors of parents, teachers, and friends which influence children's evaluation; student opinion of activities and careers associated with musical ability). The original 100 items were analyzed by professionals and 57 items were selected for the final scale. Students reacted to statements in the SEMA with four choices (i.e., strongly disagree, disagree, agree, strongly agree). After a pilot test, the scale was analyzed and shortened to 43 items. The final form was administered to early adolescents. The youth filled out a questionnaire with demographic information, wrote a paragraph about their musical ability and completed the SEMA. Validity and reliability were assessed through several means. Independent raters assessed the paragraph about musical ability and their scores were compared with a high inter-judge reliability. The correlation between the judges' scores on the paragraph and the SEMA was also good. When scores on the SEMA were compared with music achievement, the results were positive and significant. The correlation coefficient was high when students retook the test after only three days. The SEMA was deemed a reliable and valid instrument for the measure of musical ability.

Self-Concept in Music Scale (SCIM)

In order to investigate the relationship between music attitude and the preadolescent male, Svengalis (1978) constructed and validated three instruments: Music Background (MB), Masculine and Feminine Connotations of Music (MAFCOM) and Self-Concept in Music (SCIM). Validity and reliability were assessed and deemed acceptable through a series of procedures including pilot testing with 3rd and 5th graders.

The SCIM, a measure of music self-concept, was of interest to the current study. The questionnaire consisted of 36 items about music singing (20 statements), playing an instrument (3 statements), listening to music (3 statements) and creating music (1 statement). Statements also included perceptions by family members (4 statements), teachers (3 statements), and peers/others' (13 statements) of student competency in music. Music memory (5 statements), perceiving parts of music (8 statements) and professional aspirations (2 statements) were also incorporated. Because students indicated yes or no about how they felt about each statement, the magnitude of their responses was not clear. In addition, "a high score on this measure suggested that the subject had some self-confidence about his ability in music, particularly in using the singing voice" (p. 23). Self-confidence in music was defined "worth in music" (p. 14).

Arts Self-Perception Inventory (ASPI)

After reviewing self-concept literature and previous self-concept measures, Vispoel (1993) developed and validated an Arts Self-Perception Inventory (ASPI) in four areas (music, art, dance, and drama). The following content categories were identified:

1. one's skill compared to other individuals
2. skill in the given area compared to other subject areas

3. level of comfort/security/confidence in performing tasks in the given area
4. level of comfort/security/confidence in the company of other individuals
5. inclination to welcome/avoid participation in tasks
6. speed or facility in learning tasks (e.g., learn quickly/slowly; is easy/difficult)
7. endorsement/denial of general evaluative statements about one's skills (e.g., perceive one's skills as strong, weak, excellent, poor)
8. perceptions that one has or lacks natural ability in the area
9. perceptions that one's skill or lack of skill is recognized by other individuals
10. perceptions about one's typical performance in the given area (e.g., receive high/low grades, get high/low test scores)
11. projections about performance on future tasks

Two categories were not included even though they were frequently included in previous self-concept inventories. "Items about interest or enjoyment of activities within a given subject area, although frequently included in previous self-concept inventories, were excluded from the ASPI" (p. 1024). The reason given for excluding interest and enjoyment was that the intent of each subscale was to measure perceptions of overall competence rather than levels of confidence.

Sixty items were developed for each category (music, art, dance, drama) and then reviewed for clarity and relevance by junior high school instructors who had expertise in each arts-related area and measurement professionals. A subset of 22 items (half positively- and half negatively-phrased) for each subscale was retained for pilot testing based on the examination. The questionnaire was tested with 7th grade students who

completed the 88-item form of the ASPI, an additional self-description questionnaire, and a background information questionnaire.

Preliminary analyses were completed to reduce the number of items for each subscale. “Items for each subscale then were selected to have unique content, means reasonably close to the scale midpoint, large standard deviations, high corrected item-scale correlation” (p. 1028).

Analysis of responses to the ASPI reflected four separate dimensions that formed a consistent pattern of relationships with external criteria. Each subscale had a higher correlation with interest, ability ratings, grades and accomplishments in the same arts-related area and a lower correlation with other dimensions of self-concept. Vispoel (1993) concluded that the study “provides strong evidence that early adolescents can reliably appraise and distinguish among their skills in four major arts-related domains and that the ASPI is an effective tool for measuring these perceptions” (p. 1032).

Summary of Self-Concept Tools

Many of the statements in the SCIM and SEMA were dated and reflected a limited vision of music self-concept. For example, items in the SCIM (Svengalis, 1978) were directed towards feelings of worth in music while the items in the SEMA (Schmitt, 1979) were directed towards feelings of music ability (c.f., general self-worth). Vispoel (1993) developed and validated an Arts Self-Perception Inventory (ASPI) in four areas (music, art, dance, drama) that was more comprehensive nature and based on current advances in self-concept literature. Therefore, Vispoel (1993) form an appropriate basis for use in the current study.

Music Participation

Middle school students love music. Use of iPods and MP3 players play important roles in adolescent lives while participation in school organized musical activities seems to decline. In order to establish the need for the current study and develop a measurement tool, this section continues with related research and measurement of participation.

Related Research

In the following section, studies concerning music participation were reviewed to further understand adolescent participation in music and establish the need for the present study. These studies, briefly summarized, paint a picture of current music participation.

Ebie, B. D. (2004)

School-sponsored music activities can take place during school hours and also after school as an extracurricular activity. The purpose of this study was to determine the factors that students felt contributed to making extracurricular activities meaningful.

Subjects for this study were secondary school students ($n = 160$) who participated in musical and athletic school-sponsored extracurricular activities. These students gave short demographic information and answered one question about reasons for and importance of participation. Statements were coded (using processes by Emerson, Fretz, & Shaw, 1995; Wolcott, 1994), and classified into larger categories (i.e., social/integrative, kinesthetic, self-esteem and self-efficacy). Most responses fell in the social/integrative category (i.e., need to experience common goals, performing well, friendship and socialization). The responses in the self-esteem category (i.e., experience positive feelings) received the second highest number of responses followed by the kinesthetic category. The self-efficacy category received the least number of responses.

For some of the students, participation seemed to be “solely for the purpose of enhancing self-esteem and not really toward any other goal” (pp. 13-14). Future rewards, such as getting a college scholarship, were mentioned by more athletes than musicians. However, both musicians and athletes believed that extracurricular activities could keep them away from at-risk behaviors. Although Ebie did not indicate the ages or grades of the students in this study, he did mention a similar study underway with middle school students. It would be interesting to determine if there are differences between students from different age groups and/or grades.

The category with the highest number of responses was the social/integrative category that included involvement with others. It would be valuable to know why they have continued to participate. Did these students have other options? If they were asked about using their athletic or musical skills in the future, how would they reply? More athletes than musicians mentioned future rewards, which is understandable because of the media attention given to athletic scholarships. It would be interesting to see if these students were aware of the future rewards available by continuing in music. Perhaps students who have continued in music have a vision of their musical future that is subconscious and not something that would come to mind unless specifically queried. By specifically inquiring about elements of a student’s self-concept in music and future vision, perhaps some of these subconscious thoughts would be evident.

Like many other research studies in music, music participation was a prerequisite to involvement in the research study. Because the current study concerns the music self-concept of the general population, using participation as selection criteria was not appropriate.

Marlatt, J. (2004)

The purpose of this study was to investigate the causes that middle school students attribute to their success and failure in music and discover if these causes were related to music participation. A stratified random sampling method was used to identify 60 subjects from each grade level (i.e., sixth, seventh, eighth grade) for further analysis.

The researcher-designed Music Attributional Styles Questionnaire (MASQ) and Music Participation Scale (MPS) were used to collect data. MPS consisted of 13 items describing music study and performance, music listening and watching, and concert attendance. Students indicated the items that were applicable and the extent of their participation during the past year. Scores ranged from 0 to 16 with the highest scores indicating a greater level of participation than a low score. The MPS was pilot-tested with 38 students from one of the schools using the test-retest method and was considered a reliable measure of participation.

The MASQ was a two part self-report instrument. In part one, students identified causal explanations and dimensions for their success or failure in music. In order to detect the students' attributional style in part two, students responded to six descriptions of musical situations, three were positive events and three were negative events. Students were asked to imagine themselves in the situation, cite one reason for the situation happening, and rate dimensions of attributes by circling numbers on a 5-point bi-polar scale. Two judges, independently, categorized the subject response with high inter-and intra-judge reliability. Estimates of internal consistency were calculated using Cronbach's alpha with two sets of pilot subjects. The results were adequate when compared to previous questionnaires.

Music success was ranked into categories with the most frequently attributed case listed first (i.e., 1. affect for music, 2. musical ability/knowledge, 3. effort, 4. practice, 5. music participation, 6. musical talent, 7. environment/background, 8. private lessons, 8. personal commitment, 9. ease of task). Private lessons and personal commitment had the same number of responses and shared the eighth ranking. The categories reported by students for music non-success were also ranked according to frequency (i.e., 1. lack of affect for music, 2. lack of musical ability/knowledge, 3. lack of practice, 4. lack of music participation, 5. lack of effort, 6. environment/background).

To discover the attributional dimensions most prevalent among these middle school students, binomial tests were completed using dimension frequencies and data from the MASQ (part 1). There were significant differences in the dimensional proportions for all (i.e., internality, stability, controllable internal, controllable external, intentionality) but the global dimension of music success. For musical non-success, significant differences were detected in all of the dimensional proportions except the stability dimension.

To determine how music participation varied by attributional style, individual dimension ratings were used in separate chi-square tests where attributional dimension tendencies were the dependent variable and the two levels of music participation were the independent variables. There were no significant differences in music participation according to attributional style. “Although subjects may have characteristic ways of making attributions, variations in attributional style do not appear to influence individual levels of music participation” (p. 28).

The top categories for success and non-success were affect for music and musical ability/knowledge which are internal areas of self-concept. Subsequent areas are effort, practice and participation which are actions. Perhaps instead of a hierarchical vision of participation, interaction among these self-concept areas may be important. Do the ways in which students feel about music and their knowledge/ability effect the effort they put into practice and participation?

The authors did not discuss limitations to this research study. However, because of incomplete information in the report, internal consistency for the MASQ was difficult to evaluate. In the previous studies cited dealing with attribution theory and music, students were asked to respond to a specific experienced event (e.g., following participation in band contests, Austin, 1988). In the MASQ, students responded to various situations but specific information about the questions was not available. Subjects were instructed to “interpret the context surrounding the situation” (p. 27).

The students in Marlatt’s study were selected from general music classes and the items that made up the MPS described music study, performance, listening, and concert attendance. They were global in nature and did not separate the subdomains of music study such as vocal/choral or instrumental participation. Although students rated each item from 0 to 16 only 2 levels were used for analyses. The MPS was not used for the current study because an additional level of specificity was needed.

Corenblum, E. M. & Marshal, E. (1998)

The purpose of this study was to develop and test a model predicting student intentions to continue musical study. Variables included socioeconomic level, school achievement, attitudes, interests and attributions. Ninth grade Canadian band students

were selected to participate because a large decrease in band enrollment was noted upon entering high school. Students completed questionnaires during their regular class period reflecting students' attitudes toward the band program, their outside musical interests, perceptions of parental attitudes, perceptions of band teacher attitudes, perceptions of the school's attitude toward the band program and their attributes of success and failure in music classes. In addition, students indicated their overall average and current grades in math, science, social studies, and language arts, as well as their intentions concerning continuing in band next year. Band teachers rated each student's performance, ranked in-class performance, estimated current grades and estimated each student's grade in seventh and eighth grade band.

Analysis of data indicated that socioeconomic level and teacher evaluations had direct and indirect effects on intentions. Socioeconomic level predicted perceived parental support and outside musical interests that in turn predicted intention to take band the following year. Perceived parental support for band also predicted students' outside musical activities. Contrary to expectations, the more parental support a student reported the less likely s/he was to be involved in extracurricular activities. Socioeconomic level predicted perceived school support which predicted student perceptions of teacher attitudes. Perceptions of teacher attitudes also predicted student attitudes toward band. However, through a series of post-hoc analyses, researchers concluded that "there is a nonsignificant relationship between students' attitude toward their current band program and their intentions to continue" (p. 154). Teacher evaluations predicted intentions and students' perceptions of their parents' attitudes. The more positively teachers rated a band student, the more likely that student reported intention to continue in band. "Although

attributions were unrelated to intentions, the more students like band, the more likely they attributed their grades to effective learning strategies, and the less likely they were to make attributions to luck or circumstance” (p. 136).

Intentions were predicted by socioeconomic level, teacher evaluations, and perceived attitudes of important others. Course grades did not predict intention to continue study. Researchers suggested that although the structural model seemed to fit the data well, the model accounted for less than a third of the criterion variability. Additional factors may need to be considered (e.g., nonmusical extracurricular activities, additional high school courses).

An interesting point about this study was that socioeconomic level was measured by “answers to questions about each parent’s occupation, the number of musical instruments owned or rented by the family, and whether the student owned their own instrument” (p. 133). However, many students (almost half) did not answer these questions used as a measure of socioeconomic level. Although the subsequent analysis seemed to support the reliability of this measure, logic supports questions about validity (i.e., quantity vs. quality; large vs. small family). Although the factors investigated seem to be important in the retention of band students, perhaps additional factors need to be investigated. What do students think of the utility of band membership? At a time when students are deciding about their future, do they see band as contributing to their future aspirations?

When Corenblum and Marshall were studying students’ intention to continue musical study, they acknowledged that additional factors may need to be considered (e.g., nonmusical extracurricular activities, additional high school courses) in addition to

socioeconomic level, school achievement, attitudes, interests and attributions. Although only students who took part in band were used as research participants, researchers suggested that additional factors may contribute to band participation. The current study includes a general population of students in addition to those who are in band.

Abeles, H. (2004)

The purpose of this study was to identify strategies and partnerships that are effective in motivating students to play a musical instrument. Three different orchestra/school partnerships located in large cities were examined to reveal the effect on students' interest in instrumental music. Although the goals and strategies employed by the three partnerships were different all had either a primary or secondary goal to increase students' interest in playing an orchestral instrument.

The first partnership was designed to nurture the talents of students. First grade students from five participating elementary schools were given the opportunity to learn to play the violin in an in-school, modified Suzuki program. Students received instruments and instruction, observed string performances and had an opportunity to perform in a joint concert. The second partnership, aimed at third and fourth graders, was designed to provide information about and increase interest in learning to play an instrument. Information included a workshop for teachers to incorporate orchestra lessons, performances for students, instrumental demonstrations, discussions and participatory activities. The third partnership, a collaboration between an orchestra and a group of five urban and suburban elementary schools (K-5), was designed to "help classroom teachers integrate music into the curriculum in support of learning in other subjects" (p. 252). Additional goals of the program included acquiring knowledge of orchestra instruments,

personnel and repertoire while motivating students to pursue instrumental music instruction.

For each partnership, one comparison school was selected. All schools had full-time music teachers, as well as similar instrumental music programs and demographic characteristics. Vocational choice was used to measure the effect of partnership activities on students' interest in instrumental music using a modified form of the "Vocational Choice Scale" (VCS, Cutietta, 1995). Students from all of the partnership schools, as well as the comparison schools completed the VCS by finishing the sentence "When I grow up I would like to be:" for three occupations. Reliability was established by test-retest in a non-partnership school.

The top three occupations reported by all students were parent, teacher and basketball player. Of the three musical vocations, guitar was the most frequently chosen followed by tuba and violin. The data were further analyzed to determine if there were differences between schools. The pattern of vocational choices was significantly different between partnership and comparison schools. Although each of the partnership conditions contributed significantly to predicting students' music choice, the odds of selecting music were different in each condition. Analysis using a logistic regression of music choice indicated that students in partnership one were approximately nine times more likely to select music than their comparison group, while partnership three students were approximately twice as likely.

Additional data were collected in order to examine students' musical participation decisions. Middle school students who were enrolled in a school's instrumental program and had participated in partnership two completed a five-item questionnaire about the

decision to play a musical instrument. “Twenty-two students (60%) said that the partnership activities influenced their decision to play an instrument” (p. 257).

Partnership experiences influenced their choice of instrument and their decision to play an instrument. Fourth graders reported that they decided to play an instrument because they saw musicians playing string instruments or because a family member plays an instrument. One 6th grader stated “A drummer came to our school and played a lot of different beats. He made me want to learn the drums” (p. 257). Participating schools had a larger percentage of students who took school instrumental lessons than other schools and the difference was statistically significant.

The overall pattern of responses suggests that, “children in second to fourth grade tend to choose vocations that they are exposed to or are familiar with” (p. 258). All students received music instruction in their schools but students in the partnership schools also had “opportunities to develop images of musicians directly through their partnership experiences” (p. 258). One limitation of this study may be the “validity of vocational choice as a predictor of participating in an instrumental program” (p. 259). For this reason, additional questionnaires were completed and interviews conducted. “The results of these interviews and surveys indicated that students who participated in partnerships actually do enroll in instrumental music programs at a higher rate than students who did not participate in the partnerships” (p. 259). Additional limitations included the nature of the data and school participation selection. Partnerships were already in place before this study was conducted. Participants were not randomly selected. Future research should examine different programming strategies and their effect on students’ interest in participation.

A limitation of this study may be the choice of vocation as a predictor of participation. Valid ways that persons use music in their lives (i.e., playing, singing, composing, listening, etc.) may also be an important future aspiration that does not reflect an occupation. Perhaps experiencing music first hand is motivating because students see adults engaging in musical activities that youth would not normally experience. Maybe the motivating factor is not only the possibility of a musical career but the experience of musical engagement.

O'Neill, S. A. (2005)

As students approach adolescence they drop out of musical activities especially following the transition to secondary school. The purpose of this study was to further the understanding regarding the decline of positive beliefs about musical activities during adolescence. Participants were approximately 1,500 youth from the United Kingdom, along with their parents, friends, and teachers. Data were collected during the final year of elementary school, the first year of secondary school and the end of the first year of secondary school. Participants completed measures of musical involvement, motivation and perceived social support. "Our aim was to focus on the children's own views, because the way they viewed their involvement in musical activities was likely to have the largest impact on their motivation and future participation" (p. 265).

Children were asked about their involvement in listening to music, dancing to music, singing, and using a computer to make music following the transition to secondary school in both formal (at school) and informal (outside school) contexts. A decline in participation was observed that continued throughout this first year in secondary school. The only exception was listening to music which showed an increase, especially in after-

school contexts. Youth playing instruments declined in both formal and informal contexts. Less than 35% of children continued to play an instrument by the end of the first year of secondary. Girls were more likely to continue playing an instrument than boys. Youth who continued playing an instrument were more likely to have played an instrument for more than one year while in elementary school, exhibit positive motivational beliefs/values and report being more self-directed than youth who did not continue. “Those who were most likely to continue reported valuing the instruments they played and identified positively with adult role models who played similar instruments” (p. 267). Students who continued also reported more positive experiences in overcoming challenges, performance experiences and close associates who played instruments than students who did not continue playing an instrument. “(W)hat appeared to be important was not so much winning competitions, but rather having the sense of structured goals to work toward that were viewed as a challenge or opportunity to improve skills and not just as an opportunity to display competence” (p. 268).

O’Neill explained that the most frequently offered explanations for declining music participation focused on social and educational changes following the transition in terms of societal expectations, friendship patterns, institutional structures and teaching practices. “Some music programs may not be providing the kinds of activities that are valued by, and acceptable to, many young people” (p. 268). In order to understand how youth’s interest in music activities may be sustained, it is important to identify the characteristics of successful music programs with more attention to individual differences associated with their changing circumstances. “(W)e need to consider not only the musical opportunities that made available to young people, but also the extent to which

these opportunities are likely to be accepted by them in engaging and meaningful ways at different stages of their development” (p. 268).

Summary of Music Participation

Most of the research investigations (e.g., Abeles, 2004; Corenblum & Marshal, 1998; Ebie, 2004) concerning students’ involvement in music have studied students who are already participating in musical organizations. Social Context was important to their participation (Abeles, 2004; Corenblum & Marshal, 2008; Ebie, 2004; Madsen & Duke, 1999) as well as affect for music (Marlatt, 2004) and ability (Marlatt, 2004). Music is important to students. However, to ascertain whether students in the general population are participating in musical activities a measure of participation including musical experiences encountered by the general population was required while considering important characteristics as social context, affect and ability attributions.

Measuring Music Participation

A research tool was needed to determine the music participation for a group of diverse adolescents. Therefore, an examination of the ways in which music participation was measured in the general population, especially with adolescents, was warranted. In this section, studies where music engagement was measured will be reviewed focusing on the relevant measurement instruments.

Broomhead (2001)

Broomhead (2001) was interested in individual, ensemble and technical expressive performance achievement, along with musical background. The music background questionnaire for these high school students consisted of 11 variables, each measured in a different way. High School and Junior High Choir participation was

measured in semesters. Private piano, private voice, and private instrumental lessons were measured by number of years participating. Students were also asked the number of hours they spent listening to music each day and the number of years they participated in outside of school music groups. Students indicated their current grade, the age of their first private lesson and the age of their first participation in a performing organization. Parents' years in performing groups and private lessons were also examined. Although validity and reliability information was not available, four variables (i.e., years of outside group involvement, years of private voice, semesters of high school choir and age of first lessons) were significantly related to individual expressive performance. In conclusion, music engagement was measured using years, semesters, and hours with high school music ensemble participants.

North, Hargreaves, O'Neill (2000)

Researchers were interested in the importance of music to adolescents, why they listen to and perform music. Participants ($N = 2465$) were secondary school students from England between the ages of 13 and 14. Involvement in music activities was assessed using both categorical and frequency responses. Respondents were asked whether or not they played an instrument, what that instrument was and when they played it (i.e., now or in the past). Respondents were also asked about their listening habits. Listening per day was assessed in hours. Frequency of listening to music was assessed using five response options (i.e., not very often, some days, most days, once or twice a day, as often as I can). When asked about the social context of their music listening, most respondents reported listening on their own (60%). Additional questions included information about music genre and social context of music listening. Researchers did not

investigate adolescent participation in a vocal/singing context that seems important because singing is something anyone could do regardless of socioeconomic status. Reliability and validity information about the participation measures was not available. Results were reported in descriptive statistics (e.g., percentage of students reporting listening to music often or mean hours per day listening to music).

For this research study with 13- and 14-year-olds, participation was assessed with hours per day. Questions about frequency and social context of listening were explored with a five point scale. Performing music was assessed in the instrumental context. An open-ended question elicited hours listening to music.

Harrison & Narayan (2003)

Harrison and Narayan investigated whether participation in team sports and other extracurricular activities was associated with higher levels of psychosocial functioning and healthy behavior than nonparticipation. Public school students in grade nine responded to the participation questionnaire by stating hours each week spent engaging in several activities (i.e., school team sports, clubs, music organizations, community service). Level of participation was assessed by six response options ranging from “0 hours” to “21 or more hours” spent taking part during a typical week. For this study, the music possibilities were combined into one statement (i.e., “Band, choir, orchestra, music lessons, or practicing voice or an instrument”, p. 114). This study did not focus on music outcomes. However, it was important to note that music participation was assessed using hours in a typical week.

Sichivitsa (2003)

The purpose of this study was to investigate influences on college choral students' intentions to continue participating in music. Participants were college students ($n = 150$) enrolled in three traditional choirs. To assess choir participation, students listed the number of years they sang in choirs prior to college, the number of years they played an instrument before college and the number of years taking voice lessons. A panel of four independent judges confirmed face validity. The measure was considered reliable after an internal-consistency analysis.

McKeage (2004)

The purpose of this study was to examine the relationships between gender and participation in instrumental jazz ensembles. The Instrumental Jazz Participation Survey (IJPS) was developed based on themes generated from an earlier study (McKeage, 2002) and discussions with students. IJPS was designed for administration during a high school or college band rehearsal and consisted of three sections (i.e., demographic information, attitudinal information, intentions). Reliability and criterion validity was established through cross-referencing with course information. Content validity was addressed by using information from pilot surveys (Fowler, 1993) and demographic information related to research questions. The participation questions were of interest to the current study. Students were asked if they had participated in jazz in high school. Participation was rounded off to the nearest half year. Students were divided into four jazz participation groups (viz., never played, played in high school, played in college, continue to play). To summarize, in this study, jazz participation was assessed by years of group membership.

Summary of Measuring Musical Participation

Researchers have used many instruments to measure the ways in which students are involved in music. Some investigations include only students who are involved in a specific music ensemble (e.g., Corenblum & Marshall, 1998; Ebie, 2004; McKeage, 2004; Sichivitsa, 2003). Participants have ranged in age from junior/senior high school students (Broomhead, 2001; Harrison & Narayan, 2003; North, Hargreaves & O'Neill, 2000) to college students (Madsen & Duke, 1999; McKeage, 2004; Sichivitsa, 2003). Participation has been investigated using hours each day (Broomhead, 2001; North, Hargreaves & O'Neill, 2000), hours each week (Harrison & Narayan, 2003; North, Hargreaves & O'Neill, 2000), years (Broomhead, 2001; McKeage, 2004; Sichivitsa, 2003). Frequency has been assessed using a 5-point (North, Hargreaves & O'Neill, 2000) or 6-point (Harrison & Narayan, 2003) response scale. Listening to music was assessed by hours per day (Broomhead, 2001; North, Hargreaves & O'Neill, 2000). Outside of school music ensemble participation was assessed by years (Broomhead, 2001). These research instruments were developed based on the context and intention of use.

In the current study, students' perception of their current engagement in music is important. Hours per day may be an effective tool for assessing listening and other outside of school experiences. However, some experiences take place only during the school year (i.e., ensembles). Ensembles may not occur every day. For this reason, students will be asked to estimate their current participation and given the option of answering in hours per day or week.

Gender Differences in Music

Participation in school musical endeavors declines during the middle school years and this participation seems to vary according to gender. Many reasons may play a role in the disparity. Adolescent males and females physical growth rates are different. Huber and others (1999) found evidence for a large growth spurt in the male vocal tract between the ages of 12 and 14 years that was followed by a smaller, steady increase in vocal tract size to age 16 or 18. In contrast, for females, the maturation was typically completed by age 12 with a very slight decline in vocal pitch frequency that continued to age 18. “(N)ot only do males and females grow at differing rates, but female growth rate slows down earlier” (Huber, et al. 1999, p. 1538). While the voice is mutating, adolescents may feel very self-conscious about the physical changes they experience (Berk, 1997; Caissy, 1994; Conger & Galambos, 1997; Steinberg, 1996).

Some researchers have found that girls listen to more music (Greenberg et al., 1989; Roberts & Henriksen, 1990) or use music for socialization (Carroll et al., 1993; Gantz et al., 1978) more than boys do. Differences between males and females are context dependent (Tarrant et al., 2002). Many studies in music education have included information about gender differences. The studies reviewed in this section focus on gender differences in relation to motivation and self-concept.

Mboya, M. M. (1998)

Gender differences in perceived parental behaviors and self-concepts were investigated with Black African adolescents ($N = 496$). The students (159 boys, 337 girls) resided in an exclusively Black African poor neighborhood (viz., Khayelitsha, Cape

Town, South Africa). The sample consisted of boys and girls with a mean age of 18.7 years from two secondary schools.

Two measures were used in this investigation, The Perceived Parental Behavior Inventory (PPBI, Mboya, 1993a) and the Self-Description Inventory (SDI, Mboya, 1993b). PPBI is a multidimensional instrument that solicits information about the following dimensions of perceived parental behavior: support, interest and encouragement (STCT), expectations (PTTN) and participation (PTPN). SDI is a self-concept instrument based on the multidimensional model of Shavelson, Hubner, and Stanton (1976). The dimensions included in this instrument are: relation with family (FMLY), general school (SCHL), physical abilities (PHYS), physical appearance (APPR), emotional stability (EMOT), music ability (MUSC), relations with peers (PERS), health (HLTH) and global Self-Concept (GLBL).

Students completed the questionnaires during regularly scheduled class periods after standardized instructions were read aloud. Analysis of data using a t-test revealed no significant differences between boys and girls on the three subscales of the Perceived Parent Behavior (STCT, PTTN, PTPN). Boys scored higher than girls on the following subscales of the Self-Description Inventory: FMLY, PHYS, EMOT, PERS, and GLBL. Girls reported higher scores than boys on music ability. No gender differences were detected in general school, physical appearance or health dimensions. The relationship between the SCTC perceived parental behaviors and student self descriptive categories (FMLY, SCHL, and GLBL) were stronger for boys than girls. The relationship between parental expectations and relations with family self-concepts was also stronger for boys than girls. In the next step of analysis, global self-concept scores were compared with the

perceived parental behavior scores using Analysis of Variance (ANOVA). “(T)he high self-concept group reported a superior level of perceived parental behaviors to the low self-concept group in both boys and girls” (p. 209).

Researchers did not report limitations but suggested that this study was the “first systematic attempt to relate specific parental behaviors to specific self-concepts of adolescent boys and girls in an African context” (p. 210). The mean age seems to be in the older range for high school students. Research with younger students would be valuable for insight into the formation of the self-concept through adolescence and its relationship to perceptions of parental engagement.

Gender differences were not found in subscales (support, interest, encouragement, expectations or participation) of Perceived Parental Behavior Inventory. Boys and girls reported about the same strength in the relationship with their parents. However, there were gender differences in specific dimensions of the self-concept. When investigating students’ self-concepts it would be important to take into account this domain-specific nature.

Schmidt, C. P. (2005)

Within the context of instrumental music, Schmidt (2005) examined achievement orientation, self-concept, attitude, and effort of students in grades 7 through 12 ($N = 300$) from four different school districts. A student questionnaire was developed that included years of experience in band, practice time per week, outside of school instrumental participation, grade level of solos, ratings in solo festivals, and 58 - 5-point Likert items (i.e., commitment to band, self-concept in instrumental music, motivation variables). Teachers rated each student on achievement, effort and attitude.

Analysis indicated a significant positive correlation between commitment to band with self-concept or intrinsic, cooperative, mastery, and individual orientation. A high correlation was found between competitive and ego orientations. Correlations among motivation variables, achievement and experience were generally low. The relationship between commitment and practice time, commitment and effort, intrinsic orientation and practice time, intrinsic orientation and effort were moderate and significant. All correlations for motivation variables by gender were not significant and there were no significant differences in degree of association by gender.

Colley, A. & Comber, C. (1994)

Colley and Comber were interested in the relative liking of school subjects by gender and the relationship between preferences and sex role stereotyping. Respondents were British middle school students (52 males, 41 females) who ranked the nine subjects, including music, within their current curriculum and completed the Children's Sex Role Inventory (Boldizar, 1991). Additional ratings of performance in three subject areas (English, science and music) were collected from teachers. There were no statistically significant differences in the music rankings by gender. (Both males and females ranked music as one of the least favorite subjects.) However, there was a positive statistically significant low correlation between subject rankings and performance for music. When students received higher music grades they ranked music higher than students with lower grades. In this study there were no differences between adolescent boys and girls in their rankings of the music in relation to other school subjects.

Summary of Musical Gender Differences

Differences between males and females were found in their self-concept of musical ability (Mboya, 1998). However, significant differences were not found between males and females in other studies (i.e., rankings of music as a subject: Colley & Comber, 1995; perception of parent behavior, Mboya, 1998; motivation variables, achievement or experience: Schmidt, 2005). Additional investigations into gender differences may help to clarify research results.

Chapter Summary

Music seems to be an important part in teenagers' search for an identity (Sanders & Browne, 1998; Steele & Brown, 1995). A positive music self-concept may lead to increased music participation (Steele & Brown, 1995; Sanders & Browne, 1998). Social context, affect for music and ability were important factors in participation decisions for students participating in school musical organizations. In addition, attributional beliefs were strongly linked to self-concept and achievement test scores (Austin & Vispoel, 1998).

Research instruments have been developed to investigate music self-concept and music participation. The research instruments were based on the context and intention of use. However, a need was recognized for additional research that would identify and target areas of low arts-related self-concept (Vispoel, 1993). Even though, middle school students seem to love music their participation in school organized musical activities declines during these years. An unexplored element of motivation in music, *possible selves*, may be important in understanding adolescent's participation in music. Measures of self-concept in music were investigated and a *possible self* tool was developed for use

in the present study. In order to investigate student engagement with music, a participation measure was developed based on previous participation tools with adolescents. These tools were vital to the current study in order to examine the role of *possible selves* in the motivation of middle school students' participation in musical endeavors.

CHAPTER IV: METHODOLOGY

The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' participation in musical endeavors. Students' music *possible selves*, in vocal/choral, instrumental and overall musicianship contexts, were assessed, compared and examined in relation to their self-reported music participation hours. The primary research question was: What are the relationships among middle school students' music participation and their music *possible selves*? The research question was further analyzed by two dimensions of *possible selves* (i.e., current and future), by context (i.e., vocal/choral, instrumental, overall musicianship), and by gender. Therefore, the sub questions were:

1. What are eighth grade students' *now and future possible selves* in overall musicianship, as well as, in vocal/choral and instrumental music contexts?
2. How much time do eighth grade students report singing, playing an instrument, and participating in overall musicianship activities?
3. Considering students' overall perceptions of their musicianship, as well as their perceptions in the vocal/choral and instrumental context, what is the nature of relationships among eighth grade students' *now possible self* perceptions, *future possible self* perceptions, and music participation?
4. Does gender play a role in the above relationships?

Design of the Study

The study was descriptive and correlational in nature. Descriptive research is concerned with discovering "what is". As Gall, Gall, and Borg (2003) explained: "unless researchers first generate an accurate description of an educational phenomenon as it

exists, they lack a firm basis for explaining or changing it” (p. 290). In order to describe the *possible selves* of adolescents, quantitative descriptive techniques (i.e., mean, median, mode, range, standard deviation) were employed. Correlation coefficients were computed in order to describe the nature of the relationships among relevant variables [i.e., gender, overall musicianship *possible selves* (present and future), vocal/choral music *possible selves* (present and future), instrumental music *possible selves* (present and future), and music participation (vocal, instrumental, overall)]. This study determined the direction and strength of relationships among students’ music *possible self* beliefs and their participation in music.

Development of the Measurement Instruments

Because a music *possible self* questionnaire and an appropriate music participation questionnaire did not exist, instruments were developed and pilot tested with middle school students. The initial development of each instrument is described below followed by a discussion of the two pilot studies that were conducted to establish reliability, validity, and ease of use by middle school students. Subsequent revisions to the instruments as recommended by results of the pilot studies are also described.

Music Possible Self Questionnaire (MPSQ)

In order to create the Music *Possible Selves* Questionnaire (MPSQ), several *possible self* instruments were reviewed. (Please consult Chapter II for a detailed description of these measures.) Previously, researchers such as Anderman and Anderman (1998) constructed questionnaires utilizing statements of a student’s present and future self perception. These self-perceptions were compared with actual behavior or perceived conditions. Hooker and Kaus (1994) found that it was difficult to analyze *possible self*

perceptions unless a context was given. *Possible selves* have not been investigated in music. Therefore, the Music *Possible Selves* Questionnaire was developed.

The MPSQ was designed for early adolescents, who are in the process of imagining a place in the future (Steinberg & Belsky, 1991). In preparation for the construction of the MPSQ, I asked my 13-year-old son about his possibilities in music. He was not interested in responding until I asked him to imagine what he could be doing with music, if he wanted to (i.e., a context of possibilities). As a result of this experience with an early adolescent, I decided that the MPSQ should begin with questions to illicit students' imagination. For that reason, the questionnaire began with the following stimuli: "Dream about your musical possibilities.....If you wanted to, what would you do musically as an adult? Describe your dream of the future." Following this prompt, students were asked to relate what they were doing, currently, to achieve their dream. On the second page, students responded to the following prompt: "Musically, what would you like to avoid doing? Are you doing anything to avoid this possibility?" These first two pages were designed to provide a setting for imagining.

After the context was set, the questionnaire structure was consistent with previous *possible self* questionnaires (Anderman, 1998, 1999; Guinan, 1996; Markus & Nurius, 1986; Oyserman, 1990). Students responded to self-concept statements related to their current and future views of their possibilities, using a five point Likert-type scale ("strongly agree to strongly disagree"). The self-concept statements were constructed from categories identified by Vispoel (1993, 1995). The categories were: skill compared to other individuals, skill compared to other subject areas, level of confidence in performing tasks, level of confidence in the company of others, inclination to

welcome/avoid participation in tasks, speed or facility in learning tasks, endorsement/denial of general evaluative statements about one's skills, perceptions that one has or lacks natural ability, perceptions that one has or lacks being recognized by other individuals, and perceptions about one's typical performance. Vispoel used an additional category of "projections about performance on future tasks". However because each category in the MPSQ featured now, future and feared statements the Vispoel's category of "projections about performance on future tasks", was eliminated for the MPSQ.

Most of the Vispoel (1993) music statements were broad in nature (i.e., slow at learning music, like to perform music) reflecting an overall feeling about music. For this study additional specificity was required. Therefore two sub domains (i.e., vocal/choral, instrumental) in addition to the broad category of musicianship seemed relevant. Students may form a global music self-concept that is different from their self-concept within specific sub-domains. A student trumpet player may believe his/her instrumental performance is superior to or better than peers but, at the same time, articulate that s/he cannot sing or sings worse than peers. For this reason, the dimensions of musical self-concept were explored in the two sub-domains of vocal/choral and instrumental, as well as, the overall category designed to elicit a comprehensive idea of a students' self-concept in musicianship. Half of the statements were negatively worded and the rest utilized positive wording as in the Vispoel instruments (1993, 1995). For an index of the Vispoel categories along with the MPSQ music application statements, please see Appendix A.

Student Music Experience Questionnaire (SMEQ)

In addition to the *possible selves* questionnaire, a measure of music experience was also needed. Several instruments to measure music experience have been developed by other researchers. For example, music experience has been assessed by using years of involvement in a specific context (i.e., high school music ensemble, Broomhead, 2001; college choir, Sichivitsa, 2003). Some studies used music participation as a condition for study participation (Corenblum & Marshal, 1998; Ebie, 2004). Marlatt (2004) used the Music Participation Survey (MPS) with general music classes but the questions were global in nature and did not contain the specificity needed for the current study. These participation instruments were not appropriate for the current study because they did not illicit specific information about student participation in vocal/choral, instrumental and overall musicianship within a single measure.

The Student Music Experience Questionnaire (SMEQ) was developed to collect data from a general population of students concerning their music experiences. In order to ascertain the music experiences that would be possible for middle school students, middle school teachers and graduate music education students were queried. Both in-school and outside-of-school involvement was of interest. As a result, the following categories were utilized: concert band, marching band, jazz band, orchestra, school instrumental lessons, other school instrumental ensembles, school instrumental or vocal solo, mixed choir, men's or women's singing ensembles, vocal jazz or show choir, private instrumental or vocal lessons, outside-of-school organized musical ensemble, and outside-of-school other musical experience. By filling in a computer scored form, students indicated the grades

during which they participated in musical activities. An additional page was provided for students to add musical experiences not already listed.

Validity of MPSQ and SMEQ

During the initial development, an expert panel of graduate students (who were also practicing teachers) and three music education professors (who are active in music education research) reviewed the measure for face, content, and construct validity. After discussions with these experts, some panel members felt that a few students would have difficulty responding to a number of the statements. For example, a student who does not play an instrument may have difficulty responding to statements concerning instrumental playing ability. As a result, a segment was added to the administration script where students were asked to think about the ways they interact with specific facets of music (e.g., instruments, singing, other musical endeavors) and respond to statements considering what they could do if they so desired.

The MPSQ and the SMEQ were designed to be completed by students in one class period and the target administration length was 30 minutes as recommended by Fowler (1993). Two pilot studies were conducted to further develop the MPSQ and SMEQ.

First Pilot Study of MPSQ and SMEQ

The first pilot study was conducted with 7th grade general music students. The purpose of this study was to establish reliability, validity and ease of student use for the MPSQ and SMEQ. The following research questions were posed:

1. Is the Music *Possible Self* Questionnaire (MPSQ) a reliable measurement of an early adolescent's music *possible self* perceptions?

2. Is the Student Music Experience Questionnaire (SMEQ) a reliable measurement of an early adolescent's music experiences?
3. Are the administration procedures appropriate for the target population of early adolescents?

Subject Selection

All seventh grade general music students ($N = 40$) from a rural central Pennsylvania public school were invited to participate in the pilot study. These general music students did not participate in elective school music ensembles. However, the general music classes met daily for 12 weeks.

Procedure

Approval was requested and granted from the two general music teachers, school principal, school board and the University's Office for Research Protections to use students as research participants. The researcher met with each general music class three times. During one class, the investigator explained the project and requested participation. Explanatory letters, along with consent and assent forms were distributed for the appropriate signatures at this time. Thirty-one students, who returned the forms with their parents' consent, assented to participate. Approximately one week after the introduction, participating students completed the SMEQ and MPSQ during their general music class. The researcher administered both questionnaires in the students' music classroom during their regularly scheduled general music class using a script.

On each questionnaire administration date, the researcher introduced the activity using a written dialog. Students wrote their answers to the open-ended questions directly on section I of the MPSQ and indicated their responses to statements in section II on a

computer-scored form. The SMEQ was completed by filling out a computer scored form and noting additional information on an enclosed form. Preparation was made for the questionnaire to be administered in a form compatible with the district's learning support policy and practice (i.e., students who usually have tests read to them in the learning support classroom and visually or otherwise impaired students would have an aide help them complete the questionnaire). However, students did not need additional assistance.

After the questionnaire was completed, students were asked in a large group if they had any difficulties responding to the statements or understanding what was required of them. Students were also invited to write additional comments on the back of the questionnaire. Using the same procedure, students completed the same questionnaires a second time, two weeks later. For anonymity, each student was assigned a number on the first administration date and completed the same questionnaires identified with the same number during the second administration date. The only change the second time was that students talked individually to the researcher about the questionnaires as they handed in their papers.

Results and Conclusions

Students ($n = 9$) who did not participate brought a book to read or were given additional work to complete by their general music teacher. Some students ($n = 6$) only completed the questionnaire one time because they were absent from school during one of the administration occasions. Consequently, questionnaires from absent students were used for internal consistency analyses but could not be used for the reliability analyses. Upon review of the computer-generated forms, two answer sheets were considered to be

invalid because students indicated answers in a section that was supposed to be blank. The resulting number of paired questionnaires was 23.

Reliability of MPSQ. In order to answer the first research question (Is the MPSQ a reliable measurement of an early adolescent's musical *possible self* perceptions?), internal consistency and "test-retest" reliability analyses were conducted. The first administration of the MPSQ was used to estimate how well the ten questions within each category (i.e., *now vocal/choral, future vocal/choral, feared vocal/choral, now instrumental, future instrumental, feared instrumental, now overall music, future overall music, feared overall music*) yield similar results. Cronbach's alpha was used to determine their internal consistency. Both administrations of the questionnaire were compared using the "test-retest" method (Gall, Gall & Borg, 2003) with a paired t-test analysis using Statistical Package for the Social Sciences (SPSS).

For the MPSQ, means were calculated for each of the nine factors (*now vocal/choral, future vocal/choral, feared vocal/choral, now instrumental, future instrumental, feared instrumental, now overall music, future overall music, feared overall music*) on the two administration dates. Negative items were reverse coded. Internal consistency analysis was conducted using Cronbach's alpha. Because multiple questions measured each factor, the questions should be associated with each other. In the vocal/choral subset (*now, future, feared*) and the instrumental subset (*now, future*), all of the factors had coefficients above 0.80 that is an indication of good internal reliability. The *feared instrumental* category had an alpha of 0.553. The coefficients for the general subset were *now* (0.781), *future* (0.708) and *feared* (0.655). Because these coefficients

were lower than 0.80 the categories were concluded to have low reliability. The questions within each category did not address the same concept with similar results.

The paired t-test involved taking the difference between two mean scores. The p-values for all subsets were larger than 0.05 indicating that there were no significant differences between the scores from both administration dates. Paired samples were analyzed to determine the correlation coefficient. The correlation coefficients were: *now vocal/choral* (0.84), *future vocal/choral* (0.78), *feared vocal/choral* (0.50), *now instrumental* (0.71), *future instrumental* (0.59), *feared instrumental* (-0.09), *now overall music* (0.54), *future overall music* (0.66), *feared overall music* (0.52). The p-value was under 0.05 for eight of the nine factors, an indication these correlations were statistically significant. The only factor with a p-value over 0.05 was *feared instrumental*. However, the correlation coefficient in the *feared* categories ranged from -0.09 to 0.52 that was considered low to moderate by Ravid (2000). The *now and future* factors for each subset were considered reliable because the t-test failed to reject “no difference” between the administration times and the correlation between administration times was statistically significant. The *feared* statements were not found to be reliable.

Reliability of SMEQ. The reliability of the SMEQ was established using 23 paired samples. The first administration of the questionnaire ($M = 0.17$, $SD = 0.18$, $SE = 0.04$) was compared with the second administration ($M = 0.15$, $SD = 0.18$, $SE = 0.04$). The correlation coefficient ($r = 0.879$) was very high (Ravid, 2000) and statistically significant ($p \leq 0.00$). Using a paired samples test ($M = 0.02$, $SD = 0.09$, $SE = 0.02$) the difference between the two administration times was not statistically significant ($p \leq 0.278$), 2-tailed with a t value of 1.11 ($df = 24$). The 95% confidence interval of the

difference was from -0.02 to 0.06. The SMEQ was deemed a reliable measure of students' musical experience.

Administration procedures. In order to answer the third research question (“Are the administration procedures appropriate for the target population of early adolescents?”), students were queried about the procedures by a discussion after the second questionnaire administration. Students remarked that they understood the directions but the questionnaire was long, repetitive and included too many negative statements that made answering laborious. The possible answers for the MPSQ and the SMEQ were confusing to some students because their responses were recorded on different answering sheets. Students had 5 MPSQ choices (strongly agree to strongly disagree) and 10 SMEQ choices (grades participating in music).

Discussion and Revisions

The administration procedure required more time than the projected 30 minutes and students remarked that the questionnaire was too long and included too many negative and repetitive statements. The experience measure (SMEQ) contained information about past and present experiences and was deemed inappropriate for the main study because more information about current participation was needed. Consequently, middle school teachers were consulted and several changes were implemented in revised versions of the MPSQ and SMEQ.

SMEQ revisions. The experience measure (SMEQ) was changed and renamed. Upon further consideration and in consultation with other researchers, a measure of current music participation, instead of a measure of experience, was needed because the current atmosphere of possibility was the important link to motivation and action.

Although experiences may play a role in how people view their possibilities the measurement of experience was not relevant for the current study. The new questionnaire, “The Student Music Participation Questionnaire” (SMPQ), was developed based on research with adolescents by Harrison & Narayan (2003) and Hargreaves & O’Neill (2000). Because the new measure needed to illicit current music participation, hours were calculated instead of years. Hours as a measurement of participation have been used successfully by several researchers (Harrison & Narayan, 2003; North, Hargreaves & O’Neill, 2000). Harrison and Narayan (2003) asked ninth graders the following question: “During the school year, how many hours in a typical week do you spend doing the following?” Several sports and music activities, such as band, choir, orchestra, music lessons, and practicing, were listed. Six response options ranged from “0” to “21 hours or more”. Students who selected “1-2 hours” were classified as participating. Reliability and validity were not reported. North, Hargreaves & O’Neill (2000) also used hours as a participation measure. 13- and 14-year-olds were asked how many hours a day they listen to music. These questions were pilot tested to ensure that they were comprehensible and unambiguous for this age group. Although these studies and others explained in chapter III used hours of participation as the measurement scale they did not contain enough information for the current study (i.e., information about vocal/choral, instrumental participation, overall musicianship). As a result the Student Music Participation Questionnaire (SMPQ) was developed.

The SMPQ was divided into two sections (viz., school-related and outside of school). Each of these sections was further divided by questions about instrument playing, singing, music listening and creating music. Instead of answering with years of

participation in musical groups as in the SMEQ, students could respond about their current music participation with hours per day or week for each category. Students were given this option because some activities are only completed one time a week (i.e., band practice) while others are completed daily (i.e., listening to music). Space was also provided for any additional information that was relevant. This measure, based on prior research was reviewed by current middle school teachers to ensure validity.

MPSQ revisions. Because of the questionnaire length (viz., SMEQ and MPSQ) and reliability issues with the *feared* music statements, subsequent changes were also made to the MPSQ. In the new revised questionnaire, called the *Music Possible Selves* Questionnaire II (MPSQ II), the beginning open-ended questions were eliminated. Consequently, in order to set the context, students were encouraged to think about all of their music experiences by completing the SMPQ first. Additionally, examples of various types of student music participation were included in the questionnaire instructions. After completing the SMPQ by writing down the approximate hours of music participation, students responded to statements in the MPSQ II.

During the MPSQ II, students responded to statements from strongly agree to strongly disagree. The *feared self* category was eliminated because of the low reliability of *feared possible self* questions in pilot study one and the dual nature of *feared possible selves*. For example, with the original MPSQ questionnaire format, a student could answer “strongly agree” to a statement such as “I fear singing poorly” and according to Markus and Nurius (1986), the answer could either indicate that students would seek music experiences so that they could be better singers or avoid musical experiences altogether. This dual nature of *feared selves* may be confusing in the present format and a

relationship with music experience would not be valid. Some students may answer that they strongly agree with a statement and consequently avoid participation while another students would seek participation to avoid consequences. In future studies, perhaps it would be more appropriate to investigate *feared selves* using a qualitative methodology. Several past studies (Anderman, Anderman & Griesinger, 1999; Hsu, 2001; Ruff, 1991) have investigated *possible selves* by using present and future perceptions of students' *possible selves*. The current study focused on students' *current and future possible selves* in music.

Students reported that the original questionnaire was very negative that for them made answering questions laborious. As a result changes were made in the revised *possible self* measure. The MPSQ II consisted of 10 statements for each category (viz., vocal/choral, instrumental, overall). Six of the statements in each category were positively worded and four negatively worded. "I cannot sing well" was changed to "I can sing well". "I will not be talented in singing when I am an adult" was changed to "I will be talented in singing when I am an adult." "People do not like to hear me sing" was changed to "People like to hear me sing". "I will not sing well in the future" was changed to "I will sing well in the future". "For the future, I will not feel talented enough to play an instrument" was changed to "In the future, I will feel talented enough to play an instrument". "I avoid taking music classes or ensembles whenever possible" was changed to "I take music classes or ensembles whenever possible." "As an adult, I will not have natural ability in music" was changed to "As an adult, I will have natural ability in music." In addition to the slight rewording mentioned above, all of the *feared* statements were removed.

In the first pilot study research participants consisted of students who did not take part in school music groups and were frequently absent from school. The students who participated gave valuable information about administration procedures but could not reply in depth about ensemble participation. With a broader range of students, including students who are participating in musical groups, the reliability of the measure may be enhanced. Therefore, the sample for subsequent studies included both students who did and did not participate in school music ensembles.

Second Pilot Study of MPSQ II and SMPQ

In order to ascertain the reliability of the newly-revised instruments, a second pilot study was conducted. All eighth grade students (N = 356) from one middle school in eastern Pennsylvania participated in this study. The sample for this study included students who did and did not participate in school music ensembles as recommended by the results of the first pilot study. The two classroom teachers introduced the project to each general music class. Consent to participate was obtained from parents and then students assented to participate. Participating students completed the SMPQ and the MPSQ II, both administered by the researcher during their general music class.

Research Questions

Research questions for the second pilot study were: Is the music *possible self* questionnaire (MPSQ II) a reliable measurement of an early adolescent's music *possible self* perceptions? Is the student music participation questionnaire (SMPQ) a reliable measurement of an early adolescent's music experiences? In addition, do these questionnaires provide sufficient data to answer the research question for the main study? The research questions for the main study are:

1. What are eighth grade students' *now and future possible selves* in overall musicianship, as well as, in vocal/choral and instrumental music contexts?
2. How much time do eighth grade students report singing, playing an instrument, and participating in overall musicianship activities?
3. Considering students' overall perceptions of their musicianship, as well as their perceptions in the vocal/choral and instrumental context, what is the nature of relationships among eighth grade students' *now possible self* perceptions, *future possible self* perceptions, and music participation?
4. Does gender play a role in the above relationships?

Description of Participants

All eighth grade general music students from one eastern Pennsylvania public middle school were asked to participate in this study. The school district consisted of a rural township (approximately 4,500 residents), a residential, commercial and industrial township (approximately 13,142 residents), a suburban borough with a mixture of businesses and residences and two smaller boroughs (approximately 6,000 residents). The enrollment for the school district was 4,385 students in five school buildings. The eighth grade students received general music instruction every other day for the entire school year. These students also had the opportunity to participate in band, orchestra, choir, other ensembles, and instrumental lessons during the school day. The two cooperating general music teachers taught 11 different classes for a total of 398 students. In this Pennsylvania school district, all students received general music instruction, once a week, starting in kindergarten and continuing through sixth grade. Students did not receive general music instruction in seventh grade but had the opportunity to participate in music

ensembles (e.g., band, orchestra, chorus, jazz band, select choir). All eighth grade students participate in general music class in addition to optional music ensemble opportunities and have a chance to choose among several music courses in high school.

Procedure

Approval was requested and granted from the University's Office for Research Protections to include students as research participants. Approximately two weeks before test administration, the general music teachers distributed consent forms for students ($N=356$) to take home that explained the project and requested parent permission for student participation. Middle School students ($n = 193$) returned the forms and chose to participate by signing an assent form and agreeing to complete the MPSQ II and the SMPQ during two general music classes. Students who did not want to participate, or whose parents did not consent, were asked by their general music teacher to complete a reading assignment. For anonymity, each student was assigned a number on the first administration date and completed the same questionnaires identified with the same number during the second administration date. Some students ($n = 35$) participated during one class but were either absent or elected not to participate during the other class. Questionnaires from students ($n = 158$) who were present for both administrations were used to answer the research questions. Students ($n = 163$) who did not want to participate were asked to complete a reading assignment during this time. The general music teachers were available for additional help during the administration of the questionnaires.

Results

Reliability analysis. As in the first pilot study, correlation between questionnaires was determined by paired t-test analysis using Statistical Package for the Social Sciences (SPSS). Means were calculated for each of the variables (*now vocal/choral possible self, future vocal/choral possible self, now instrumental possible self, future instrumental possible self, now general musicianship possible self, future general musicianship possible self, vocal/choral participation, instrumental participation, overall music participation*) on each of the two administration dates. Internal consistency analysis using Cronbach's alpha (Table 4.1) were conducted on *possible self* questions because multiple questions measured each factor and these questions should be associated with each other. In order to complete analyses, negative items were reverse coded.

Table 4.1

Internal Consistency of Possible Self Questions

Variable	Cronbach's Alpha	Mean	S D	Variance
<i>Now vocal/choral</i>	0.94	31.19	10.10	102.09
<i>Future vocal/choral</i>	0.89	31.39	8.31	69.02
<i>Now instrumental</i>	0.91	33.56	9.92	98.39
<i>Future instrumental</i>	0.93	33.32	9.80	96.00
<i>Now general</i>	0.90	28.30	8.38	70.26
<i>Future general</i>	0.89	32.71	8.39	70.38

All of the factors for each subset had coefficients above 0.80 (Table 4.1) indicating that each of the questions was associated with each other and had good internal consistency. In addition to internal consistency, tests from the two administration times were compared to determine the consistency of the students' responses. The paired t-test (Table 4.2) involved taking the difference between the two mean scores for each respondent. The p-value was larger than 0.05 indicating that there were not significant differences between the administration occasions.

Table 4.2

Paired Samples Test Measuring Differences

Pair	Mean	SD	SE	95%		t
				Lower	Upper	
<i>Now Vocal</i>	.01	.49	.04	-.07	.08	0.15*
<i>Future Vocal</i>	-.04	.43	.03	-.11	.02	-1.27*
<i>Now Instrumental</i>	.03	.42	.03	-.03	.10	0.95*
<i>Future Instrumental</i>	.02	.43	.03	-.05	.09	0.65*
<i>Now Overall</i>	.02	.46	.04	-.05	.09	0.55*
<i>Future Overall</i>	.06	.43	.03	-.01	.13	1.67*

Note. * $p \geq .05$ (2-tailed). $df = 157$.

A paired samples correlation (Table 4.3) was also conducted. The correlation coefficients were very high (above 0.80) an indication that the association between the two administrations was strong. The p-value was under 0.05 when questionnaires were compared, an indication that the correlation was statistically significant. The *now* and

future factors for each subset were considered reliable because the t-test failed to reject “no difference” between the administration times.

Table 4.3

Paired Samples Correlation (n=158)

Pair	Correlation
<i>Now Vocal</i>	.88*
<i>Future Vocal</i>	.86*
<i>Now Instrumental</i>	.91*
<i>Future Instrumental</i>	.91*
<i>Now Overall</i>	.84*
<i>Future Overall</i>	.87*

Note. * $p \leq .05$

Reliability of SMPQ. The reliability of the SMPQ was assessed using the “test-retest” method (Gall, Gall & Borg, 2003). Bivariate correlational statistics, computed with the Statistical Package for the Social Sciences (SPSS), were used to compare the scores on the two administration dates. Hours of participation were calculated in vocal/choral music, instrumental music and general music participation on the two administration dates (see chart). The reliability of the SMPQ was also established using 158 paired samples. When the data from the two administration times were compared, the correlation coefficient was strong ($r = .95$) and statistically significant ($p \leq 0.00$). Under further analyses, the correlation between administration times was statistically significant

at the 0.01 level and very high (i.e., general experience, $r = 0.95$; instrumental experience, $r = 0.92$; vocal experience, $r = 0.97$). The SMPQ was deemed a reliable measure of students' musical experience.

Data to answer main research question #1. In order to answer the first research question (What are eighth grade students' *now and future possible selves* in overall musicianship, as well as, in vocal/choral and instrumental music contexts?), descriptive statistics (i.e., mean, range, standard deviation) were calculated using the responses from statements in each category. The following categories were included (statement numbers in parentheses): *now vocal/choral* (2, 9, 12, 21, **25**, 32, **37**, 47, **48**, 56), *future vocal/choral* (4, 7, 10, 15, **29**, **31**, **41**, 49, **54**, 60), *now instrumental* (5, 6, **8**, 16, 20, 42, 45, **53**, 55, **58**), *future instrumental* (11, **22**, 26, 30, 36, 39, 46, **50**, **51**, **59**), *now overall musicianship* (1, **3**, 14, **18**, 27, **33**, 34, **38**, 40, 52) and *future overall musicianship* (**13**, 17, 19, **23**, 24, 28, **35**, 43, **44**, 57). Bold numbers denoted negatively worded statements. Please see Table 4.4 for the mean, range and standard deviation for each *possible self* category.

Table 4.4

Possible Selves Descriptions

Category	Mean	Range	SD
<i>Now vocal/choral</i>	31.20	10-50	10.10
<i>Future vocal/choral</i>	31.39	13-50	8.31
<i>Now instrumental</i>	33.56	11-50	9.92
<i>Future instrumental</i>	33.32	10-50	9.80
<i>Now overall</i>	28.30	10-50	8.38
<i>Future overall</i>	32.71	10-50	8.39

Main research question #2. In order to answer the second research question [How much time do eighth grade students report singing, playing an instrument, and participating in overall musicianship activities?] descriptive statistics (i.e., mean, range, standard deviation) were calculated (see Table 4.6). When students answered in hours per day in school-sponsored activities their answers were multiplied by five since school is in session for five days a week. For outside-of-school, hours were multiplied by seven.

Table 4.5

Descriptive Statistics for Music Participation (hours per week)

Type of Experience	Mean	Range	SD
Vocal/Choral	9.22	0 - 336	27.97
Instrumental	3.27	0 - 75	8.20
Listening	24.94	1 - 174	19.41
Creating	1.67	0 - 36.75	4.21
General Musicianship	36.10	1 - 517	47.38

Main research question #3. To answer the third research question [Considering students' overall perceptions of their musicianship, as well as their perceptions in the vocal/choral and instrumental context, what is the nature of relationships among eighth grade students' *now possible self* perceptions, *future possible self* perceptions, and music participation?] correlation statistics (Pearson Product Moment Correlation) were used. Very high statistically significant relationships ($p = .000$) were found between students' *now and future possible selves* (instrumental 0.90; vocal/choral 0.90; overall musicianship 0.81). Additional very high correlations (at the 0.01 level of significance) were found between *future instrumental and future overall musicianship* (0.81) and between vocal participation and overall musicianship participation (0.90).

Table 4.6

Correlations Among Possible Selves and Participation (N = 158)

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. <i>Now Choral</i>	--	.90**	.29**	.25**	.46**	.48**	-.32**	-.17*	-.32**
2. <i>Future Choral</i>		--	.34**	.32**	.52**	.57**	-.29**	-.23**	-.33**
3. <i>Now Instrumental</i>			--	.90**	.79**	.78**	-.11	-.43**	-.23**
4. <i>Future Instrumental</i>				--	.77**	.81**	-.11	-.41**	-.23**
5. <i>Now Overall</i>					--	.81**	-.15	-.35**	-.26**
6. <i>Future Overall</i>						--	-.21**	-.41**	-.33**
7. <i>Vocal Participation</i>							--	.14	.90**
8. <i>Instrumental Participation</i>								--	.42**
9. <i>General Participation</i>									--

Note. ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Main research question #4. For research question number 4 [Does gender play a role in the above relationships?] an analysis of variance (ANOVA) was used to investigate differences by gender. The only statistically significant difference in *possible*

selves between males and females was in vocal/choral *possible selves now* ($F = 08.56, p = .004$) and *future* ($F = 12.70, p = .000$). There were also differences between males and females in vocal participation ($F = 6.12, p = .01$) and overall participation ($F = 5.80, p = .02$).

Conclusions and Revisions

The procedures worked well with 8th grade students. The reliability of both measures was very good. The questionnaires provided sufficient data to answer the research questions for the main study. However, after consultation with education researchers, some additional changes to both the SMPQ and the MPSQ II were deemed appropriate.

The reliability of the SMPQ may be enhanced by additional specificity. Following the second pilot study and in consultation with students and music researchers, the outside-of-school categories were further divided into two additional categories (i.e., during the week and weekends). This division was necessary because, during administration, students reported that their music participation was different on the weekends than during the week when they also had school commitments. This slight change was reflected in a revised questionnaire (Appendix D) named the Student Music Participation Questionnaire II (SMPQ II).

Some of the MPSQ II items still appeared to be negative and there was a potential confusion with *feared possible selves*. In consultation with educational researchers several statements that may have been confused with *feared selves* were changed from negative to positive wording. “In the future, I will not do well in singing” was changed to “In the future, I will do well in singing” (number 29). “In the future, I will be afraid to

sing because others might laugh at me” was changed to “In the future, I will feel comfortable singing in front of others” (number 31). “In the future, people will not want to hear me perform music” was changed to “In the future, people will want to hear me perform music” (number 35). “I will not sing well in the future” was changed to “I will sing well in the future” (number 41). “In the future, I will not play an instrument well” was changed to “In the future, I will be a good instrumentalist” (number 51). “I will not be talented in singing when I am an adult” was changed to “I will be talented in singing when I am an adult” (number 54). The revised questionnaire was the Music *Possible Selves* Questionnaire III (MPSQ III) in Appendix D.

Instrument Development Summary

The SMEQ, used in the first pilot study, was based on a student’s musical experiences. Although the SMEQ was ultimately deemed unusable, it was adapted to form the Student Music Participation Questionnaire (SMPQ) used in the second pilot study. With a slight alteration (i.e., outside of school experiences were separated by occasion), the SMPQ became the SMPQ II and was used in the main study.

After two pilot studies, the first MPSQ was changed to reflect erudition. *Feared self* questions were eliminated and slight rewording was instituted. The resulting questionnaire (i.e., MPSQ III) contained statements in the same categories as the Vispoel (1993, 1995) questionnaire. However, instead of 50% positively worded and 50% negatively worded statements, the MPSQ III consisted of 68% positively worded statements (c.f. 32% negatively worded). In addition, students were asked to imagine their experiences with music by completing the participation measure (i.e., SMPQ II) before they completed the MPSQ III.

Principle Study

The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' participation in musical endeavors. Students' music *possible selves*, in vocal/choral, instrumental and overall musicianship contexts, were assessed and compared with self-reported music participation hours. The primary research question was: What are the relationships among middle school students' music participation and their music *possible selves*? The research question was further analyzed by two dimensions of *possible selves* (i.e., current and future), by context (i.e., vocal/choral, instrumental, overall musicianship), and by gender. Therefore, the sub questions included the following:

1. What are eighth grade students' *now and future possible selves* in overall musicianship, as well as, in vocal/choral and instrumental music contexts?
2. How much time do eighth grade students report singing, playing an instrument, and participating in overall musicianship activities?
3. Considering students' overall perceptions of their musicianship, as well as their perceptions in the vocal/choral and instrumental context, what is the nature of relationships among eighth grade students' *now possible self* perceptions, *future possible self* perceptions, and music participation?
4. Does gender play a role in the above relationships?

Description of Participants

The participants from an eastern Pennsylvania Public School District were all in the eighth grade. The same population (same middle school, same grade level) served as the research site for the second pilot study. The primary study was conducted a year later than the second pilot study. Consequently, different eighth grade students participated in

the main study than in the pilot studies. This eastern Pennsylvania Public School District consisted of a rural township (approximately 4,500 residents), a residential, commercial and industrial township (approximately 13,142 residents), a suburban borough with a mixture of businesses and residences and two smaller boroughs (approximately 6,000 residents). The enrollment for the school district was 4,385 students in five school buildings.

The eighth grade students received general music instruction every other day for the entire school year. Students had the opportunity to participate in band, orchestra, choir, ensembles, and instrumental lessons during the school day. The two cooperating general music teachers taught 11 different classes for a total of 398 students. All students received general music instruction, once a week, which started in kindergarten and continued through sixth grade. Students did not receive general music instruction in seventh grade but could elect to participate in music ensembles (e.g., band, orchestra, chorus, jazz band, select choir). All eighth grade students participated in general music class in addition to optional music ensemble opportunities and will have a chance to choose among several music courses in high school.

Procedure

Approval was requested and granted from the University's Office for Research Protections to include students as research participants. Approximately two weeks before test administration, each general music teacher distributed consent forms for students to take home that explained the project and requested parent permission for student participation (Appendix B). Middle School students who returned the forms, chose to participate and signed an assent form completed the MPSQ III and the SMPQ II

(Appendix D) during one general music class. Students who did not want to participate were asked by their general music teacher to complete a reading assignment. Students who are absent from school during the administration date did not participate. Each measure was administered only once since test-retest reliability had already been established. The researcher administered the questionnaire but the general music teachers were available for additional student help during questionnaire administration.

Data Analysis

The data analysis for the research questions followed the same procedures as the second pilot study. However, since the student responses on the measures were deemed reliable in the second pilot study only one administration of the questionnaire took place. An internal consistency analysis using Cronbach's alpha was conducted on *possible self* questions because the multiple questions to measure each factor should be associated with each other. In order to complete analyses, negative items were reverse coded. The following sections detail the data analysis procedures for each of the research questions.

Research Question #1

In order to answer the first research question (What are eighth grade students' *now* and *future possible selves* in overall musicianship, as well as, in vocal/choral and instrumental music contexts?), descriptive statistics (i.e., mean, range, standard deviation) were calculated using the responses from statements in each category. The following categories were included (with statement numbers in parentheses): *now vocal/choral* (2, 9, 12, 21, 25, 32, 37, 47, 48, 56), *future vocal/choral* (4, 7, 10, 15, 29, 31, 41, 49, 54, 60), *now instrumental* (5, 6, 8, 16, 20, 42, 45, 53, 55, 58), *future instrumental* (11, 22, 26, 30, 36, 39, 46, 50, 51, 59), *now overall musicianship* (1, 3, 14, 18, 27, 33, 34, 38, 40, 52) and *future*

overall musicianship (13, 17, 19, **23**, 24, 28, 35, 43, **44**, 57). Bold numbers denoted negatively worded statements.

Research Question #2

In order to answer the second research question (How much time do eighth grade students report singing, playing an instrument, and participating in overall musicianship activities?) descriptive statistics (i.e., mean, range, standard deviation) were calculated. When students answered in hours per day for school-sponsored activities and during the week for outside of school activities, their answers were multiplied by five. For weekend outside-of-school participation, hours were multiplied by two. Inside and outside-of-school singing were combined to create singing participation. Two questions were also combined to create instrumental participation (i.e., inside and outside of school). All of the participation questions were combined to describe overall participation.

Research Question #3

In order to answer the third research question (i.e., Considering students' overall perceptions of their musicianship, as well as their perceptions in the vocal/choral and instrumental context, what is the nature of relationships among eighth grade students' *now possible self* perceptions, *future possible self* perceptions, and music participation?) correlational statistics (Pearson Product Moment Correlation) were employed. The variables included: *now vocal/choral*, *future vocal/choral*, *now instrumental*, *future instrumental*, *now overall*, *future overall*, vocal/choral participation, instrumental participation, general participation. For interpretation of the correlation coefficients, guidelines from Ravid (2000) were used. Correlation coefficients were described by Ravid as: negligible to low (below

0.20), low (0.20 – 0.40), moderate (0.40 – 0.60), high/substantial (0.60 – 0.80) and very high (0.80 – 1.00).

Research Question #4

In order to answer the fourth research question (i.e., Does gender play a role in the above relationships?) an analysis of variance (ANOVA) was calculated to reveal significant differences and interactions by gender. Variables included: *now vocal/choral possible selves*, *future vocal/choral possible selves*, *now instrumental possible selves*, *future instrumental possible selves*, *now overall musicianship possible selves*, *future overall musicianship possible selves*, vocal participation, instrumental participation, overall music participation. In addition a z-value was calculated in order to find any gender differences in the relationships from research question #3. Preliminary steps included calculating the Pearson Product Moment Correlation for all of the variables in question #3 separately according to gender.

CHAPTER V: RESULTS

Restatement of the Purpose

The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' participation in musical endeavors. Students' music *possible selves*, in vocal/choral, instrumental and general musicianship contexts, were quantified and compared with reported hours of music participation to reveal relationships. The primary research question was: What are the relationships among middle school students' music participation and their music *possible selves*? The research question was further analyzed by the two dimensions of *possible selves* (i.e., current and future), by context (i.e., vocal/choral, instrumental, overall musicianship), and by gender.

Participants

Of the 333 students invited to participate in the study, 199 students returned the consent forms, assented to participate and were present on the testing day. Eleven of the questionnaires did not include a gender designation but were otherwise complete. Of the questionnaires with gender designations 95 were female and 93 were male participants. Accordingly, 188 questionnaires were used when considering gender differences while 199 were utilized for the remainder of the data analyses. Out of the 333 students invited to participate 134 did not participate. The number of nonparticipants ($n = 134$) was a concern. Upon further inquiry, the students who did not participate were either absent from school or forgot to bring the parent participation form. These students did not appear to form a different population from the students who did participate. Many inquired about participating but did not have the proper documentation and additional

times for administration were not available. However, the number of nonparticipants remains a concern that may impact the statistical outcome and subsequent results.

Research Question #1

In order to answer the first research question (i.e., What are eighth grade students' *now and future possible selves* in overall musicianship, as well as, in vocal/choral and instrumental music contexts?), descriptive statistics (i.e., mean, range, standard deviation) were calculated using the total responses from statements in each category. The following categories were included (with questionnaire statement numbers in parentheses): *now vocal/choral* (2, 9, 12, 21, **25**, 32, **37**, 47, **48**, 56), *future vocal/choral* (4, 7, 10, 15, 29, 31, 41, 49, 54, 60), *now instrumental* (**5**, 6, **8**, 16, 20, 42, 45, **53**, 55, **58**), *future instrumental* (11, **22**, 26, 30, 36, 39, 46, **50**, 51, **59**), *now overall musicianship* (1, **3**, 14, **18**, 27, **33**, 34, **38**, 40, 52) and *future overall musicianship* (**13**, 17, 19, **23**, 24, 28, 35, 43, **44**, 57). Bold numbers denoted negatively worded statements that were reverse coded for analyses. Using Cronbach's Alpha, internal consistency for statements in each category was very good (Table 4.1). The range was the same for each category (viz., 10 to 50). A score of 10 indicated that students strongly agreed with the statement, 50 denoted a strong disagreement, and 30 was associated with neither agreeing or disagreeing. The data were centrally located, near 30 on the scale with *now vocal/choral* and *now overall* categories slightly lower indicating agreement and the rest of the categories slightly higher indicating disagreement. Since the standard deviation was close to 10 for each category indicating an even distribution of scores, mode and median were calculated. In the *now vocal/choral* category the mean and median were 29 with modes on either side (20, 39). A bimodal indication may result from students feeling either very strongly towards or against their own singing. For *now instrumental*, the

descriptive statistics were mean (33), median (35) and mode (42). Students who do not take instrumental lessons may strongly disagree with the statements resulting in a high frequently occurring score. The means, modes and medians for the remaining categories were comparable.

Table 5.1

Possible Selves Descriptions

Category	Mean	Range	SD	Cronbach's Alpha
<i>Now vocal/choral</i>	29.39	10-50	10.82	.95
<i>Future vocal/choral</i>	30.90	10-50	9.90	.95
<i>Now instrumental</i>	33.00	10-50	10.85	.94
<i>Future instrumental</i>	33.39	10-50	10.55	.95
<i>Now overall</i>	27.80	10-50	9.20	.92
<i>Future overall</i>	31.30	10-50	9.39	.92

In answering question #1 concerning students' descriptions of their *possible selves*, the range in answers were the same for overall musicianship, as well as vocal/choral and instrumental contexts. However, the means for each category were higher for projections in the *future* than for *present possible selves*.

Research Question #2

In order to answer the second research question (i.e., How much time do eighth grade students report singing, playing an instrument, and participating in overall musicianship

activities?), descriptive statistics (i.e., mean, range, standard deviation) were calculated as specified in Table 5.2. When students answered in hours per day during the week their answers were multiplied by five. When students answered in hours per day during the weekend their answers were multiplied by two. The overall musicianship category reflected a combination of all participation scores (i.e., creating, listening, singing, playing an instrument). Every student who completed the questionnaire reported participating in some type of musicianship activities. However, 27.8% of the students did not participate in singing and 61.3% did not play an instrument. Everyone reported listening to music each week. Most students reported that they did not create music (60.3%) nevertheless, 39.7% reported that they did create music in some way each week.

Table 5.2

Descriptive Statistics for Music Participation (hours per week)

Type of Experience	Mean	Range	SD
Vocal/Choral	6.57	0 - 59	8.76
Instrumental	3.62	0 - 39	6.90
Listening	16.65	1 - 73	13.08
Creating	2.64	0 - 60	5.95
Overall Musicianship	29.51	1 - 160	26.14

In answering question #2 about students' participation in musical activities, the range of hours per week varied according to the type of experience. All students listened

to music each week while some students did not participate in vocal/choral, instrumental or creating experiences. In addition, the range in hours of music listening hours was greater than the other categories. The means for these categories varied in the following order from highest to lowest: "overall musicianship", "listening", "vocal/choral", "instrumental", "creating".

Research Question #3

To answer the third research question (i.e., Considering students' overall perceptions of their musicianship, as well as their perceptions in the vocal/choral and instrumental context, what is the nature of relationships among eighth grade students' *now possible self* perceptions, *future possible self* perceptions, and music participation?), correlation statistics (Pearson Product Moment Correlation) were calculated. All of the relationships investigated were statistically significant at the $p \leq .01$ level (Table 5.3). Statistically significant relationships were found between students' *now and future possible selves* (*instrumental*, $r = 0.92$; *vocal/choral*, $r = 0.92$; *overall musicianship*, $r = 0.88$). High correlations existed between students' present *overall musicianship possible self* and their *present vocal/choral possible self* (.67) or *present instrumental possible self* (.76). The *present overall possible self* was highly related to *future possible selves* in the vocal/choral category (.67) or instrumental (.72). *Future general musicianship possible selves* also related highly to *now vocal/choral* (.62), *future vocal/choral* (.66), *now instrumental* (.77) and *future instrumental* (.79). Additional high positive relationships were found between overall music participation and specific participation measures, vocal/choral participation (.71) instrumental participation (.68). Moderate relationships were found between vocal participation and *now vocal possible selves* (-.44), *future vocal possible selves* (-.44). Instrumental participation was moderately

related to instrumental *possible selves* [i.e., *now* (-.59), *future* (-.53)] and *overall musicianship possible selves* [i.e., *now* (-.43), *future* (-.48)]. Overall music participation was moderately related to *now instrumental* (-.41) and *future overall musicianship* (-.44). These negative relationships indicated that students who had a higher *possible self* perception participated more in music activities than students who had lower *possible self* perceptions.

In answering question #3 about the relationship among *possible self* perceptions and participation, students' *now and future possible self* perceptions were related in overall musicianship, vocal/choral and instrumental contexts. Students' views of their *future overall musicianship* were highly related to their present and future views of their *possible selves* in vocal/choral and instrumental *possible selves*. In addition, music participation was related to *possible self* perceptions now and in the future.

Table 5.3

Correlations Among Possible Selves and Participation (N = 199)

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. <i>Now Choral</i>	--	.92**	.38**	.33**	.67**	.62**	-.44**	-.24**	-.31**
2. <i>Future Choral</i>		--	.39**	.36**	.67**	.66**	-.44**	-.22**	-.30**
3. <i>Now Instrumental</i>			--	.92**	.76**	.77**	-.25**	-.59**	-.41**
4. <i>Future Instrumental</i>				--	.72**	.79**	-.20**	-.53**	-.38**
5. <i>Now Overall</i>					--	.88**	-.29**	-.43**	-.34**
6. <i>Future Overall</i>						--	-.35**	-.48**	-.44**
7. <i>Vocal Participation</i>							--	.29**	.71**
8. <i>Instrumental Participation</i>								--	.68**
9. <i>General Participation</i>									--

Note. ** Correlation is significant at the 0.01 level (2-tailed).

Research Question #4

For research question 4 (i.e., Does gender play a role in the above relationships?), an analysis of variance (ANOVA) was used to investigate differences by gender. Variables

included: *now vocal/choral possible selves*, *future vocal/choral possible selves*, *now instrumental possible selves*, *future instrumental possible selves*, *now overall musicianship possible selves*, *future overall musicianship possible selves*, vocal participation, instrumental participation, overall music participation. Eleven questionnaires could not be used for analyses because the participants did not indicate their gender.

When differences between genders were examined in music participation (vocal, instrumental, overall) and *possible selves* perceptions (vocal/choral, instrumental, general), statistically significant differences were found between girls and boys in singing participation ($F = 15.16$; $p \leq .000$); *now vocal possible selves* ($F = 22.80$; $p \leq .000$); *future vocal possible selves* ($F = 18.91$; $p = .000$) and *future overall possible selves* ($F = 4.44$; $p \leq .03$).

In addition a z-value was calculated in order to determine any gender differences in the relationships from research question #3. Preliminary steps included reverse coding the *possible self* scores so that 5 would indicate strong agreement and 1 would indicate strong disagreement. In addition, the data were divided between males and females and the Pearson Product Moment Correlation was calculated by gender for all of the variables in question #3 (Table 5.4). Subsequently the z-score was tabulated.

For females, very high statistically significant relationships were found between *now* and *future choral possible selves* (.90); *now* and *future instrumental possible selves* (.90); *now* and *future overall possible selves* (.86); instrumental participation and general participation (.81). High/substantial statistically significant correlations were found between: *now choral possible selves* and *now overall possible selves* (.70); *now choral possible selves* and *future overall possible selves* (.71); *future choral possible selves* and *now overall possible selves* (.69); *future choral possible selves* and *future overall possible selves* (.73);

now instrumental and *now overall possible selves* (.68); *now instrumental* and *future overall* (.64); *future instrumental* and *now overall* (.64); *future instrumental* and *future overall* (.70).

The correlation matrix appears in Table 5.4.

For males, very high statistically significant relationships were found between *choral possible selves now and future* (.91); *instrumental possible selves now and future* (.93); *now instrumental selves* and *overall possible selves now* (.83); *now instrumental selves* and *overall instrumental future selves* (.87); *future instrumental selves* and *future overall selves* (.87); *now and future overall possible selves* (.89). High/substantial statistically significant relationships were found for males between *now choral possible selves* and *now overall possible selves* (.70); *future choral possible selves* and *now overall possible selves* (.70); *future choral possible selves* and *future overall possible selves* (.65); *now instrumental possible selves* and *vocal participation* (.63); *future instrumental possible selves* and *now overall possible selves* (.78); *future overall possible selves* and *vocal participation* (.60); *vocal participation* and *general participation* (.79). Moderate relationships were found between *choral now possible selves* and *now instrumental possible selves* (.48); *choral now possible selves* and *future instrumental possible selves* (.43); *choral now possible selves* and *future overall possible selves* (.59); *choral now possible selves* and *instrumental participation* (.40); *choral future possible selves* and *now instrumental possible selves* (.49); *choral future possible selves* and *instrumental future possible selves* (.47); *choral future possible selves* and *instrumental participation* (.42); *instrumental now possible selves* and *general participation* (.48); *instrumental future possible selves* and *choral participation* (.58); *choral future possible selves* and *general participation* (.49); *now overall possible selves* and *choral participation* (.54); *now overall possible selves* and *general participation* (.42); *future overall*

possible selves and general participation (.53); instrumental and general participation (.58). Low statistically significant relationships were found between choral participation and *now possible selves* (.32) or *future possible selves* (.31); overall participation and *now choral possible selves* (.26) or *future choral possible selves* (.28); instrumental participation and *now instrumental possible selves* (.30) or *future instrumental possible selves* (.30). For more information, please see the correlation matrix for males in Table 5.4.

The Bonferroni adjustment (i.e., a statistical procedure where the level of significance is adjusted according to the number of tests performed on study data) was not used in calculations because its use has been questioned (Olshan, 1995; Rothman, 1990; Savitz, 1995). Specifically, when using the Bonferroni correction, the likelihood of type II errors is increased and important differences may be considered insignificant. Perneger (1998) suggested describing what was done and why, and discussing the possible interpretations of each result. The tests have been described in Chapter IV. The possible interpretations will be explained in Chapter VI.

Table 5.4

Pearson Product Moment Correlations Among Female ($n = 95$) and Male ($n = 93$)
Subjects' *Possible Selves* and Participation

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. <i>Now Choral</i>	--	.90** (.91**)	.33** (.48**)	.32** (.43**)	.70** (.70**)	.71** (.59**)	.18 (.32**)	.38** (.40**)	.30** (.26**)
2. <i>Future Choral</i>		--	.32** (.49**)	.32** (.47**)	.69** (.70**)	.73** (.65**)	.14 (.31**)	.38** (.42**)	.28** (.28**)
3. <i>Now Instrumental</i>			--	.90** (.93**)	.68** (.83**)	.64** (.87**)	.57** (.63**)	.23* (.30**)	.35** (.48**)
4. <i>Future Instrumental</i>				--	.64** (.78**)	.70** (.87**)	.50** (.58**)	.17 (.30**)	.30** (.49**)
5. <i>Now Overall</i>					--	.86** (.89**)	.34** (.54**)	.24* (.33**)	.25* (.42**)
6. <i>Future Overall</i>						--	.39** (.60**)	.32** (.39**)	.36** (.53**)
7. <i>Vocal Participation</i>							--	.30** (.34**)	.57** (.79**)
8. <i>Instrumental Participation</i>								--	.81** (.58**)
9. <i>General Participation</i>									--

Note. ** Correlation is significant at the 0.01 level (2-tailed). Correlation coefficients for males are in parentheses.

Using a conversion table, correlation coefficients were converted to z-scores. The difference between male and female z-scores was divided by the standard error of difference (SE = .14) to obtain the z-value. As determined by the z-value, the following correlations were statistically different ($p \leq 0.05$): *now instrumental possible selves* and *now overall possible selves*; *now instrumental* and *future overall possible self*; *future instrumental possible selves* and *now overall possible selves*; *future instrumental possible selves* and *future overall possible selves*; *now overall* and vocal participation; *future overall* and vocal participation; vocal participation and general participation; instrumental participation and general participation. The only r-value that was stronger for females than males was the relationship between instrumental participation and general participation [i.e., female ($r = .81$); male ($r = .58$)]. In the remainder of the relationships, males demonstrated stronger relationships than females.

In answering research question #4 about disparity between boys and girls, there was a difference in singing participation, *now vocal possible selves*, *future vocal possible selves* and *future overall possible selves*. In addition, for males and females *now and future possible selves* were highly related. The relationship between instrumental participation and general participation was stronger for females than males. The rest of the relationships were stronger for males than females.

CHAPTER VI: SUMMARY, DISCUSSION AND IMPLICATIONS

Even though music is important to adolescents (Campbell, Connell & Beegle, 2007; Macdonald, Hargreaves & Miell, 2002; Roberts & Henriksen, 1990) and plays a valuable role in their development (Ebie, 2004; Horton, 2002; Kurdek, 1987; Larson, 1995; Roberts & Christenson, 2001; Schwartz & Fouts, 2003), many youth do not participate in elective school music programs. At a time when they are experiencing tremendous growth, young people are also developing lifelong attitudes and behaviors (Anfara, 2001). If they do not perceive themselves as continuing to make music (in- and out-side of school), youth may stop their current music participation in order to focus on activities they perceive to have greater future utility. *Possible selves* (Markus & Nurius, 1986) was introduced in this study as a means to investigate a facet of adolescent motivation that had not been examined in connection with music participation.

Summary

The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' participation in musical endeavors. Students' music *possible selves*, in vocal/choral, instrumental and general musicianship contexts, were quantified and compared with reported hours of music participation to reveal relationships. The primary research question was: What are the relationships among middle school students' music participation and their music *possible selves*? The research question was further analyzed by the two dimensions of *possible selves* (i.e., current and future), by context (i.e., vocal/choral, instrumental, overall musicianship), and by gender.

Methodology

Eighth grade students ($n = 199$) from a suburban southeastern Pennsylvania public middle school participated in this study by completing two questionnaires during one general music class. One questionnaire focused on their music possible selves; the other on their music participation. All eighth grade students in this school district are required to take general music. Some also elect to participate in a variety of instrumental and/or vocal ensembles.

Two questionnaires were designed for use in this study. Because a music *possible self* questionnaire did not exist, an instrument was designed, based on previous studies (Anderman, 1998, 1999; Guinan, 1996; Markus & Nurius, 1986; Oyserman, 1990; Vispoel, 1993, 1995), to collect primary source data. Variables included: *now vocal/choral possible self, future vocal/choral possible self, now instrumental possible self, future instrumental possible self, now overall music possible self, future overall music possible self*.

A measure of music participation was also required to determine weekly music participation in singing, playing an instrument and overall musicianship activities (i.e., creating, listening, singing, playing instruments). Previous measures (Broomhead, 2001; Harrison & Narayan, 2003; North, Hargreaves & O'Neill, 2000) were not appropriate for this study but they served as models for the measure of participation that was developed. After several pilot studies, the Music *Possible Selves* Questionnaire III (MPSQ III) and the Student Music Participation Questionnaire II (SMPQ II) were deemed reliable and valid measures for use in this study.

Data were analyzed through the use of several statistical measures. Mean, range, standard deviation and percentages were calculated to answer the first two research questions. A Pearson Product Moment Correlation was calculated to identify statistically significant relationships in order to answer research question #3. To determine if variables differed by gender, an Analysis of Variance (ANOVA) was calculated for research question #4. In addition, a z-value was calculated to find gender differences in the relationships identified in research question #3. In the following sections, each research question is answered followed by a discussion of results.

Results and Discussion

Research Question 1: What are eighth grade students' now and future possible selves in overall musicianship, as well as, in vocal/choral and instrumental music contexts?

Students saw themselves as musicians now and in the future. The answers in each category (i.e., *now overall, future overall, now vocal/choral, future vocal/choral, now instrumental, future instrumental*) registered the same range from 10 (i.e., strong agreement) to 50 (i.e., strong disagreement). The means ranged from 27.80 (*now overall musicianship possible self*) to 33.39 (*future instrumental possible self*) which were basically around the middle point of the scale. The standard deviation was similar for all categories ranging from 9.20 (i.e., *now overall musicianship possible self*) to 10.85 (i.e., *now instrumental possible self*).

About 68% of the answers were around the midpoint of the scale with *instrumental possible selves* slightly higher (indicating disagreement) and *overall* slightly lower (indicating agreement). Since many of the students did not play instruments it stands to reason that their *instrumental possible selves* were lower than in other areas. It

is believed that many students define their musicianship by their ability to play an instrument. This belief may have influenced responses to these items resulting in lower scores for students who do not play school instruments.

The responses to *possible self* questions might also have been influenced by self selection. Because approximately 40% of the study population did not return the required forms for participation, it seems possible that at least a portion of these students did not envision themselves as musicians either now or in the future and chose not to participate in the study. If their scores had been included, the overall result might have been different. However, it was encouraging that the scores for *overall possible selves* were higher than the *instrumental self* scores indicating that these students' views of their musicianship may include factors in addition to perception of instrument playing.

Research Question 2: How much time do eighth grade students report singing, playing an instrument, and participating in overall musicianship activities?

Every student who completed the questionnaire reported participating in some type of musicianship activities (i.e., 72.2% singing, 38.7% playing an instrument, 39.7% creating music and 100% listening) for many hours each week. The range in overall participation (i.e., creating, listening, singing, playing an instrument) was from 1 to 160 hours per week. The participation of the study subjects was higher in each category than has been reported in the 1997 National Assessment of Educational Progress (NAEP) that perhaps an indication of geographic differences.

As expected, a substantial number of students did not play an instrument (61.3%). In order to play an instrument, a student needs to have access to one which necessities resources beyond what is often available through the school (e.g., such as renting or

purchasing an instrument). Students also need to construct short term goals (e.g., time to practice) implying intention to learn. However, the percentage of instrumentalists among this sample was higher than reported by the NAEP (1997) for in-school music participation. It is also not possible to determine if the instrumentalists in the current study are playing instruments outside of school and/or playing instruments that are not traditionally used in-school.

In the current study, 27.8% of those questioned did not report participating in singing even when alone. Campbell and others (2007) found that very few adolescents identified themselves as singers. Perhaps this finding is evidence of the importance of social context discussed by Ebie (2004) and elaborated by Demorest (2000). If students saw others singing perhaps they would be more likely to sing than if they did not have a singing role model. Maybe youth do not consider singing as the “in” thing to do or perhaps the vocal changes that occur during adolescence impact their desire to sing. However, over 72% of the students in the current study reported that they did participate in singing which is higher than documented in the NAEP (1997) report.

Every student reported listening to music each week between 1 hour and 73 hours. A student who listened to music 73 hours per week would average over 10 hours each day, a considerable amount of time that would call this finding into question. However, other researchers (Roberts & Christenson, 2001; Zillmann & Gan, 1997) have also found that adolescents listen to music a large portion of their day. Because music listening does not always require focused attention, students may be doing other activities while they are also listening to music (i.e., dancing, studying, exercising, practicing an instrument). In addition, as adolescents are listening to music they may also be dealing with the strain

of everyday life as suggested by Kurdek (1987), Horton (2002) and Steele & Brown (1995). Because music listening devices are readily available to adolescents, they may accomplish many activities while listening to music.

While most students reported that they did not create music (i.e., 60.3%), many students reported that they did create music in some way each week. Campbell and others (2007) found that '(v)ery few adolescents identified themselves as...composers, although in that vein, references were made to "songwriting", "improvising", and "making up music".' (p. 226). In the current study, creating music was viewed in the broad sense including all of the above which may explain the high percentage of students who "created music". Perhaps some students relate the term "composers" to creators of commercially composed music (cf. personal/private music conceptions) and do not acknowledge themselves as "music creators". However, almost 40% of the students questioned reported creating music which is a notable percentage.

The overall participation category was computed by combining all of the participation questions (i.e., creating, listening, singing, playing an instrument). The range in overall participation was from 1 to 160 hours per week. At 160 hours per week, a student would participate over 22 hours per day that seems impossible. Perhaps they are participating in more than one type of music activity at a time. For example, a student may play an instrument and create music at the same time. Because students were asked to separate their music participation into different categories and not asked about exclusive music participation, the total music participation scores may have been artificially high; a response not predicted when the measure was designed.

Research Question 3: Considering students' overall perceptions of their musicianship, as well as their perceptions in the vocal/choral and instrumental context, what is the nature of relationships among eighth grade students' now possible self-perceptions, future possible self-perceptions, and music participation?

Very high statistically significant correlations were found between students' *now* and *future possible selves* in all contexts studied (i.e., instrumental, vocal/choral, overall). The way in which a student viewed his/her musicianship in any context (instrumental, vocal/choral, overall) was related to the way in which the future was seen. Campbell and others (2007) also found that music was described by adolescents as capable of "directing them in shaping their broader sense of self, who they were becoming, and how they might succeed in the world" (p. 230).

As indicated by high positive relationships, students with greater overall participation took part in vocal/choral or instrumental music more than students with lower overall participation. Several explanations could account for this finding. Perhaps the need to experience teamwork including common goals, performing well, friendship and socialization found by Ebie (2004) predisposed these students to desire additional music experience. Conceivably, when students participated to a great extent in the sub domains of musical experience they may be likely to seek out additional musical experiences. Conversely, students who participate briefly or a small amount of time in one of the sub domains of musical experience may not go through the complete experience which would result in aforementioned non-music outcomes.

Moderate relationships were found among some participation measures and *possible selves* measures. For the vocal/choral context and instrumental context, students who had

higher *possible self* perceptions (i.e., now and future) participated in music activities more than students who had lower *possible self* perceptions. Students who played an instrument had a more positive overall *possible self* image (now and in the future) and participated to a greater extent in music activities than those who did not play an instrument. This finding does not seem surprising and confirms the notion that students who participate in music are more likely to have a positive view of their musicianship than students who do not participate as frequently.

Research Question 4: Does gender play a role in the above relationships?

Males and females related different patterns of participation and *possible selves*. Statistically significant differences were found between boys and girls in their singing participation, *now vocal possible selves*, *future vocal possible selves* and *future overall possible selves*. For females, very high statistically significant relationships (0.8 - 1.0) were found between *now and future possible selves* in choral, *instrumental and overall* domains, as well as, between instrumental participation and overall participation. High/substantial correlations (0.6 – 0.8) were found between: *now choral and now overall possible selves*, *now choral and future overall possible selves*, *future choral and now overall possible selves*, *future choral and future overall possible selves*, *now instrumental and now overall possible selves*, *now instrumental and future overall possible selves*, *future instrumental and now overall possible selves*, *future instrumental and future overall possible selves*. Moderate relationships (0.4 – 0.6) were found between *now instrumental* and vocal participation, *future instrumental* and vocal participation, general participation and vocal participation.

For males, very high statistically significant relationships (0.8 – 1.0) were found between *choral possible selves* now and in the future, *instrumental possible selves* now

and in the future, *now instrumental and overall possible selves*, *now instrumental selves and future overall instrumental selves*, *future instrumental selves and future overall selves*, *now and future overall possible selves*. High/substantial statistically significant relationships (0.6 – 0.8) were found between *now choral possible selves* and *now overall possible selves*, *future choral possible selves* and *now overall possible selves*, *future choral possible selves* and *future overall possible selves*, *now instrumental possible selves* and vocal participation, *future instrumental possible selves* and *now overall possible selves*, *future overall possible selves* and vocal participation, vocal participation and general participation. Moderate relationships (0.4 – 0.6) were found between *now choral possible selves* and *now instrumental possible selves*, *now choral* and *future instrumental*, *now choral* and *future overall*, *now choral* and *instrumental participation*, *future choral* and *now instrumental*, *future choral* and *future instrumental*, *future choral* and *instrumental participation*, *now instrumental* and general participation, *future instrumental* and vocal participation, *future instrumental* and general participation, *now overall* and vocal participation, *now overall* and general participation, *future overall* and general participation, *instrumental* and general participation.

When gender differences in statistically significant relationships were investigated, the following relationships were different for males and females: *now instrumental* and *overall possible selves*, *now instrumental* and *future overall possible self*, *future instrumental* and *now overall possible selves*, *future instrumental possible selves* and *future overall possible selves*, *now overall possible selves* and vocal participation, *future overall possible selves* and vocal participation, vocal participation and general participation, *instrumental participation* and general participation.

The only r-value that was stronger for females than males was in the relationship between instrumental participation and general participation. The more females participate in instrumental music, the more they are likely to also participate in a variety of other musical activities than males. In the remainder of the associations, males exhibited stronger relationships than females. Males seemed to have definite opinions about their music *possible selves* that were linked between now and in the future. These opinions were stronger for males than females and related to the instrumental and general *possible selves* but not vocal/choral. However, when vocal/choral participation was considered, males exhibited a stronger relationship with overall *possible selves* (now and future) than females.

Perhaps by participating in vocal activities, a male student was more likely to participate in a variety of music activities. While for females, participating in instrumental activities seems to be strongly related to overall musical activities. On the other hand, these relationships may illustrate the reality of music participation where more males are involved with instrumental groups than females and more females are involved with vocal groups than males. As a result, a male who is also involved in vocal/choral participation would be more involved overall than a female just like a female involved in an instrumental ensemble would be more involved overall than a male who is involved in an instrumental ensemble. Specifically, they are doing something different than most of their same-gender peers.

Mboya (1998) found gender differences in specific dimensions of the self-concept (e.g., girls reported higher scores on music ability than boys). Physically adolescent males and females are growing at different rates. The male vocal tract grows rapidly from age 12 to

14 while females' vocal maturation is typically completed by age 12 (Huber, et al. 1999). The participants in the current study were 8th graders, approximately 14 years of age. At a time when males have a significant change in their voice, uncertainty about their abilities now and in the future are anticipated. Many researchers have reported that adolescents may feel self-conscious about the voice changes they experience (Berk, 1997; Caissy, 1994; Conger & Galambos, 1997; Steinberg, 1996). This uncertainty may also impact their view of future musicianship. The findings in the current study support gender differences in specific dimensions of the self-concept.

Limitations

Music *possible selves* were investigated with a sample of students participating in an eighth grade general music class. The accessible population represented all of the eighth grade students from one school district where all students are required to take general music. These students were generally white and middle class. Although results may be true of many early adolescents they cannot be generalized to all early adolescents without further investigation. In addition, *possible selves* may be one aspect of motivation for middle school students but should not be perceived as the only component. Subsequent research may examine *possible self* perceptions in relation to other key music motivation factors.

The available adolescents represented approximately 60% of the total number of students in the classes targeted for this research. Although the nonparticipating students did not appear to form a specific population, the relatively low percentage of participating students may have skewed the results of this study.

Data were collected through a self-reported questionnaire. Therefore, the results are subject to the students' perceptions at the time queried and their motivation to complete the task.

Implications for Teaching

Every student who completed the questionnaire reported participating in some type of musicianship activities. Perhaps this participation could serve as a starting point for future musical learning. Campbell and others (2007) found that "school music is not yet all it could be...Some (American adolescents) long for more provisions for the study of music that is relevant to their needs, their interests, and their hopes and desires" (p. 234). Since every student reported participating in some type of music activity, teachers may benefit by finding out the specific ways in which their students interact with music and reevaluating school curriculum to provide connections with the way in which students view music participation.

Motivation to participate in music may be enhanced by connecting present activities to a vision of the future. It is recommended that teachers carefully examine musical possibilities in their communities and associate present instruction with a realistic vision of future musical experiences. In this way, adolescents may begin to see the relevance of music learning to their everyday lives and increase their music participation in the process. Some of these possibilities may be activities like the traditional community band or church choir. However, other music possibilities may be activities neglected by current instruction such as listening to and purchasing CDs, attending live music concerts, composing music with computer programs and/or playing computer music games. School curricula should attend to the wide range of "future

involvements” that are possible for students. Some students may have a limited view of their musical possibilities which may seem unattainable and/or undesirable. Experiencing many musical situations in a positive way may spark adolescents’ imagination of future possibilities.

Knowledge about the developing singing voice may help students understand their future singing possibilities. Many of the students questioned (i.e., 27.8%) did not participate in singing. Since singing is an activity most people could do, it seems troubling that students would not report singing even at times when no one is listening, such as in the shower or with CDs. Perhaps one of the reasons that students did not sing or even report singing was their perception of singing/singers. With the current popularity of reality television shows such as “American Idol” where many contestants are harshly informed that they sing appallingly, singing may be perceived as an embarrassing activity. In addition, developmentally, adolescents are at a stage in life where perception of others is important. Adolescents may also feel very self-conscious about the physical changes they are experiencing (Berk, 1997; Caissy, 1994; Conger & Galambos, 1997). Even though the current study was not focused on the development of the singing voice, perhaps students need to know more about their singing voice to understand the utility of singing and future benefits of singing participation. In addition, students may benefit by taking a broader view of singing including recognizing that singing in the shower or in the car are ways to engage with the voice and express emotions.

Beginning instrumental programs should be available to adolescents and not limited to elementary aged students. In order to reach more students, teachers could investigate the possibility of offering a variety of beginning experiences based on

students' *current and future possible self* perceptions. Financial resources and knowledge about obtaining instruments needs to be addressed. Many schools provide instrument rental programs for students wanting to begin a band or orchestral instrument in elementary school but similar programs are not as frequently available for older students.

Instruction with non-traditional instruments and types of music should be considered. The percentage of students who played instruments in the current study was above the national average for students participating in band or orchestra. Perhaps the students in this study are playing instruments that are not generally associated with school band or orchestras. Teachers can build on youth's interest in instruments such as guitars, steel drums and synthesizers by providing opportunities for exploration and growth of "popular instruments". Also students may relate to electronic, movie and computer music as future possibilities. Many students may see themselves involved with these instruments and styles of music but cannot find a way to prepare for such involvement in their school music programs.

Teachers should address the wide variety of contexts for music participation with their learners. Students may need to know that their favorite musicians play more than the instruments depicted on music videos. If music instruction addresses how traditional musical instruments are used in current popular music and relate this use to students' current and future visions, perhaps youth would be more likely to play diverse instruments now. According to one study (Campbell, et.al., 2007), "(a)lmost as many explicit mentions were given to a few popular music instruments (such as guitar, bass guitar, and drums) as to the vast array of orchestral, band, and 'classical music' instruments" (p. 225). Besides pointing out the use of "traditional" instruments in current

music, teachers could not teach popular instruments in school. In addition to guitars and drums, computer-generated music may serve to spark an adolescents' imagination and provide a way to generate interest in music learning.

Teachers may help students prepare for realistic future musical roles and envision musical futures by exploring possibilities. Perhaps if students saw themselves as musicians in the future they would be more likely to participate in music activities as teenagers. In order to help educate teenagers in a school setting, these visions need to show relevance of school music to future aspiration. Teachers may help by providing experiences that closely resemble the kinds of musical experiences that students may envision in their future and help students to make connections between what they are doing now and may accomplish in the future.

Teachers should determine what students consider to be "creating music" and then investigate when, how and under what conditions their students create. After these explorations, teachers can devise meaningful "creating activities" in the music curriculum. Because almost 40% of the students indicated that they create music each week, their own music may serve as a good starting point for future music education. Teachers may help students in their music creating efforts to make activities which show relevance to everyday life. In this way, students may get more out of the experience and continue to enjoy music making in their adult lives. Additionally, teachers could use the ways students are learning now to inform future educational practices.

New types of music discovery should be encouraged. Students who participated to a great extent in vocal/choral or instrumental activities had greater overall music participation than students who participated less in the sub domains. This finding may be

a result of the measure which was determined by including the sub domains in the calculations for overall music participation. However, everyone reported music participation and participation was not limited to specific activities or contexts. Teachers may benefit from finding out their students specific interests and encouraging new types of music exploration in fresh and diverse contexts. The relationship between instrumental and overall participation were stronger for females than males. Perhaps teachers could emphasize the utility of participating in instrumental ensembles to females. For males the relationship between vocal/choral and overall participation was stronger than for females. By emphasizing the importance of vocal participation to males, overall music participation would be enhanced.

Recommendations for Future Research

The purpose of this study was to examine the role of *possible selves* in the motivation of middle school students' participation in musical endeavors. The concept of *possible selves* was applied to the study of music. Since *possible selves* had not been investigated previously in music education motivation research, many questions and recommendations for future research have been uncovered as a result of this study.

Music Learning

Since *possible selves* was a new area of research in music education, it is important to know more about the construct and how it is operationalized via tools used in this study. Additional studies may be completed with populations representing different ages, contexts and cultural groups. The research instruments should be further employed to determine their reliability and validity within diverse situations.

It is recommended that the nature of middle school students' musical involvement, both in- and out-side of school be further investigated. The current study did not distinguish between music activities organized by others and those activities that were self-directed. Results in several categories (i.e., vocal participation, instrumental participation) were higher than reported in NAEP (1997). The higher participation reported by subjects in the current study may be an indication that students engage in a variety of music outside school musical organizations and/or an indication of geographic differences. However, because the data in the current study were not detailed, the specific nature of these students' music participation was unclear.

The nature of students' musical creating experiences should be investigated. Almost 40% of the subjects in this study reported creating music each week. However, it is unclear if this activity takes place during school or outside-of-school. Conceivably students could be reporting music creating that took place during the general music class. However, students may also be creating music in contexts outside of school. Information about these activities may help teachers construct more meaningful classroom instruction building on students' interests.

Future research may address student participation in musical experiences that are not in the traditional school band and orchestra settings. Approximately 39% of the students in this study played an instrument, while the national average (NAEP, 1997) was 18% for school band and 3% for school orchestra membership. Perhaps some students in this study are involved with experiences outside of traditional school ensembles. These students may play instruments in a different context and/or that are not included in traditional school music programs. An in-depth look at students' music learning in-school

and outside-of-school, along with sociological implications may be instructive to both teachers and researchers. Because precise data concerning specific types of music participation were not collected for use in this study, it is not known whether the high percentage of instrumental participation is related to school music participation or outside of school music experiences. Future research could address factors that contribute to successful programs and/or motivated students both inside- and outside-of-school.

Investigating students' singing participation may improve understanding of youth's decision process. A large number of students in this study reported singing. The percentage of students engaged in singing was greater than was reported by NAEP (1997). However, the disparity between the current findings and the NAEP (1997) findings leads to questions about students' singing participation. How and why do teenagers participate in singing? What reasons do teenagers cite for participating or not participating in singing? Future research should focus on the settings in which adolescents engage in singing, both in- and out-side of school as reasons why they do and do not participate in singing activities.

It is recommended that future studies separate components of music participation to discover relationships among parts. Music participation components may include times when students perform music and also occasions when they are involved in listening during performances and media interaction. Steele and Brown (1995) found that adolescents used media, of which music was an important part, with various intensities depending on their own sense of self, present and future. Because media influence is complex and interwoven into the context of daily life, separating the different elements becomes difficult. Sometimes they are accomplished simultaneously. As a result, a

student could listen and do other activities (i.e., sing, create, play an instrument) at the same time. Perhaps students need another category on the questionnaire where they can detail the interrelationship among the various participation types.

Data from the current study indicates that 40% of the students were involved in some kind of music creation. This study did not attempt to identify the nature of that involvement, or distinguish between in-school and out-side-of school music creation activities. By understanding how students currently create music perhaps school music programs could build on this basic knowledge to provide meaningful education for students.

Investigation of *possible selves* in music may result in teacher's increased understanding of the degree to which students are motivated by their self-image. By learning more about students' *possible self* visions teachers may design curriculum that may enhance participation in music activities. All of the relationships among *possible self* measures and participation measures were of moderate strength and statistically significant. When students had a positive *possible self* report they also reported participating in music. Anderman and others (1999) also found that present and future selves were related to achievement and motivation during early adolescence. Additional research may address specific desirable future musical visions that would motivate teenagers to participate in school music now. This research could include an experimental study on the effect of *possible self* education on motivation to participate in music and/or motivation to carry out vital short term goals such as practicing an instrument. Oyserman, Terry & Bybee (2002) concluded that *possible self* education was effective in improving academic *possible selves* and engagement with school. Conceivably, *possible self*

education focused on music ideas may improve students' participation and learning in music.

Student *possible self* reports may help teachers and researchers understand students' reaction to school music. Although youth in this study reported participating in music to a great extent, researchers, teachers and students have reported that many students are not interested in school music classes (Campbell, 2007; Ross, 1998; Rutkowski, 1993). A study that addresses the relationship between interest in music class and *future possible selves* may help to achieve insight into youth's behavior.

Future research may also identify the relationship between outside-of-school involvement in music and their music *possible self*. If teachers were aware of the nature of involvements that influence perceptions, they may be able to revise school curriculum so that in-school opportunities more closely match influential outside-of school involvement.

A significant finding in this study was that the *future musicianship possible self* was higher for students who are currently participating in music than for those who are not. For teachers who seek to foster lifelong musicians, current music participation is important. Future studies may address whether or not students who have positive music *possible selves* as teenagers continue to participate in music activities as adults.

Additional Area of Research

Feared possible selves were not addressed in the current study. Some researchers believe that it is essential to understand *feared possible selves* (Markus & Nurius, 1986; Oyserman & Markus, 1990) but other researchers felt that *feared selves* were not as influential as *possible selves* (Hooker & Kaus, 1994). Hsu (2001) hypothesized that

exercise feared selves may be difficult to detect with adolescents and may have a greater influence with older subjects. However, we do not understand how *feared possible selves* work within the music domain. (e.g., How do students react when they fear singing? Do they increase or decrease participation? What is the nature of this fear? Is the fear from personal experience or inexperience? Is there a way that teachers can alleviate the fear of singing so that students would be more comfortable with their singing voices? When students fear failure in a musical venture, such as singing or playing an instrument, do they increase participation in musical activities to become better or do they avoid participation?) Because of the dual nature of *feared selves*, a qualitative study that addresses the nature of students' musical participation and its relationship with *possible selves* would be beneficial.

Conclusions

Possible selves appears to be an important construct to consider when discussing and assessing the reasons for student music participation and non-participation. However, this construct had not been explored previously in the music context. Although this study was not causal, the strong relationship between *now possible selves* and *future possible selves* as well as the relationship between *possible selves* and music participation would indicate that student perceptions of their music *possible selves* may play an important role in their participation decisions. Education that enlightens youth about their musical possibilities may be a valuable addition to adolescent music classes. Although the exact nature of music participation was not determined, school programs may benefit from assessing students' *possible self* images and making appropriate modifications.

Additional research into music *possible selves* may contribute to better understanding of adolescent motivation for music participation.

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Appendix A:
Vispoel Statement
Application Chart

Categories from Vispoel (1993)	Vocal/Choral	Instrumental	General Music
one's skill compared to other individuals	(2) XX Singing is harder for me than it is for other people. (7) X (F) Singing will always be easier for me than it is for other people.	(5) XX When I attempt to play an instrument, I am not as good as other players. (26) X (F) In the future, I will be better at playing an instrument than other people.	(38) XX Learning music is harder for me than it is for other people. (17) X (F) In the future, learning music will be easier for me than other people.
skill in the given area compared to other subject areas	(9) X Singing is one of my best subjects. (29) X (F) In the future, I will do well in singing class.	(42) X I am better at playing an instrument than I am at other skills. (59) XX (F) In the future, my skill in playing an instrument will be poor when compared with my other skills.	(3) XX Music is one of my worst subjects. (28) X (F) I will do better in music than other areas in the future.
level of comfort/security/confidence in performing tasks in the given area	(25) XX I do not feel confident when I am singing. (4) X (F) I will enjoy singing throughout my lifetime.	(8) XX I am not a good instrumentalist. (39) X (F) If I wanted to, I could play an instrument in the future.	(14) X I am confident in my ability to perform music. (23) XX (F) As an adult, I would be uncomfortable performing music.
level of comfort/security/confidence in the company of other individuals	(21) X I feel comfortable singing in front of others. (31) X (F) In the future, I will feel comfortable singing in front of others.	(20) XX I enjoy playing instruments with others. (36) X (F) I will play an instrument in the future because others like to hear me perform.	(18) XX I feel embarrassed performing music in front of others. (57) X (F) As an adult, I will feel comfortable performing music in front of others.
inclination to welcome/avoid participation in tasks	(37) XX I avoid taking classes or ensembles when I know that I will need to sing. (60) X (F) I would like to join a choir as an adult.	(6) X I try to take as many instrumental classes or ensembles as possible. (22) XX (F) I will not play an instrument as an adult.	(27) X I take music classes or ensembles whenever possible. (19) X (F) I will look for opportunities to make music as an adult.

speed or facility in learning tasks (e.g., learn quickly/slowly; is easy/difficult)	(48) XX Singing is difficult for me. (49) X (F) Singing will be easy for me as an adult.	(55) X Playing an instrument is easy for me. (50) XX (F) Playing an instrument in the future will be hard for me.	(33) XX I am slow in learning music. (24) X (F) Learning music will be easy for me as an adult.
endorsement/denial of general evaluative statements about one's skills (e.g., perceive one's skills as strong, weak, excellent, poor)	(47) X I can sing well. (10) X (F) My voice will sound nice when I am older.	(45) X If I wanted to, I could play a musical instrument well. (51) X (F) In the future, I will be a good instrumentalist.	(34) X I can perform music well. (44) XX (F) After high school, I will have weak music skills.
perceptions that one has or lacks natural ability in the area	(32) X I am talented in singing. (54) X (F) I will be talented in singing when I am an adult.	(16) X I am talented at playing an instrument. (46) X (F) I will feel talented enough to play an instrument in the future.	(40) X I am talented in music. (43) X (F) As an adult, I will have natural ability in music.
perceptions that one's skill or lack of skill is recognized by other individuals	(56) X People like to hear me sing. (15) X (F) In the future, others will appreciate my singing.	(53) XX People do not like to hear me play an instrument. (11) X (F) When I am an adult, people will want me to play my instrument.	(52) X People like to hear me perform music. (35) XX (F) In the future, people will want to hear me perform music.
perceptions about one's typical performance in the given area (e.g., receive high/low grades, get high/low test scores)	(12) X I usually do well in singing. (41) X (F) I will sing well in the future.	(58) XX I usually do poorly when playing instruments (30) X (F) I will play my instrument well as an adult.	(1) X I usually do well in music classes. (13) XX (F) As an adult, I will not be recognized for my musical accomplishments.

KEY	
X	= positively worded statement
XX	= negatively worded statement
F	= future oriented statement

(Statements in bold are from Vispoel's study.)

Appendix B:
Principle Study,
Parent/Guardian Consent Form

**PARENT OR GUARDIAN
Informed Consent Form
for Social Science Research**

The Pennsylvania State University

Title of Project: *Relationships among Middle School Students' Music Possible Selves and Their Participation in Music*

Principal Investigator: Debra L. Campbell, Music Education
252 Music Building I
Penn State University, University Park, PA 16802
EMAIL: dlc210@psu.edu
TELEPHONE: 814-XXX-XXXX

Advisor: Dr. Joanne Rutkowski, Music Education
206 Music Building I
Penn State University, University Park, PA 16802
EMAIL: rvi@psu.edu
TELEPHONE: 814-XXX-XXXX

1. **Purpose of the Study:** The purpose of the research is to examine the role of possible selves in middle school students' music participation.
2. **Procedures to be followed:** The researcher will create a questionnaire and ask that your child complete it twice over a one-month period of time. This will allow the researcher to compare your child's responses.
3. **Discomforts and Risks:** There are no risks to your child related to participating in this research beyond those experienced in everyday life.
4. **Benefits:** Your child might learn more about himself or herself from participating in this research project. Your child might have a better understanding of the diverse areas of self perception as related to music education. Your child might learn how music affects his or her potential perception of himself or herself.
5. **Duration:** It will take about 30 minutes for your child to complete the questionnaire each time. You child's music teacher has agreed to allow this research to be conducted in the classroom.
6. **Statement of Confidentiality:** Your child's participation in this research will remain confidential. Only the principal investigator noted above and her advisor will know how your child responded on the questionnaire. The data from the questionnaire will be stored and secured at 252 Music Building I or in the Principal Investigator's home residence on a locked/password protected file. In the event of a publication or presentation resulting

from the research, no personally identifiable information about your child will be shared. The following may review and copy records related to this research: The Office of Human Research Protections in the U.S. Department of Health and Human Services, Penn State University's Social Science Institutional Review Board, and Penn State University's Office for Research Protections.

7. **Right to Ask Questions:** You can ask questions about this research. Contact Debbie Campbell at 814-865-2065 with questions. You can also call this number if you have complaints or concerns about this research. If you have questions about your rights as a research participant, or you have concerns or general questions about the research, contact Penn State University's Office for Research Protections at (814) 865-1775. You may also call this number if you cannot reach the research team or wish to talk to someone else.
8. **Payment for participation:** There is no compensation available to you or your child for his or her participation in the research.
9. **Voluntary Participation:** Your decision to permit your child to participate in this research is voluntary. Your child does not have to answer any questions he or she does not want to answer and can stop at any time. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits your child would receive otherwise.

If you agree to the information describe above and will allow your child to participate in the research, please print your child's first and last name below and sign both copies of the parental consent forms provided in this mailing. Then, please return one signed copy to your child's **MUSIC TEACHER within one week of receiving the information about the research.**

Print First and Last Name of Your Child

Parent of Guardian Signature

Date

Person Obtaining Consent – Researcher
Debra L. Campbell

Date

Appendix C:
Principle Study,
Student Assent Form

CHILD ASSENT FORM for Social Science Research

ORP USE ONLY: IRB# 22086 Doc. #2
The Pennsylvania State University
Office for Research Protections
Approval Date: 04-18-2006 DWM
Expiration Date: 11-28-2006 DWM
Social Science Institutional Review Board

The Pennsylvania State University

Title of Project: *Relationships among Middle School Students' Music Possible Selves and Their Participation in Music*

Principal Investigator: Debra L. Campbell, Music Education
252 Music Building I
Penn State University, University Park, PA 16802
EMAIL: dlc210@psu.edu
TELEPHONE: 814-XXX-XXXX

Advisor: Dr. Joanne Rutkowski, Music Education
206 Music Building I
Penn State University, University Park, PA 16802
EMAIL: rvi@psu.edu
TELEPHONE: 814-XXX-XXXX

1. **What is project about?** You are being asked to participate in a research study to help teachers find better ways to understand learning and teach people. This form will tell you about the study to help you decide whether or not you want to participate. You can ask any questions you have before making up your mind. You can think about it and discuss it with your family or friends before you decide. It is okay to say "No" if you don't want to be in the study. If you say "Yes" you can change your mind and quit being in the study at any time without getting in trouble. If you decide you want to be in the study, an adult (parent, guardian) will also need to give permission for you to be in the study.
2. **What is the research about?** Although students seem to love to listen to music and have music in their lives, many students drop out of musical organizations in school or do not want to participate in school music. I want to find out why. The purpose of the research is to find out what you do and what you think you can do with music.
3. **What do I need to do?** You need to read this form, and, only if your parent or guardian has signed a similar form, consider signing this to show your permission to participate. Then you would complete two questionnaires about your ideas of musical possibilities and what you are doing musically.

4. **How long will it take me?** The questionnaire is about 30 minutes long (but could be shorter) during two music classes. If you feel uncomfortable answering any of the questions, you can stop at any time. The music teacher will be available if help is needed or you have any questions.
5. **Risks if I participate?** Your class grade will not be affected if you participate or decide that you do not want to participate. If you decide that you do not want to participate, please bring a book to read in class instead of participating in the research project. When I get the results back from the study, I will be happy to share them with your class. It feels good to be involved in a project to help make things better.
6. **Confidentiality of Answers:** All of the answers you write on the questionnaire will remain confidential, meaning that it will be kept a secret between you and the researcher only. I, the researcher, will analyze the data, but never match your answers with your name or other information about you when I summarize, present, or publish the results of the research.

Questions? Please call me, Debra L. Campbell, at (814) XXX-XXXX with questions.

Thank you for your help!!!!!!!!!!

Student's Signature

Date

Person Obtaining Consent – Researcher
Debra L. Campbell

Date

Appendix D:
Principle Study,
Music Possible Selves
Questionnaire III (MPSQ III) and
Student Music Participation
Questionnaire II (SMPQ II)

I. Your Musical Experiences

Think about your experiences with music...in-school and outside-of-school. How long do you interact with music in some way each week? Some of these experiences may be formal (in class for example) and some more casual (at home with friends for example). For each of the ways you may interact with music, list either the hours each day or hours each week (whichever is easier for you). Also, since you may use music differently during the week than you do on the weekend, I am asking you to mark these separately.

How many hours do you spend listening to music?

_____ hours per day **or** _____ hours per week on the weekend
(Saturday and Sunday)
_____ hours per day **or** _____ hours per week during the week
(Monday through Friday)

How many hours do you spend creating music (composing, arranging, making up music)?

_____ hours per day **or** _____ hours per week on the weekend
(Saturday and Sunday)
_____ hours per day **or** _____ hours per week during the week
(Monday through Friday)

How many hours do you spend playing an instrument (performing, practicing, improvising, making up music)?

_____ hours per day **or** _____ hours per week on the weekend
(Saturday and Sunday)
_____ hours per day **or** _____ hours per week during the week
(Monday through Friday)

How many hours do you spend singing (performing, practicing, improvising, making up music)?

_____ hours per day **or** _____ hours per week on the weekend
(Saturday and Sunday)
_____ hours per day **or** _____ hours per week during the week
(Monday through Friday)

If you have any additional musical experiences that did not fit into the above categories please list them on the next page and include the hours each day or hours each week that you engage in these activities during the week and on the weekends.

Part II: Music Possible Selves Questionnaire

In this section of the questionnaire, you will enter your answers on the computer card. Thinking about your musical possibilities, darken the circle that corresponds with the description that best describes your feelings. This is NOT a test and there are no right or wrong answers. Your answers will be kept private. Teachers and other students will not know how you answered.

Strongly Agree A	Agree B	Neither Agree nor Disagree C	Disagree D	Strongly Disagree E
------------------------	------------	------------------------------------	---------------	---------------------------

1. I usually do well in music classes.
 2. Singing is harder for me than it is for other people.
 3. Music is one of my worst subjects.
 4. I will enjoy singing throughout my lifetime.
 5. When I attempt to play an instrument, I am not as good as other players.
-
6. I try to take as many instrumental classes or ensembles as possible.
 7. Singing will always be easier for me than it is for other people.
 8. I am not a good instrumentalist.
 9. Singing is one of my best subjects.
 10. My voice will sound nice when I am older.
-
11. When I am an adult, people will want me to play my instrument.
 12. I usually do well in singing.
 13. As an adult, I will not be recognized for my musical accomplishments.
 14. I am confident in my ability to perform music.
 15. In the future, others will appreciate my singing.
-

Strongly Agree A	Agree B	Neither Agree nor Disagree C	Disagree D	Strongly Disagree E
------------------------	------------	------------------------------------	---------------	---------------------------

-
16. I am talented at playing an instrument.
17. In the future, learning music will be easier for me than it is for other people.
18. I feel embarrassed performing music in front of others.
19. I will look for opportunities to make music as an adult.
20. I enjoy playing instruments with others.
-
21. I feel comfortable singing in front of others.
22. I will not play an instrument as an adult.
23. I will be uncomfortable performing music as an adult.
24. Learning music will be easy for me as an adult.
25. I do not feel confident when I am singing.
-
26. In the future, I will be better at playing an instrument than other people.
27. I take music classes or ensembles whenever possible.
28. I will do better in music than other areas in the future.
29. In the future, I will do well in singing.
30. I will play an instrument well as an adult.
-
31. In the future, I will feel comfortable singing in front of others.
32. I am talented in singing.
33. I am slow at learning music.
34. I can perform music well.
35. In the future, people will want to hear me perform music.

Strongly Agree A	Agree B	Neither Agree nor Disagree C	Disagree D	Strongly Disagree E
------------------------	------------	------------------------------------	---------------	---------------------------

36. I will play an instrument in the future because others will like to hear me perform.

37. I avoid taking classes or ensembles when I know that I will need to sing.

38. Learning music is harder for me than it is for other people.

39. If I wanted to, I could play an instrument in the future.

40. I am talented in music.

41. I will sing well in the future.

42. I am better at playing an instrument than I am at other skills.

43. As an adult, I will have natural ability in music.

44. After high school, I will have weak musical skills.

45. If I wanted to, I could play a musical instrument well.

46. I will feel talented enough to play an instrument in the future.

47. I can sing well.

48. Singing is difficult for me.

49. Singing will be easy for me as an adult.

50. Playing an instrument in the future will be hard for me.

51. In the future, I will be a good instrumentalist.

52. People like to hear me perform music.

53. People do not like to hear me play an instrument.

54. I will be talented in singing when I am an adult.

55. Playing an instrument is easy for me.

Strongly Agree A	Agree B	Neither Agree nor Disagree C	Disagree D	Strongly Disagree E
------------------------	------------	------------------------------------	---------------	---------------------------

56. People like to hear me sing.

57. As an adult, I will feel comfortable performing music in front of others.

58. I usually do poorly when playing instruments.

59. In the future, my skill in playing an instrument will be poor when compared with my other skills.

60. I would like to join a choir as an adult.

Last page..... page 5 of 5.....

Please check over your answers to make sure that you have answered each item.

THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THIS STUDY!!!!!!

Appendix E:
Script for Administrating
MPSQ III and SMPQ II

Script for administering the questionnaire: Thank you for participating in this study by completing this questionnaire and agreeing to participate in this research project.

If at anytime, you do not want to participate in the survey, please give me your questionnaire and read your book quietly at your seat. You will not be penalized if you do not participate. Your class grades will not be affected if you decide not to participate.

Everyone look at the first paper. For this section, write your answers directly on the paper. What are some of the ways you participate in music? Do you sing in the shower? In the car? Think of all of the times you sing and write an approximate number of hours you sing each week or each day. (Give time to write.) Now think about instruments that you play. What kinds of instruments do you play? Does anyone play in a group outside of school? I have a student who plays the Didgerdoo. When you answer the question about playing an instrument, think about all the different kinds of instruments from band/orchestra instruments to other instruments like the guitar. Write the approximate number of hours that you play these instruments each day or each week.

For the questions in the rest of the questionnaire, write your answers on a computer (scan tron) card. You will need to use a pencil to answer these questions. Let's look at the computer card first. (Show this section on an overhead or computer screen.)

Now let's skip the student number and the second box is **SEC NO**. Here you need to write in your age. In the first column there is already a 0. You need to fill in your age using the middle and the end columns. Fill in your age at the top and then color in the correct box. Check my copy if you have a question.

You do not need to fill in your name, course number, instructor, but under the instructor – write fill in the **date**.

Now go to the **SPECIAL CODE** box. If you are a girl color in 1. If you are a boy - 2.

The questions in this section will ask how you feel about statement. If you strongly agree with the statement color in the A. If you strongly disagree, color in the E.

FOR EXAMPLE: I like to listen to music.

If you really like to listen to music, you would color in the A. If you really do not like to listen to music, you would color in the E. If you sometime like to listen to music and sometimes do not like to listen to music, you would color in the C.

Please read and answer each question. Remember to write the answers to the questions on the white paper on the computer card. If you have any questions, please raise your hand and I will answer any questions. Please do not talk to any one else. I would really like to hear about your musical thoughts and experiences. When you are finished turn your questionnaire upside down so that I know who is finished.

DEBRA LYNN CAMPBELLcampbedl@potsdam.edu**EDUCATION:****Ph.D., Music Education**, *Pennsylvania State University*, 2009**Masters of Music Education**, *Pennsylvania State University*, 2002**Bachelor of Science, Music Education**, *West Chester University (PA)*, 1980

Pennsylvania Instructional I Teaching Certificate (K-12)

COLLEGE TEACHING EXPERIENCE:**Assistant Professor of Music Education** (Crane School of Music: Potsdam, NY)**Adjunct Instructor of Music** (Shippensburg University: Shippensburg, PA)**Instructor of Music Education** (Penn State: University Park, PA)**PRE-K THROUGH 12 TEACHING EXPERIENCE:****Teacher for Preschool children** (Music Academy: State College PA)**Music Teacher, K-12** (Governor Mifflin School District: Shillington, PA;

Boyertown Area School District: Boyertown, PA)

MUSIC DIRECTING AND PERFORMING EXPERIENCES:

Grace Lutheran Church: Shillington, PA; Lincoln Park United Methodist:

Reading, PA; St. John's Presbyterian: Devon, PA; St. Paul's U. C. C.:

Bowmansville, PA

PUBLICATIONS:

Campbell, D.L. (2004). Attention focus of college music and non-music majors. Conference Proceedings from 2004 ICMPC, Northwestern University.

Rutkowski, J., Miller, M.S., and Campbell, D.L. (2002). The '6th grade singing slump': Continuation of a longitudinal investigation. In *Proceedings from the 2001 Desert Skies Symposium on Research in Music Education*. University of Arizona, 2002, pp. 99-111.**RESEARCH/TEACHING INTERESTS:**

Music Psychology, Interest and Motivation, Perception of Music Listening, Teaching and Learning Music

RESEARCH PRESENTATIONS:

New York State School Music Association (2008); Pennsylvania Music Educators Conference (2002, 2003, 2004, 2006); Eastern Division MENC (2005); Florida Music Educators Conference (2004); Council for Institutional Cooperation (2004); International Committee for Musical Perception and Cognition (2004); American Educational Research Association Conference (2003); Penn State Graduate Symposium (2002, 2003); Thompson Symposium (2003); Desert Skies Symposium (2001, 2003); Arizona Symposium on Learning in the Arts (2001)

CONFERENCE PRESENTATIONS:

National Conference of Teachers of English (2005, 2006); Music Educators National Conference (2006); Pennsylvania Music Educators Association conference (2005); Mountain Lake Symposium for Teachers of General Music Courses (2005)