THE MEASUREMENT OF OCCUPATIONAL IDENTITY AMONG
UNDERGRADUATE PRESERVICE MUSIC TEACHERS:
A TEST DEVELOPMENT STUDY
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A large segment of society is either preparing to enter the work force, or is already engaged in some chosen line of work. Preparing to enter the work force takes a considerable amount of time and effort. The decision to follow one career path over countless others may, on the surface, appear to be discretely individual. But when viewed from a sociological perspective, occupational choices are implicitly and explicitly reached through a consensus of contributing factors. Consequently, an occupational identity is not how an individual describes a personal work-related self, but is rather dialectic. It is the merging, albeit, negotiation of viewpoints which causes persons to view themselves in relationship with how others think of them. It is expected that students newly enrolled in music education degree programs will, with time, replace erroneous lay conceptions of music teaching with those presented in curricula and espoused by significant role models. However, the professional socialization process, characteristic of music education degree programs, has not always been successful in transforming students’ personal perspectives of music teaching. This transformation process is critical toward the development of occupational identities that are congruent with school music teaching positions. There has been an established line of research in music education that examines who school music teachers are from a sociological perspective. When pursuing this literature, however, it became evident that, over time, the term identity had been used under many different guises, incorporating mixed
perspectives from among the social sciences. The studies that have dealt with occupational identity have done so for different purposes, employing different theories and methodologies. While any of these previous research protocols may be useful for particular purposes, the reality is that the terms identity and occupational identity have become interchangeable. The term identity is sometimes used to denote self-concept or role concept without being clear about what these mean or how or if they are different from occupational identity. The underlying issue here, and a principle concern for music education, is whether or not music education degree programs are guiding preservice music teachers toward an occupational identity that matches with the occupation. The purpose of this study was to contribute to the field of occupational identity by developing a researcher-designed measurement tool for occupational identity in music education. This study focused solely on preservice music teachers, their perceptions and demonstrable behaviors, associated with the changes that might occur over the course of their professional preparation. The data in this investigation, subjected to principal components analysis, resulted in a 5-component solution rotated to simple structure using oblique Oblimin rotation. Thirty-five items from a pool of 106 with component loadings >.35 explained 57% of the total variance. Reliability estimates using Cronbach’s alpha were .93 for all 35 items and ranged from .92 to .66 for the five components.
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# TABLE OF CONTENTS

<p>| ACKNOWLEDGEMENTS | ........................................................................................................... iii |
| LIST OF TABLES | ........................................................................................................... ix |
| LIST OF FIGURES | ........................................................................................................... x |
| CHAPTER 1 INTRODUCTION | ........................................................................................................... 1 |
| Background of the Study | ........................................................................................................... 2 |
| Statement of the Problem | ........................................................................................................... 6 |
| Need for the Study | ........................................................................................................... 9 |
| Purpose of the Study | ........................................................................................................... 10 |
| Definition of Terms | ........................................................................................................... 11 |
| Assumptions and Limitations | ........................................................................................................... 12 |
| Theoretical Framework | ........................................................................................................... 12 |
| Significance of the Study | ........................................................................................................... 13 |
| CHAPTER 2 REVIEW OF LITERATURE | ........................................................................................................... 14 |
| Historical and Theoretical Backgrounds for Occupational Identity | ........................................................................................................... 15 |
| Adult Occupational Socialization | ........................................................................................................... 17 |
| Formal Training | ........................................................................................................... 18 |
| Four Key Elements of Work | ........................................................................................................... 20 |
| Social Reference Groups | ........................................................................................................... 23 |
| Parental Support | ........................................................................................................... 25 |
| Summary | ........................................................................................................... 26 |
| Occupational Choice and Socialization | ........................................................................................................... 26 |</p>
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>148</td>
</tr>
<tr>
<td>Data Analysis for the Main Study</td>
<td>152</td>
</tr>
<tr>
<td>CHAPTER 4 RESULTS</td>
<td>153</td>
</tr>
<tr>
<td>Initial Analyses</td>
<td>153</td>
</tr>
<tr>
<td>Research Questions</td>
<td>154</td>
</tr>
<tr>
<td>Research Question 1</td>
<td>154</td>
</tr>
<tr>
<td>Components</td>
<td>162</td>
</tr>
<tr>
<td>Mechanism of Change-Problem Interest and Pride in New Skills</td>
<td>164</td>
</tr>
<tr>
<td>Research Question 2</td>
<td>171</td>
</tr>
<tr>
<td>Summary</td>
<td>172</td>
</tr>
<tr>
<td>CHAPTER 5 DISCUSSION AND RECOMMENDATIONS</td>
<td>173</td>
</tr>
<tr>
<td>Design and Analysis</td>
<td>174</td>
</tr>
<tr>
<td>Summary of Results</td>
<td>174</td>
</tr>
<tr>
<td>Discussion and Recommendations</td>
<td>175</td>
</tr>
<tr>
<td>Commitment to Task (CTASK)</td>
<td>175</td>
</tr>
<tr>
<td>Mechanism of Change-Problem Interest and Pride in New Skills</td>
<td>178</td>
</tr>
<tr>
<td>Title/Ideology</td>
<td>181</td>
</tr>
<tr>
<td>Mechanism of Change-Internalization of Motives</td>
<td>184</td>
</tr>
<tr>
<td>Commitment to Organization or Institution</td>
<td>187</td>
</tr>
<tr>
<td>Research Question 2</td>
<td>190</td>
</tr>
<tr>
<td>Summary of Recommendations</td>
<td>193</td>
</tr>
<tr>
<td>Limitations</td>
<td>194</td>
</tr>
<tr>
<td>Recommendations for Future Research</td>
<td>197</td>
</tr>
</tbody>
</table>
APPENDIX A  TEST DEVELOPMENT REFERENCES ......................................................... 206
APPENDIX B  RECRUITMENT DOCUMENTS .............................................................. 211
APPENDIX C  INTERNAL REVIEW BOARD DOCUMENTS ........................................ 214
APPENDIX D  MUSIC EDUCATOR SCALE OF OCCUPATIONAL IDENTIFICATION
FINAL VERSION ........................................................................................................ 218
REFERENCE LIST ................................................................................................... 227
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Descriptive Statistics of MESOI</td>
<td>153</td>
</tr>
<tr>
<td>Table 2</td>
<td>Total Variance-Explained</td>
<td>158</td>
</tr>
<tr>
<td>Table 3</td>
<td>Intercomponent Correlations</td>
<td>159</td>
</tr>
<tr>
<td>Table 4</td>
<td>Component Matrix ($n = 35$ Items)</td>
<td>160</td>
</tr>
<tr>
<td>Table 5</td>
<td>CTASK Total and Subscale Descriptives</td>
<td>163</td>
</tr>
<tr>
<td>Table 6</td>
<td>CTASK Item Descriptives ($n = 16$ Items)</td>
<td>163</td>
</tr>
<tr>
<td>Table 7</td>
<td>MCPIPS Total Descriptives</td>
<td>164</td>
</tr>
<tr>
<td>Table 8</td>
<td>MCPIPS Item Descriptives ($n = 3$ Items)</td>
<td>165</td>
</tr>
<tr>
<td>Table 9</td>
<td>TITLEID Total Descriptives</td>
<td>166</td>
</tr>
<tr>
<td>Table 10</td>
<td>TITLEID Item Descriptives ($n = 8$ Items)</td>
<td>166</td>
</tr>
<tr>
<td>Table 11</td>
<td>Item Response Trends</td>
<td>167</td>
</tr>
<tr>
<td>Table 12</td>
<td>MCIM Total Descriptives</td>
<td>168</td>
</tr>
<tr>
<td>Table 13</td>
<td>MCIM Item Descriptives ($n = 4$ Items)</td>
<td>169</td>
</tr>
<tr>
<td>Table 14</td>
<td>Commitment to Organization and School Year</td>
<td>170</td>
</tr>
<tr>
<td>Table 15</td>
<td>COI Total Descriptives</td>
<td>171</td>
</tr>
<tr>
<td>Table 16</td>
<td>COI Item Descriptives ($n = 4$ Items)</td>
<td>171</td>
</tr>
<tr>
<td>Table 17</td>
<td>Component Acronyms and Descriptive Statistics</td>
<td>172</td>
</tr>
<tr>
<td>Table 18</td>
<td>MESOI Item Origins ($n = 106$ Items)</td>
<td>198</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Figure 1</td>
<td>Distribution of test scores.</td>
<td>154</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Scree plot.</td>
<td>159</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

In industrialized societies such as the United States, cultural norms dictate that as individuals come of age, they should choose an occupation in a timely fashion. The development of an occupational identity is a complex process that is often overlooked in university educational programs, even though it might be an appropriate place to begin this developmental process. This process is vitally important to music educators’ job satisfaction, career commitment, negotiation of occupational stress, and particularly career longevity (Blair, 2013). Issues concerning music teacher retention have been cited as major concerns by the principle organization for music educators, the National Association for Music Teacher Education, formerly known as the Music Educators National Conference (Bergee et al., 2001; Niermann, 2010). Through the continuing examination of the role of occupational identity, music education researchers might be able to contribute to teacher education programs in giving preservice music educators greater opportunity to develop a music teacher occupational identity. This might improve teacher retention; however, there can often be a lack of clarity concerning the basic concepts of occupational identity.

Because research in this field has emerged from across multiple disciplines, confusion (H. Froehlich, personal conversation, July, 22, 2009) often exists not only in the understanding of initial sociological constructs which serve as a foundation to occupational identity, but also in the use of terms. In the field of music education, this process is made even more challenging because of the roles of teacher and performer, which can conflict. Froehlich and L’Roy (1985) found that music teacher identity
appeared not to develop over the course of undergraduate study but rather, students strongly identified with their musician/performer identity. Roberts (1991a) found that students believed the label of “teacher” to be perceived negatively, and preferred to develop their expertise as performers rather than teachers.

In addition, the instruments that have been developed to measure and assess music teacher occupational identity have been varied. Wagoner (2011) developed an instrument based on two selected constructs, music teacher self-efficacy and music teacher commitment, which was used to explore her proposed definition of music teacher identity. There exists a need for clarity concerning foundational concepts in music educator occupational identity, and there is a need for an instrument based on those concepts that measures occupational identity among undergraduate music education students so that teacher education programs might become even more effective in guiding in-service teacher success and longevity.

This study sought to contribute to the role of occupational identity in the field of music education through the development of an instrument to measure occupational identity among music education undergraduates.

Background of the Study

As this study was grounded in the sociological constructs of occupational identity, this section presents a contextual and historical background to provide context for the reader. Work, defined sociologically, is a web of social relationships (Pavalko, 1971). It is through these relationships that a person becomes yoked with other like-minded individuals and learns behaviors, attitudes, and values inherent in an occupation.
Known as occupational socialization, this process links the individual to a broader social network. A large segment of society is either preparing to enter the work force, or is already engaged in some chosen line of work. In industrial societies in which people spend the majority of their lives earning a living, occupational association becomes an important source of identity (Pavalko, 1971). Aspects of identity might include various non-work related behaviors, attitudes, and values, and occupational choice has been considered a good predictor of these aspects (Pavalko, 1971). In addition to these, another crucial aspect of identity centers around the occupational title associated with one’s profession.

The name or title of an occupation is an important aspect of a person’s occupational identity because the title carries with it not only a definition of the actual work and related ideologies, but can also imply specific characteristics, abilities, and interests of that work force. Occupational titles are also subject to evaluation both by those engaged in the work and by populations outside of the workplace. How individuals change their personal perspectives of the work at hand to accommodate those held by those in and outside the organization, as well as the quality of those changes, is fundamental to the sociological study of work. All these factors work together in intricate ways, but for some occupations, these issues can be even more challenging. This is the case in the context of music as an occupation.

For musicians, the matter of occupational titles and occupational socialization can be particularly complex. For example, music teachers and performing musicians often share similar childhood musical experiences that, of necessity, create an abiding affiliation to their vocal or instrumental specialization. Both teachers and performers
come to their degree plans with a well-developed performance identity. Those who plan to be music teachers tend to identify more with their performance content area than with education (L’Roy, 1983). This can be problematic because the occupational title of *performer* can carry with it a different set of social expectations and professional competencies than that of *music teacher*. Each title, as well as the person on which it is conferred, is evaluated differently by insiders with the same title as well as by outsiders. Moreover, music education students have been found to seek and prefer to be identified with a performance title rather than one as a teacher, despite their degree designation, and might persist in this performance identification throughout their degree plan (Roberts, 1991a).

While it is expected that newly enrolled students will, with time, replace erroneous lay conceptions of music teaching with those presented in curricula and espoused by significant role models, the professional socialization processes present in music education degree programs have not always placed an emphasis on transforming students' personal perspectives of music teaching. Because of the rigors of degree requirements placed on those programs by state education certification boards, emphasis is quite often placed on what and how to teach and not necessarily on the role of the teacher. There can also be disconnect between the developing occupational identity experienced by music education undergraduate students and an identity that would be congruent with an actual teaching position. A fundamental question for music education is whether music education programs should be committed to developing occupational teaching identities at the undergraduate level in addition to providing a framework of knowledge and skills. If professors accept the assumption that
occupational identity is important for music education undergraduate programs to include, then an additional question is if there is a valid tool for measuring occupational identity.

Music education has been viewed from multiple perspectives, including historical, psychological, biological, and philosophical (Kelly, 2002). A sociological perspective of music education is imperative to consider, as music has been identified as a form of human behavior (Davidson, 2004), and sociology is, in part, the study of human behavior (Macionis, 1997). Kelly further notes that:

… the sociological perspective has often been overlooked or underappreciated by many music educators. Yet, it is the sociological perspective that can contribute much to the understanding of how music is globally used and learned within a human context, and therefore a social context. (p. 40)

There has been an established line of research in music education that has examined who music educators are from a sociological perspective (Clinton, 1991; Cox, 1994; L’Roy, 1983; Paul, 1998; Prescesky, 1997; Wolfgang, 1990). Within that literature, researchers have focused on how music education students might see themselves as musicians and/or teachers. The studies that have dealt with occupational identity have done so for different purposes, employing different theories and methodologies (Bernard, 2004; Brewer, 2009; Harris, 1998; Isbell, 2008; Maltas, 2004; Roberts, 1991a). Consequently, the terms identity, self-identity, and occupational identity have often been used interchangeably, but with varying definitions. The studies most often cited in research on occupational identity among music teachers have included the works of four primary scholars: Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c) and Lortie (1959, 2002). These scholars were also identified as foundational to a sociological perspective in music education (L’Roy, 1983). These
studies have been cited to some extent in much of the subsequent literature related to occupational identity of music teachers. While these foundational works and the constructs that have emerged from them have been obviously valued, subsequent researchers have sometimes lost sight of the sociological underpinnings provided by these scholars. Because of confusion surrounding the definition of terms, theoretical frameworks, and sociological perspectives, it is vital to re-present these foundational concepts through the sociological lens in which they were originally framed. In revisiting the works of these primary scholars and creating a theoretical framework that includes their original constructs in context, it is hoped that the concept of occupational identity among music teachers might be clarified, and some sense of unity concerning terms, definitions, and perspectives might emerge. The development of an instrument that could measure occupational identity in music education would then be useful to music educators across the field.

The purpose of this study, which was grounded in the foundational works of Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c), and Lortie (1959, 2002), was to contribute to the field of occupational identity by developing a researcher-designed measurement tool for occupational identity for music education. The following section provides an historical overview of occupational identity.

Statement of the Problem

Occupational identity, defined sociologically, is derived from symbolic interactionism, borrowing heavily from role theory, which is sometimes referred to as labeling theory (Becker, 1968, 1977a, 1977b, 1977c; Mead, 1934). In the field of music,
there has been much research in the context of identity, in some cases dealing with occupational identity. One of the first studies using a symbolic interactionist framework explored the professional socialization of music educators (White, 1967). Pioneering research on the occupational identity of music educators occurred with L’Roy’s (1983) study that was premised upon the research of Pavalko, Becker and Carper, and Lortie.

Subsequent to L’Roy (1983) have been two studies that examined occupational identity expressly utilizing the original theories of these four foundational scholars (Clinton, 1991/1997; Schonauer, 2002). Other studies based on aspects of their work incorporated additional theories in relation to their investigation of occupational identity (Cox, 1994, 1997; Harris, 1991, 1998; Maltas, 2004; Paul, 1998). An underlying assumption driving this line of research was that training in general, or certain aspects of training, would strengthen an occupational music teaching identity. Currently, however, research has not appeared to reveal what a strong occupational identity is in a music educator.

Recent scholarship on the occupational identity of music educators has endeavored to build on that of its predecessors. When pursuing this literature, however, it becomes evident that the term identity has been used under many guises, incorporating mixed perspectives from among the social sciences (Bernard, 2004, Brewer, 2009; Dust, 2006; Prescesky, 1997). Further, the research has been situated in different theories (Bernard, 2004; Brewer, 2009; Broyles, 1997; Dust, 2006; Isbell, 2006; Prescesky, 1997) and methodologies (Bernard, 2005; Isbell, 2006; Prescesky, 1997; Roberts, 1990, 1991a, 1991b, 1991c, 1993; Wagoner, 2011; Wolfgang, 1990). Test protocols have differed, either using only parts of the foundational occupational identity
construct or none at all. Consequently the questionnaires, when used throughout this research, or the results of qualitative inquires have not always been comparable to each other.

A perceived omission in much of this research is that some of these studies have used only the respondents’ personal perceptions of identity or their memories of significant others. Perceptual studies only cover one part of the dialectic. Furthermore, data obtained from retrospective interviewing methods have been found to be intrinsically unreliable when corroborative evidence was not included (Moore, Burland, & Davidson, 2003).

A secondary issue that could be challenging is the tools themselves. Socialization is an ongoing event, coloring our attitudes and memories of past occurrences. The tests used in much music education identity research have either not been designed to find gradations of occupational development in samples, might not have been strong enough to find these differences, or were vague as to the type of identity being measured.

While any of these previous research protocols might be useful for particular purposes, the reality is the terms identity and occupational identity have become interchangeable. The term identity is sometimes used to denote self-concept or role concept without being clear about what these mean or if they are different from occupational identity.

Amid the confusion, assumptions can be found in much of this research. These include that occupational identity should have a strong connection with teaching (Clinton, 1991; L’Roy, 1983), but research has not confirmed this. Another assumption
is that being mostly concerned about children and their learning environment might be an identifier of strong occupational identity as a teacher (Isbell, 2006; Paul, 1998), or that certain aspects of the training process would nurture a deeper commitment to the teacher role (Brewer, 2009; Broyles, 1997; Paul, 1998; Prescesky, 1997), resulting in enhanced or future job satisfaction (Harris, 1998; Maltas, 2004). A pervasive research question in the literature has been in consideration of conflict between the performer and teacher role identities (Bernard, 2004; Brewer, 2009; Dust, 2006; Harris, 1998; Isbell, 2006; L’Roy, 1983; Roberts, 1990), which some believe must be reconciled in order for an authentic teaching occupational identity to develop properly (Harris, 1998; L’Roy, 1983; Roberts, 1990). The nature and validity of that reconciliation process continues to be a debated topic. The underlying issue, and a principle concern for music education, is whether or not faculty members are guiding music education students toward an occupational identity that matches the occupation itself.

Future research on occupational identity of music educators might benefit from making use of agreed-upon criteria defining the construct of occupational identity. There is a need for research based on the original construct that singularly looks at the development of a valid and reliable instrument with which to measure occupational identity in preservice music teachers.

Need for the Study

Much research has examined the issue of identity and occupational identity among music educators. A critical review of literature found the research to be mixed as to whether music teachers develop occupational identities as they progress through
their educational programs and into the work force. Several possible reasons have been discussed as to these ambiguous findings. Beginning with L’Roy (1983), research in music education looking at occupational identity has cited the original sociological literature authored by Becker and Carper (1977a, 1977b, 1977c), Pavalko, (1971) and Lortie (1959, 2002). Except for acknowledgement of the four elements of occupational identification (Becker & Carper, 1977a), music education literature has not described or applied the totality of the ideas and conclusions that were the result of that line of scholarship. Most notably absent was the idea that the career expectations of certain social groups, i.e., family (parents especially), peer and the occupational group, i.e., colleagues would qualify, can enhance or detract from an individual’s occupational choice and the living out of that choice. This concept in particular speaks to the idea that a sociological understanding of occupational identification is dialectic and should be investigated as such. This study focused solely on preservice music educators and their perceptions and demonstrable behaviors associated with the changes that might occur over the course of their professional preparation. The scale used in this investigation was based on a comprehensive review of the sociological literature aforementioned. The second part of the dialectic, perceptions of others, must be addressed in a different study after the development of this initial tool.

Purpose of the Study

The purpose of this study, which was grounded in the foundational works of Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c), and Lortie (1959, 2002), was to contribute to the field of occupational identity by developing a researcher-
designed measurement tool for occupational identity in music education. This study focused solely on preservice music teachers and their perceptions and demonstrable behaviors associated with the changes that might occur over the course of their professional preparation. The following research questions were addressed:

1. What components are fundamental to occupational identity?
2. What is the reliability estimate of the Music Educator Scale for Occupational Identification (MESOI)?

Definition of Terms

- Occupational identity: An occupational title given as an answer to the question “What do you do for a living?” Occupational identity often appears in the literature as synonymous with the terms professional self-concept and occupational role (Becker & Carper, 1977a; L’Roy, 1983; Lortie, 1959, 2002; Pavalko, 1971).
- Construct: in sociology, a theory or mechanism that is developed to examine a product of human social interaction. For the context of this study, the construct will be defined as the foundational theories of occupational identity as developed by Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c), and Lortie (1959, 2002).
Assumptions and Limitations

This study contained several assumptions. The first of these assumptions was that individuals who attain a high degree of occupational socialization reflect the ideals, ideologies, and tasks that the occupational group holds dear, and that also identify the individual as a group member. Therefore, knowledge of an individual’s occupation would provide information about the institution, its work culture, its ideologies, and its members. The second assumption was that formal training experiences are transmitters of professional culture toward the development of a new occupational identity. A person’s occupation is a social role, which sociologists study to understand human behavior. Macro social norms and values can be studied within particular work contexts. Occupational roles can be good predictors of non-work related attitudes, perceptions, activities, and behaviors.

This study was limited to reviewing literature that jointly used a symbolic interactionist framework and also cited either the foundational construct authors (Pavalko, Becker and Carper, and Lortie) and/or subsequent research premised on the sociological construct of occupational identity (L’Roy, 1983). The focus of this study was to investigate occupational identity in undergraduate preservice music teachers.

Theoretical Framework

This investigation was framed within the theory of symbolic interactionism. Heavily influenced by late 19th and early 20th century pragmatists including William James, John Dewy and Charles Cooley, symbolic interactionism has commonly been attributed to George Mead (Charon, 2007). Symbolic interactionism is a perspective
among the social sciences that has been found salient in the study of human behaviors and how we individuals come to associate human behaviors with human identities. In the field of music education, symbolic interaction has been used as a way to interpret the behaviors of music teachers as they change from lay individuals to professionals (L’Roy, 1983) and, in the current study, served as a guide in developing questions, in choosing a theoretical framework and in defining the overall topic.

Significance of the Study

The focal point of this investigation was to develop a reliable and valid measurement tool that would, in a relatively economical way, access occupational identity. Given that previous research in this area has been epistemologically diverse, the measurement tools themselves and the assumptions upon which they have been predicated may not be comparable. This study may add to the body of knowledge by referring to the original construct of occupational identity in order to establish an empirical understanding of occupational identity in music educators. Additionally, this research might be important for identifying and describing job requirements, for the comparison of those with students’ occupational identity and personality traits for the purpose of predicting job suitability, and for exploring the relationship between job satisfaction and job requirements. Music education faculty might use this test to determine how well defined their own occupational identity is as well as that of their students. Such knowledge could aid faculty in knowing if educational programs are challenging students’ sense of occupational identity as compared to the actual requirements of the job.
CHAPTER 2

REVIEW OF LITERATURE

The purpose of this study, which was grounded in the foundational works of Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c), and Lortie (1959, 2002), was to contribute to the field of occupational identity by developing a researcher-designed measurement tool for occupational identity in music education. The following research questions were addressed:

1. What components are fundamental to occupational identity?
2. What is the reliability estimate of this questionnaire?

Determined by the initial literature on occupational identity in the field of music education, four sociologists emerged as the primary scholars on occupational identity from a sociological perspective. This study built on the research of L’Roy (1983) who identified these four in her work with Froehlich. This review of literature will begin by presenting the broader perspectives from this seminal work for the purpose of clarity. In order to present a complete review of literature, it was necessary to provide a framework based on the broad field of sociology. A sociological perspective was chosen as the most appropriate lens because it was the paradigm from which symbolic interactionism originated. Furthermore, the original authors situated their research in an interactionist paradigm. L’Roy (1983) found that symbolic interactionism was an effective lens with which to investigate the development of occupational identity among preservice music teachers. Consequently, this study reviewed only literature that used symbolic interactionism as its fundamental framework. Presented first is the historical
and theoretical backgrounds for occupational identity to give the reader context for the rationale that was utilized for the development of the questionnaire.

Historical and Theoretical Backgrounds for Occupational Identity

In order to provide a framework for occupational identity in music education, it was important to investigate the historical background in research and scholarship. A considerable portion of contemporary sociological scholarship about occupation and occupational identity has been premised upon the writings of Cooley (1902) and Mead (1934). Throughout his professorship at the University of Michigan, Cooley was dedicated to the topic of the self. Perhaps due to his excessive shyness and competing with the reputation of a highly successful and ambitious father, Cooley was led to observe his behaviors and attitudes in reaction to his life’s circumstances, and also the behaviors and attitudes of his children (Coser, 1977). Cooley’s most referenced theory, described in his book The Looking Glass Self (1902), sometimes referred to as The Looking Glass I, drew from his self-reflections on the awareness, development, and growth of the self. Cooley theorized that the self is never an individual entity, nor does the self develop in isolation from other selves.

Using a mirror to illustrate his ideas, Cooley posited that as a person looks in a mirror, what that person sees and verifies as self is in actuality a trinity of communicative exchanges that, combined together, define who the person is. These exchanges are (a) a person’s imaginings of his appearance to others, (b) his judgments concerning his imaginings of how others view him, and (c) the resulting feelings evoked in him toward those judgments (Cooley, 1902). Society, therefore, is comprised of
multiple events made up of these three-fold mental interactions. Society, as such, becomes part of the individual self as the self evolves through the many interpersonal interactions that comprise the normal life of the individual (Cooley, 1902).

Mead wrote and taught extensively as a professor of philosophy at the University of Chicago in the early part of the 20th century. The term symbolic interaction is generally attributed to the writings of Mead, especially his lectures and notes that were published and interpreted by his students, most notably Blumer (Charon, 2007). Mead’s perspective on the development of self was largely pragmatic, drawing on the ideas of Dewy, James, and Cooley, to name a few.

Pragmatic thought brought to symbolic interactionism the idea that humans interpret their environment based on objects’ perceived as useful to them and they remember those environments that contain objects that are also useful. Objects deemed useful fulfill a specific role at a specific time, but might be adapted to other roles at other times. According to this notion, the usefulness of objects is an ongoing process. The most noticeable, most relevant and desired environment or object is that which is considered useful. Consequently, pragmatists focus on what human beings do as a reflection of whom they are. Cooley’s writings on the self as expressed through his looking glass metaphor and Mead’s writings on the emergence of the human self amid social interactions provided the framework for role theory.

Role theory posits that a person perceives the personal self objectified as a product of human interactions. In other words, a person assumes and ascribes to an identity that is reflected back to him or her through the mirror of opinions, behaviors, beliefs, and conversations to which the person is privy. Situated within a symbolic
interactionist framework, role theory is a way to explain how individuals interact with and use their environment according to the perspectives that arise and that are continually transformed (Charon, 2007). Specifically, role theory has been used by researchers to study how adults learn and adopt occupational roles or identities (Charon, 2007). The process by which adults are initiated into a chosen line of work is often identified as occupational socialization. For music educators, occupational socialization into the teaching profession might start when they begin their undergraduate work in music education, as their perspectives are challenged and modified.

The works of Cooley and Mead provided a sociological foundation for the thoughts on occupational identity as developed by Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c), and Lortie (2002). The following sections focus on the constructs of these primary scholars and provide the theoretical framework for this study. One of the first constructs to be explored is the connection of occupation with social groups.

**Adult Occupational Socialization**

Adult occupational socialization is rich with complex, interactive personal and situational encounters involving both the development of observable skills and the potential transformation of self-perceptions. An understanding of the inter-working attributes of this process is premised mainly upon certain foundational assumptions. One assumption made by Pavalko was that an occupation might connect an individual to a larger social group (Pavalko, 1971). Social groups, often referred to as reference groups, express the behavioral characteristics, attitudes, and values that identify the
group with a particular occupation (Pavalko, 1971). Individuals within the group reflect the ideals, ideologies, and tasks that the group holds dear and that also identify an individual as a group member. Consequently, knowledge of an individual's occupation might reveal more about the individual than just a particular career choice. A greater understanding of group culture, i.e., social norms, inherent in the training and induction phases of a career path, can be gained through the study of an individual’s insights and beliefs about the institution, its ideology, and its members (Pavalko, 1971). This training has typically consisted of some type of education or schooling.

**Formal Training**

Historically, schooling has figured prominently in the attainment of an occupation and its associated identity (Lortie, 1959). The educative experience imparts to the student the characteristics of a work culture, both unconsciously and through intentional means, as a consequence of daily human interactions (Pavalko, 1971). Formal training experiences are crucial transmitters of professional culture toward the development of a new occupational identity (Pavalko, 1971). Students encounter many new and varied experiences as they enter college, experiences, which act as socializing agents of their new role as independent young adults.

Adult socialization involves the learning and unlearning of new and old ways of thinking and of doing, in addition to the formation of new alliances and the end of old ones. The possibility of hanging onto conflicting norms or realizing conflicting roles is inherently real. According to Lortie, the primary goal of higher education is to socialize an individual away from personal and often stereotypical images of an occupation to
more experientially grounded and professional models espousing an occupational identity “which is believable both to the individual and to others” (Lortie, 1959, p. 363). This implies an interaction resulting in an agreement of, and conformity to, shared values and expectations about an occupational role. Conformity and agreement are a requisite outcome of occupational socialization (Pavalko, 1971).

Young adults enrolled in university degree plans are, in a sense, at work, in that they are learning the skills and values of a particular occupational group in the presence of its members (Pavalko, 1971). Lortie (2002, p. 61) coined the term “apprenticeship of observation” and used it to describe the differences between the partial, lay conceptions of an occupation as experienced, for instance, in elementary and secondary school by children who hope to be school teachers, and the actual adult occupational socialization that occurs in professional university degree programs where students encounter diversities and subtleties of their actual occupational roles (Lortie, 2002). In other words, primary and secondary educational experiences consistent with early childhood and adolescence might not be authentic adult occupational socialization experiences.

Unlike primary and secondary educational experiences, those in adulthood often operate under different assumptions and purposes that characterize those socialization experiences. For music teachers, occupational socialization can be particularly complex. The extensiveness and quality of these teachers’ childhood music experiences are critically essential toward their skill development as musicians, abilities that will allow them to audition for admittance into accredited music teaching programs. But as music education students, their identity as teachers might come into conflict with their identity as performers as they undergo the socialization process specific to music
teaching in the schools. In becoming socialized to a particular group, key elements have been identified that can indicate a person is a member of an occupational group.

**Four Key Elements of Work**

Becker and Carper (1977a) outlined four key elements of work that together can be used to identify a person as a role-playing member of an occupational group. These elements are (a) an occupational title and its associated ideology, (b) a commitment to tasks, (c) a commitment to specific organizations or institutional positions, and (d) the significance with which society at large recognizes the occupational title and its related social position.

When a person is perceived as being a highly socialized constituent of a profession, it will appear to the observer that the occupational role is indistinguishable from the person (Lortie, 1959). There are many things a novice needs to learn and experience in each element of his or her work situation before both the personal and the occupational self conjoin (Lortie, 1959). One element that can contribute to the merger of role and self is how the work itself is labeled and recognized.

**Occupational Title and Ideology**

Occupational names imply powerful and persistent conclusions about an occupation, names that come to symbolize the occupational identity of a person. Names and titles infer the kinds of expectations that characterize an occupational role (Lortie, 1959), and the rewards that the attainment of such a role promise. Titles are conferred by significant and non-significant persons both inside and outside the occupational
reference group. The title is deemed significant as evidenced by the preferences and beliefs of a person seeking to be labeled or identified by the title. Titles are accepted or rejected by an individual on the basis of implied meanings. An ideology is a collection of ideas to which groups of persons give their united allegiance. Ideologies, as constructed agreements of what the group believes, values, and promotes, are expressed through the use of occupational titles.

Commitment to Task

Members of an occupational group exercise a commitment to occupational tasks in the same degree to which they feel identified with the role itself (Becker & Carper, 1977a). In occupations where the job is perceptually clear and well-defined, a commitment to task is more apt to occur. High levels of specificity with regard to job expectations and requirements make it easier for an individual to imagine the type of ideal person who might succeed in a particular line of work, and what it would feel like to be that kind of person (Becker & Carper, 1977a).

Both an undergraduate student and a junior employee may perceive the various expectations that characterize a particular role. But it is primarily in the perceived expectations of others that the individual finds an assertion of an occupational identity either confirmed or disconfirmed (Lortie, 1959). Consequently, it is important to accomplish the complex skills that are required to meet these expectations, both personal and perceived, of vested members associated with an occupation.
Commitment to Specific Organizations or Institutional Positions

An occupational identity can foretell the type of appropriate career avenues in which one’s future will lie (Becker & Carper, 1977a). An individual who has a projected image of himself in a particular occupational role, and has perceived confirmation of that image through interactions with significant others might begin to compare his role with colleagues. Networking and social engagements, growing camaraderie in the pursuit of a common interest, deference to an institution, and appropriate professional dependence on its contacts are characteristics of a developing occupational identity (Becker & Carper, 1977a).

Significance within Society at Large

It is not only how a person characterizes his or her occupational identity, but also the perceived notion of how that identity is received and judged by the larger social community that can encourage occupational roles. Consequently, an occupational identity carries with it implicit references to an individual’s social standing, which communicates the worth and appropriateness of a chosen profession (Becker & Carper, 1977a). Social reference groups, each with differing expectations, social norms, and values, exert particular influence on the development of the four elements of occupational identification, and have been theorized as being common among many professions including music education.

In the context of this study, it was important to examine the four elements: (a) an occupational title and its associated ideology, (b) a commitment to tasks, (c) a commitment to specific organizations or institutional positions, and (d) the significance
with which society at large recognizes the occupational title and its related social position.

**Social Reference Groups**

According to the work of these first scholars in occupational identity, through participation in social reference groups, students and employees come to their work experiences with well-developed identities, both personal and occupational. This is due to socialization norms particular to those social groups, however, these might or might not match their jobs. Common group affiliations include informal peer or student groups, as well as the formal academic or professional climate and operational structure of an organization (Becker & Carper, 1977b). Interaction with any or all of these groups might cause changes, either positive or negative, in a person’s level of participation in occupational pursuits, which in turn, can create a potential change in the overall development of the corresponding occupational identity (Becker & Carper, 1977b).

Becker and Carper (1977b) segregated ways that individuals change in participation into five mechanisms: (a) the development of problem interest, (b) a sense of pride in new skills, (c) the acquisition of a professional ideology, (d) the level of investment, (e) an internalization of motives, and (f) professional sponsorship. Each particular mechanism operates within a specific social group, and the resulting interaction can cause movement either away from or toward a sense of occupational identity. Thus, the processes that fashion an occupational identity are comprised of a continuum of interactions.

The nature of each group influence originates in the potential conflict that might
arise when one group’s norms, values, or expectations are in opposition with another
group, and/or with that of a person’s own developing sense of occupational identity.
Since the development of occupational identity is dialectically constructed, a perception
of support for one’s personal ambition is critical. This might be evidenced in the case of
an undergraduate student pursuing music as a career.

When and by whom that professional support is conferred can be a factor.
Support is salient when the expectations a group has with regard to an individual’s
occupational choice and the living out of that choice are confirmed. In actual life
experiences, however, social groups and their ideologies are not neatly segregated
from one another, but rather coexist and operate simultaneously in the background of
day-to-day life. It is probable that one or another group expectation might conflict with
that of another group. But how and under what conditions does any one set of group
expectations become more prominent than another?

Social reference groups can be broadly characterized into three categorical
orientations from which a particular set of expected behaviors and attitudes might be
promoted and rewarded. These three broad groupings are (a) contemporary cultural
expectations, (b) expectations of a particular occupational group, and (c) family
expectations (Becker & Carper, 1977b). In the pursuit of an occupational title, an
individual often becomes aware of various other associations of culture and birth.
Society at large determines the appropriateness of an occupational choice in terms of
age, gender, socioeconomic status, and education, with accrued wealth as a measure
of productivity and success. Significant family members build upon generalized societal
expectations by setting specific criteria for success. At the same time, the individual,
becoming more involved in the learning of an occupation, becomes increasingly more responsive to the expectations of the occupational group (Becker & Carper, 1977b). Encountering conflict among diverse group expectations is not a sure outcome when assuming an occupational identity. When conflict does occur it usually results from discrepancies between parental and occupational expectations (Becker & Carper, 1977b). Generally, if parental support is guaranteed, additional group support is unnecessary. However, the nature of parental support and how harmony might come about is complex.

**Parental Support**

Becker and Carper (1977c) gave several possible scenarios through which parental expectations might become aligned with an occupational title. The intensity of family expectations and the power with which significant members of the family can enforce these desires can either sanction or derail personal career aspirations. How those expectations are felt are mitigated by occupational or cultural group expectations. The age at which a personal commitment in terms of time and individual resources is necessary for beginning occupational training might or might not seem reasonable, according to familial norms. Parents possessing an intrinsic understanding, or who even think they understand the nature of an occupation, of both time and human investment, may be more apt to lend support. Support can be even more forthcoming when societal estimations of worthiness are in agreement with those of the family. All these conditions, interactively, can determine a propensity for parents to either endorse an occupational choice or not. When parental support is not conferred, the individual must find support in
either of the remaining groups for the identification with an occupation to occur (Becker & Carper, 1977c).

Summary

The preceding section presented an historical and theoretical framework of occupational identity as developed by four primary sociologists, Pavalko (1971), Becker and Carper, (1977a, 1977b, 1977c), and Lortie (2002). Each of these scholars wrote extensively on specific aspects of occupational identity and further developed their theories and constructs. The following section focuses on the work of Pavalko, sociologist, researcher, and professor emeritus at the University of Wisconsin-Parkside, in the context of occupational choice and socialization.

Occupational Choice and Socialization

Other than sleeping, most people spend most of their time at work. Work can be examined from many angles and perspectives. Psychologists, for example, might center their interests on the individual, personal preferences about the kind of work people want to do. Psychologists might also measure particular skills needed to complete certain work-related tasks. Psychology has been mainly interested in a variety of cognitive, motor, and vocational aptitudes of individuals (Pavalko, 1971). Sometimes this information is used to divine a person’s understanding of his or her individual sense of self within a particular environment. Sociologists often approach work and work-related occupations in different ways from psychologists, by using a different set of assumptions.
According to Pavalko (1971), one assumption is that occupations are social roles that are used by the sociologist to understand human behavior. Some questions of interest to sociologists have included how individuals choose an occupation and how they learn their occupational roles. Other questions might deal with the types of conflict that might occur between an occupational role and a competing one such as a familial role.

A second assumption of Pavalko’s is that macro social norms and values might be studied within particular work contexts. Pavalko (1971) stated that the behaviors and attitudes of people in the context of their work experiences could be used to predict non-work-related behaviors found among the larger social strata. A third assumption is that occupational roles serve as a significant source of personal identity (Pavalko, 1971). In industrial societies, a query of someone’s personal identity is more likely to illicit a statement in occupational terms rather than a description of who that person is (Pavalko, 1971). Consequently, a person’s occupational role has been considered a predictor variable of non-work related attitudes, perceptions, activities, and behaviors.

Pavalko wrote extensively on the sociology of occupations and occupational choice. His book, *Sociology of Occupations and Professions* (1971), was written for college students who have a rudimentary knowledge of sociology. The book approaches work as a social phenomenon, a *theatre* where the process of adult socialization prepares students for interacting with their occupational peers and realizing their occupational pursuits. It identifies those concepts common to most occupations and the conditions under which the concepts operate. The following section is restricted to selected phenomena pertinent to the current research topic. These phenomena are
(a) occupational choice, and (b) socialization, including adult socialization versus childhood socialization.

**Occupational Choice**

Choosing an occupation to the exclusion of all others is one of the greatest decisions of an individual’s life. The living out of that choice requires a substantial commitment of both time and finances. The consequences of this single decision might dramatically affect one’s future lifestyle and both personal and professional fulfillment. From a sociological perspective, the choice of occupation connotes and confers prestige and infers a certain quality of lifestyle. The time at which a choice is imperative varies by profession according to the expectations of and demands for specialized prerequisite skills.

For musicians, having a competitive proficiency of musical skill demonstrated and evaluated through audition is the way to gain entrance to most professional training programs. Other professions, by contrast, expect that a candidate will experience the norms, values, and specialized skills of the occupation after being accepted into a training program.

At the outset, it might seem that individuals settle on a profession largely by their own design. There are, however, many factors that can guide decision-making that are outside an individual’s immediate awareness. Those considered by Pavalko were (a) rational decision-making, (b) fortuitous approach, and (c) sociocultural influences (Pavalko, 1971). Each perspective and its variants are situated on a continuum with
polar opposite end points of the underlying assumptions, strengths, and weaknesses that characterize one from the other.

Rational Decision-Making

Characteristic of the rational decision-making perspective is the designation of specific stages at which occupational interest can occur relative to the age and maturation of an individual. Occupational interests are expected to change over time, parallel to changes in life style, age, and experience, with the assumption that occupational choices will narrow over time. As its name implies, individuals make occupational choices that are both reasoned and deliberate. It represents a weighing of what their ideal job choice would be and the job they could reasonably be successful doing. There is also some interaction in the decision process between personality, current economic conditions, and other individual characteristics that might cause some individuals to choose one occupation over another.

According to Pavalko, the rational planning perspective lends itself to occupational choices that entail considerable investment of time, money, and personal effort characterized by prestigious or professional jobs. In such cases, the actual decision to pursue a particular occupation is made earlier rather than later. It is often the case that an individual might have some ancillary experience in a chosen profession either personally or through a family member.

An inherent weakness of this perspective is that rational planning might not be applied in all cases. Upward movement from elementary to middle and then high school is fixed culturally and enforced in the educational system of a society. Therefore,
culturally determined educational events, such as passing from one grade to another or graduation from secondary school, might precipitate occupational decisions. Furthermore, the age at which a society defines adulthood is culturally fixed. Upon reaching adulthood, the expectation is either to work or have a realistic occupational choice to pursue in college. In contemporary American society, there is a wide array of occupational choices available to high school graduates. Many young adults, however, delay settling on a career until well into their college degree plan.

Fortuitous Approach

The fortuitous approach is less deliberate. It considers many alternative occupational choices until, by a process of elimination, the desired choice remains. As such, this perspective is sometimes referred to as occupational drift (Pavalko, 1971), whereby individuals casually choose an occupation without careful consideration of their strengths or weaknesses. Occupational choices can be based on trivial matters, perhaps a comment from a high school teacher, past success in a course that figures prominently in the performance of a job but is not the job in actuality, or choosing an occupation to stay connected with a close friend.

Generally, the fortuitous approach is often applied to career choices that require no specialized preparation or experience, and in work situations where on-the-job training replaces or is more compelling than formal career planning. The potential for spontaneous occupational choices makes it difficult to attribute those choices to anything concretely related to the occupation itself.
Sociocultural Influences

Sociocultural considerations and the influence these can exert on occupational choice are not only about identifying how individuals come to choose an occupation, but also about dealing with occupational aspirations, preferences, and desires that are external to the person and that can misdirect or improve occupational choices. Consequently, many of these variables are included in much of the research on the development of occupational identity (Pavalko, 1971) among various disciplines, including music education. These include, but are not limited to, the following: (a) social class (White, 1964), (b) local and regional, urban, and rural environs (Maltas, 2004), (c) ethnicity, (d) gender (Becker and Carper, 1977a, 1977b, 1977c), (e) educational attainment (Lortie, 1959), (f) parental occupational status (Becker and Carper, 1977c), (g) religious tradition, and (h) the level of casual exposure with an occupation prior to entry into it (Isbell, 2008). Many factors are intertwined into an occupational choice, factors, which arise from a collection of events encompassing childhood and young adulthood. These events can collectively be considered as socialization.

Socialization

What distinguishes sociology from other life sciences is the premise that human behavior is the product of social relationships. Culture is not conferred, but rather its values, assumptions, rules, limits, and judgments are gained through learning. For the sociologist, learning is synonymous with socialization. Research on the topic of socialization has come from studies concerning early childhood and its impact on the development of adult personalities. In recent years, however, the topic of socialization
has come to mean adult socialization rather than childhood socialization. While these
two paradigms are elementally different, some commonality of experience exists in a
broad sense. The first common feature is the two instances through which socialization
occurs, inexplicit and explicit socialization. The second common feature is a type of self-
socialization called anticipatory socialization.

Inexplicit and Explicit Socialization

Among human relationships, the products of socialization, appropriate gender
behaviors, for example, are learned unconsciously and come about as an unintended
consequence of human interactions. An example is that of a mother who intervenes in a
sibling quarrel. In correcting her son for hitting his sister, the mother most likely is not
directly teaching a lesson on proper behavior among boys and girls, but is rather trying
to reinstate order and quiet. Nonetheless, her actions communicate a culturally implied
correctness about appropriate gender roles. Events such as these, unintended and
ubiquitous, comprise the greater part of human socialization.

Explicit, intentional socialization is often experienced at the institutional level, in
schools, or well-defined institutions. Fraternities and sororities inculcate a sense of
separateness from other organizations in the expectations of behavior, dress, and the
ideologies that define membership. In the early part of the nineteenth century, American
public schools explicitly and intentionally sought to acculturate students to a common
expression of nationalism and patriotic sentiment. The desired outcome of these efforts
was to reach social conformity to norms, values, and proper role behavior (Pavalko,
1971).
Anticipatory Socialization

Anticipatory socialization, sometimes referred to as self-socialization, is a kind of mental role-playing in which an individual engages to experience, theoretically, what it might be like to occupy a particular role. Thus, a prominent condition of anticipatory socialization is that the person does not have to be an actual member of a group to which he aspires. Mentally acting out possible future roles is a common activity for children, adolescents, and adults alike. In each case the individual bases theoretical musings on personal assumptions and perceptions of what might be. It is a solitary endeavor, the outcome of which might or might not replicate the social expectations of the role being considered. Anticipatory socialization is an important consideration in the study of occupational roles as it can either assist or hinder role development.

The amount of time spent in role-playing can be a factor. Children who begin musical studies at an early age and go on to enroll in a music degree plan have ample time to consider what it might be like to play, sing, or teach music professionally before they enter college. Music is one of the few occupations that requires candidates to possess previous well-developed musical skills in order to be admitted to an educational program. Consideration for admission demands that candidates perform an audition documenting their skill levels. The acquisition of such skills not only requires years of disciplined training and application, but also learning the skills of positive role-play and effective daydreaming techniques conducive to a musical career. The ubiquitous question, What shall I be when I grow up?, can possibly be a major part of secondary musical experience. In such cases, role-play might become more frequent, and it can become engraved upon the mind, and instrumental in developing personal expectations
Both casual contact and personal observation can serve as material for role-play. The influence of the music teacher’s attitudes, musical skill, teaching behaviors, and lifestyle become familiar, and, because they are familiar, can be enacted out either in theory or in actual practice. Parental influences also can interact with the type and quality of imaginary role-play. Whether the parent has musical skill, is a performing musician, or music teacher, or conversely, has no musical skill, nor relishes having a child become interested in music to the point of making a career of it, all these might have bearing on the strength and degree of those lay conceptions of an occupation that anticipatory socialization can generate.

Anticipatory socialization might also occur during formal training in undergraduate or graduate programs in the replacement of roles, either the changing of a major at the undergraduate level, or in the case of a graduate student’s multiple roles as administrator, student, researcher, and teacher. Role-playing driven by prolonged casual contact and observation of major professors and advisers can lead as much to the rejection of occupational norms and values as to the acceptance of them.

Anticipatory socialization can be easily misunderstood and referred to as a sort of pre-apprenticeship or primary stage of occupational socialization. According to this interpretation, children who spend a good amount of their childhood in an educational setting become socialized into the norms, values, and practices of the teaching profession. This interpretation is not consistent with a sociological understanding of the development of occupational identity. A child who engages in imaginary role-play is, in a sense, practicing a kind of self-socialization based on criteria that might or might not
represent a correct interpretation of the occupation as defined by the norms, values, and behaviors adhered to by the profession (Lortie, 2002). While anticipatory socialization is an important part of both childhood and adulthood, it would be erroneous to conclude the experience would be the same for a child as it would for an adult. Despite the similarities given, there are many differences in the ways in which children and adults experience socialization and utilize the consequences of their socialization experiences. Clarity in understanding these differences has bearing on the discussion of adult occupational identities.

Childhood versus Adult Socialization

Adults enrolling in a college degree program bring with them multiple roles consistent with different settings and reference groups. A defining factor of adult occupational socialization is the unlearning, the revision or the rejection of old, or the learning of newly presented roles (Lortie, 2002; Pavalko. 1971). Examples of this are seen particularly in the replacement of familial roles, i.e., transitions from single life to married life, from childhood to adulthood, from being childless to becoming a parent. Transitions found in the work setting might include promotion from teacher to administrative staff or some lateral occupational move where there is a change of work emphasis.

Children generally learn roles in situations that are new to them. The roles they come to learn do not replace the roles they currently occupy; rather, the social, relational learning curve is cumulative. These largely involuntary childhood socialization events are part of daily routines, routines that engrave upon them a sense of normalcy.
Consequently the “degree of voluntariness” (Pavalko, 1971, p. 84) with which children decide the future events of their lives is low. Children exercise very little control over the socializing agents and decisions that are the result of parental judgments or interpersonal exchanges.

Adults, more often than not, initiate socializing events and are free to terminate or perpetuate these experiences, whatever the consequences, at will. Adult voluntary submission also implies a benefit for which the time, expense, and inconvenience spent in training was endured for a greater good. Thus, many adult socialization experiences confer degrees of completion or certificates of skill necessary for future employment.

**Summary**

The choosing of an occupation, and the living out of that decision, is one of the greatest, most life changing decisions an individual can make. Rather than being an isolated event, the choice of occupation is the product of many converging factors, including economic conditions, personality traits, and even trivial matters such as the casual opinions of teachers or associates. Work, defined sociologically, is premised on the assumption that human behavior is the product of social relationships. An occupation is a major component of adult socialization, which, unlike childhood socialization experiences, serves as a major source of personal identity.

Consequently, a person’s occupational choice, its title, and associated ideology have been considered a predictor variable of non-work related attitudes, perceptions, activities, and behaviors. The next section presents the work of Becker and Carper, who delved into these particulars in order to describe elements, influencing factors, and
mechanisms of behavioral changes that, together, reveal how occupational identities can be developed as a result of collegiate degree plans.

Occupational Socialization among Physiology, Engineer, and Philosophy Graduate Students

This section presents the work of Becker and Carper and is important to this study as the authors applied theoretical constructs discussed previously in investigations of three distinct collegiate groups in authentic social settings. Its inclusion here will operationalize the theories previously described and place the theories in a sociological perspective. Studies that have referred this research have been ambiguous in the manner in which the work is cited. In some instances, Becker has been listed as the sole researcher; in others, Carper has been listed as the solo researcher. Other studies have cited both Becker and Carper. The author of this study contacted Becker who was able to provide clarity. According to Becker, the study of occupational identification was developed by both himself and Carper, and therefore this study acknowledges both authors (Becker, personal communication, August, 13, 2009).

The nature of Becker and Carper’s research was to encapsulate the process of occupational identification in the context of authentic human endeavor in actual social settings. The purpose of their studies was to dissect the construct of occupational identity into smaller components for a comparative analysis of specific social and personal issues among three discrete groups of male graduate students, including 11 physiology students, 22 engineering students, and 18 philosophy students for a total sample of 51 subjects (Becker & Carper, 1977a, 1977b, 1977c). The decision to study male, non-foreign born students controlled for gender and unknown extraneous social
or cultural variables that could complicate the interpretation of the data. Graduate students were chosen because of the characteristic nature of graduate work in focusing on the development of an occupational role.

The research protocol included tape-recorded informal interviews of one-half to two hours in length with subjects ranging from their first year through those about to graduate. Participants were asked to talk about how they happened to be in their degree program. An admitted limiting feature of the study was that all subjects were selected from one major four-year university that possibly recruited graduate students from its undergraduate population. Thus differences might be found at other types of institutions or in studies where this variable is controlled.

A comparison of findings among these three occupational groups was initially published in a trilogy of papers: (a) “The Elements of Identification with an Occupation” (Becker & Carper, 1956), (b) “The Development of Identification with an Occupation” (Becker & Carper, 1956), and (c) “Adjustment of Conflicting Expectations in the Development of Identification with an Occupation” (Becker & Carper, 1957). In 1977 these studies were republished in a book of collected essays by Becker entitled *Sociological Work: Method and Substance*.

The discussion that follows is an in-depth description of Becker’s and Carper’s theoretical work and research findings. In an effort to minimize ambiguity and avoid linguistic confusion, the current study uses the title of each paper as a major heading and the author’s exact terminology for both the four elements of occupational identification and the mechanisms of change.
Four Elements of Occupational Identification

Among all three graduate student groups, there emerged four principle variables related to work identification. These elements were (a) occupational title and associated ideology, (b) commitment to task, (c) commitment to particular organizations or institutional positions, and (d) significance for one’s position in the larger society (Becker & Carper, 1977a). The following discussion gives a description of each element along with the Becker and Carper findings for that element.

Occupational Title

Symbolic meanings of names imply much about the person identified by that name. In ancient times, names were changed or conferred to denote a new role or occupation that defined the identity of the recipient. In contemporary society, occupational titles also have persistent, implied meanings that hint at the characteristics of the bearer. These meanings become generalized into ideologies that succinctly detail the qualifications, qualities, and character of the individual being identified. Occupational titles are conferred by persons both significantly related in some way to the bearer and by ancillary others. Occupational titles can either be accepted or rejected based on the implied meanings the title connotes. Therefore, a title and the ideology associated with it can be looked upon as both something desired or personally objectionable and something to avoid.

In Becker and Carper (1977a), each group reacted differently to the idea of occupational title. Physiology students were clear about the particular and specialized niche that was their occupational calling. They conceived their vocation as more
foundational than that of physicians. The role of a physiologist, they concluded, was to provide the necessary research with which doctors were able to treat patients. Rather than identify with physicians or other branches of medical science, they differentiated themselves as valuable developers of scientific theories upon which medical science depends.

Engineers, while equally proud of their occupational title, were not pulled exclusively to the specific title of engineer, choosing in some cases the titles of research scientist or teacher. These engineers identified strongly with the broad definition of their work tasks that defined the title of engineer but were also consistent with other occupational titles. They chose their occupation based on the skills and ideology that the title, engineer, implied but did not specify. In other words, they valued the ability to reason and problem-solve a variety of issues in any given area effectively and quickly. This was a personal skill, albeit valuable, but not uniquely associated with engineering.

The philosophers were markedly different from the physiologists and engineers. They had almost no attachment to their occupational title or to any specific specialization or skills consistent with it. They imagined themselves as intellectuals with broad interests that converged among several disciplines. Their rationale for choosing an occupational title was based on a method of elimination, selecting any title, whatever its name or ideology, that would allow them a wide berth in dealing with society’s broad issues from multiple perspectives.

Commitment to Task

Occupational identity also refers to the degree to which individuals are committed
to a specific kind of work. Whether and how persons become attached to procedures for getting work done, if they feel empowered to begin and complete tasks and if they are clear about the kind of work required for the success of their occupational venture they build a sense of identification with an occupation. With regard to commitment to job-related tasks, the physiologists, engineers, and philosophers represented different degrees of identification to a specific type of work. The engineers and physiologists were extreme opposites of each other. Physiologists were equally clear about their daily work activities and their occupational future. Their work was so specified that the range of research problems and the procedures used to solve them were clear and well understood. They felt well qualified to meet the demands of their work and considered their professional training distinctly valuable. They took great pride in being precise, creating theoretically sound and reproducible research grounded in previous literature.

The engineers displayed almost no commitment to tasks, nor could they characterize any tasks as specifically their own. Further, they were unconcerned about the possibility of venturing from the specific engineering work for which they were trained and could see themselves as working at any job carrying the title of engineer. Thus, they conceptualized their task preferences as anything that was challenging, interesting, or technical in any setting and were assured they would be able to be successful at any job that met those qualifications.

The philosophers were in a somewhat neutral position. They had no commitment to any specific tasks, nor did they believe that any or all tasks were uniquely appropriate to them. They were not sure what tasks were the most salient. While most of them knew that university teaching would be a probable task, they did not exclusively attach to it or
seek to enter into it. Rather, they saw themselves in a position to give advice and to busy themselves with tasks that fostered intellectual learning opportunities among sundry disciplines ranging from the sciences to journalism and the arts.

Commitment to Particular Organizations or Institutional Positions

An occupational identity implies that there is a specified path along which one’s future career lies. A person might conceive his or her occupational future in either one or several organizations or may feel tied to a particular institutional position. The opposite end of the continuum represents vagueness about where a person would like to work and a disinclination to imagine the work place as dependent on personal occupational achievements.

Physiologists conceived of their occupational future in the narrowest of terms. They expected a highly organized work place with only a few positions that they might fill with confidence. They were apt to turn down any position too far from their skill base. Physiologists expected to work closely within the hierarchy of their profession, earning positions of prominence through precise research, thorough knowledge of their field, and frequent publication of their work. They relied on the sponsorship of their professors to initiate them into the practical application of their college training through job recommendations, interviews or networking opportunities.

The engineers’ approach to entering the work force was markedly different from the physiologists’. Their occupational future was conceived in the broadest terms with regard to employers. Engineers identified with skills more than the job titles they represented, possessing a great sense of self-efficacy. They confidently expected to
transfer learned skills to any job situation that came along. No job was impossible to an
engineer, and thus, any industrial employer or market offered a competitive employment
opportunity. Few engineers in the sample saw their futures tied with their mentors or the
academic hierarchy. Rather, they pursued their job search as an independent activity,
interviewing employers instead of being interviewed.

The philosophers spent the greater part of their degree plan having no notion of
their occupational future, where they could work, or what they would do. The work of an
intellectual, for them, had no relative counterpart in the occupational world. While it
seemed logical to them that teaching might be a big part of their academic life, they only
considered teaching late in their degree plan and only then because it offered financial
support for their more important intellectual pursuits. If they decided to teach, they were
not concerned or discriminating about the subject they pursued.

Philosophers were ready to consider any position involving teaching or other
employment that would draw from their acquired skills outside their degree program or
work experience, even though it would take them outside of professional affiliations with
philosophy. Philosophers were unsure about where and how to look for suitable jobs or
how they could be successful in them. Only two participants believed their professors
might have a role in their occupational future, but they were not sure about what that
would entail. As a group, the philosophers were not overly concerned about their future
work situation.

Significance for One’s Position in the Larger Society

An occupational identity implies a person’s social place within the larger society,
passing judgment on the kinds of positions that are the most career appropriate, either through acquired skill or by diligent personal work. A fundamental reference is class mobility, defined as the opportunity to move from one social class to another by virtue of one's job title. There is also the possibility of securing personal and professional alliances separate from social class considerations.

Physiology students purposefully sought higher positions on the corporate ladder. Most of the physiology students hoped to achieve class status as a physician. When, for whatever reason, medical school and the chance of a prestigious career were no longer options, they chose physiology as a second best option. Physiology would not provide for them the high-class status of a medical doctor, but it placated their families' desire to see them aspire to a higher purpose. Four of the remaining physiology students intentionally chose physiology over medical school as a way to avoid the high stakes competitiveness associated with medicine. They settled for an occupation with sufficient class status but less stress, rather than the research-driven lifestyle to which their colleagues aspired.

Engineers entered their degree plan simply due to an interest in mechanical things. Coming largely from blue-collar laborer families, success in their professional pursuits equated to upward social mobility. They expected to earn a comfortable living and enjoy an affluent lifestyle simply because they had achieved engineer status.

Philosophers' attachment to the intellectual title set themselves apart from the competitive activities of class and position. Considering themselves to be unusual, as did friends and family members, they decided to forgo aspirations of social prestige. They maintained a benign attitude toward financial success or material wealth and
sequestered themselves from those who celebrated these achievements. The opinions of their parents seemed to have had little to do with their professional goals or decision-making. In this initial study, Becker and Carper identified four elements associated with work identification. The following discussion deals with the influences and conditions inherent in an educational program and how these might provoke changes in individual behaviors that either move away or toward identification with an occupation.

The Development of Identification with an Occupation

One of the most compelling events in adult life is the growth of an occupational identity. An occupational identity is an image a person has of self that suggests a particular and specialized occupational position within a larger social setting. Occupational identities are internalized as a person progresses through a course of training and continues in the actual performance of one's professional position. Becker and Carper (1977a) applied two complementary sets of concepts for analyzing the development of occupational identity: changes in the individual’s degree of institutional participation, and the conditions that provoked these changes. These two concepts were viewed in light of occupational attachment, focusing attention on behaviors that either moved toward or away from it. Special attention was given to any evaluative judgments offered by those persons who were significant to participants. These movements were then analyzed through the “concepts of self, identity and transformation” (Becker & Carper, 1977a, p. 191), emphasizing whether and how individual experiences built upon previous ones to either form new identities or
Data were taken from the same participant interviews previously described. Results were grouped by occupational field, describing the kinds of change and the conditions prompting change, thus shedding light on how the training institution functioned to produce particular occupational identities. Findings indicated that physiology students had a strong preference for medical school, but were, nonetheless, transformed through their training experience into professionals with a well-developed occupational identity as physiologists. Engineers did not experience any additional identification with the occupational title gained in their undergraduate training. The philosophers' training experience served to strengthen their tendency to avoid identification with specialized tasks or titles, preferring a broad sense of commitment to intellectual pursuits. Each group alone highlighted certain issues and sequences of identity development. A comparative analysis will serve to isolate general mechanisms in which change occurred in these particular occupations.

Physiologists

Physiologists entered their graduate degree plan without any practical experience, having majored in another area of science. Physiology had been for most participants a second choice when, for whatever reason, they did not qualify for medical school. Their plan was to try out physiology for a year thinking the experience would boost their chances of entering medical school later on. Other physiology students chose graduate school as a way to work up the ladder, so to speak, in the knowledge that an advanced degree would ensure professional success. None were committed to
the idea of becoming a physiologist, but rather hoped eventually to be physicians. All were vague about what physiologists studied or did either in actuality or through unrealistic media portrayals of the profession. They brought to their degree program the expectation that they would learn specialized skills and knowledge, and were willing to commit themselves to at least one year of study.

Those who reapplied for medical school at the end of their first year of study and were rejected stayed within their physiology degree plan. As alternative career choices became more remote, a new, more authentic interest in physiology began to take hold. They considered their core interest in science and surmised that going on to a terminal degree in physiology would save them from a career as a laboratory technician.

Sometime before the end of the second year, physiology students began investing significant time in their department laboratory, collaborating with their professors on joint or individual research projects. They devoted more free time to work and leisure activities with colleagues and mentors who also frequented the laboratory. A casually organized group of students of various skill levels and experience together with mentors met frequently with each other for coffee and casual conversation to discuss topics of specific interest in their field of study or future job prospects. These reference group experiences reinforced notions about what it might be like to be a physiologist in an actual work setting.

Changes in physiologists’ behavior were further solidified by informal apprenticeships with professors through writing research studies or assisting with laboratory projects. Professional alliances developed in which the benefits of becoming a physiologist were both expressed and modeled by mentors, offering students
examples through observation of the ideal physiologist and the skills in practice. In some cases, students were chosen by a professor for a specific job for which they were uniquely qualified.

By the end of the second year, most students were so committed to the idea of becoming physiologists that, even if offered admittance into medical school, they felt certain they would decline such an offer. They were certain that physiology had been a valuable investment of their time, and it would be a huge waste of personal capital to begin again somewhere else. Having acquired an occupational ideology, students began to disparage their former desire to become physicians or any other profession within the sciences other than physiology.

In the case of physiologists, all these mechanisms, developing an interest in special topics and problems of their field, realizing a pride in their new skills, acquiring an occupational ideology, valuing their commitment of time and personal effort, internalizing the goals of the profession, and having their ideals confirmed and rewarded by the occupational elite, coalesced to produce the occupational identity of physiologist, to the exclusion of other competing choices. Compared with students just entering their degree plan who were unsure about their occupational selves, these graduating students, secure in their developing allegiances, began to orientate themselves toward behaviors and attitudes consistent with the person they had become. They expected to receive help from their professors in finding a job and succeeded in doing so. Professor sponsorship of student professional capabilities created a sense of student obligation to work effectively and succeed in any position acquired through a mentor’s recommendations.
Engineers entered their graduate study with a well-developed sense of occupational identity, gained either in their undergraduate degree plan or through job experience. They very strongly identified with engineering and its associated ideology of logical thinking, rational problem solving, and the belief that monetary rewards were akin to professional achievement. Engineers’ expectation of their degree plan was orientated toward this limited end, to command higher remuneration.

First year engineer students realized quickly that any investment of time or effort as a teaching fellow or research assistant would not pay as much as could be earned in the market place. While degree plans, in general, required two years to complete, they had hoped to do so in one year, along with the option to quit if the experience proved to compromise their financial ideals. The benefits of graduate school for engineers were the skills and knowledge they would acquire, rather than the actual completion of the degree. Engineers were in no way compelled to stay in their program, no matter the investment of time or effort. They expected to see immediate pragmatic outcomes of their time spent. Most students left their degree plan after a year. Some who had well-paying jobs took minimal coursework, making short-term commitments, semester by semester, and using the experience to meet other engineers and network in their field. Some engineers were tempted to pursue an academic career, appreciating the relaxed atmosphere of academia, however, at any time they felt certain that they could easily change course and find a lucrative job in any industrial position.

Because of their financial ideals and outside work obligations, or maybe due to the rather temporary attitude with which they viewed graduate work, engineers did not
participate in any organized reference group relationships. Rather, they worked on semi-autonomous projects requiring little collaboration or only casual contact with others. Consequently, engineers maintained their initial identification with their field. They continued to ascribe to their original goals and ideals that were not in any way altered by their training experiences. Rather, education offered them an opportunity to enhance their skill base, making them more attractive for higher paying positions. Student-professor relationships were cordial but not close, especially when there were age similarities across mentor and student. Potential mentors who were more mature were considered helpful, but not necessary to procuring a good position.

Philosophers

Philosophers considered their degree plan to be the most tolerable of a list of unacceptable choices. Prior to their graduate work they had come to identify with being an intellectual. From this perspective, their expectations were to continue to develop an interest in and awareness of the broad field of human endeavor as it is found in the sciences and the liberal arts. They were committed to keeping an open and curiously inquiring mind and resisting specialization. According to their understanding, philosophy offered respite and safe haven allowing them to maintain their global occupational ideals.

Philosophers entered their degree plan from a wide range of disciplines, keeping alive their previous academic interests as well as acquiring other interests during their training experiences, solidifying for themselves a personal commitment to an intellectual lifestyle. They avoided any activities that would encourage the development of a
specified occupational identity. They had little interest in jobs or money and when pressed to commit to a particular field within their doctoral studies, concluded that the university system forced them to make a choice.

The relationships formed with faculty and peers, both formal and casual, did not incite a change in identification. Philosophy students had minimal contact with professors, learning little about their mentor’s professional ideals or activities. Likewise, philosophy students’ professors had no rudimentary awareness of their students in order to position themselves as an active agent guiding their professional futures. Under these circumstances, students did not conceive an image of themselves as future philosophers, which did not concern students since they were committed to an intellectual individualism free from professional constraints. Because they rarely saw their professors outside the classroom, students were not able to discern typical work situations or the daily activities in which philosophers routinely engaged. Consequently, it was difficult for philosophy students to identify themselves with specific occupationally-related tasks.

Opportunities to build peer relationships were almost non-existent. There was no organized student group or casual affiliations among philosophy students. Coursework did not lend itself to group activities or collaborations. There were no laboratory courses or assigned activities necessitating social interactions. Newly enrolled students did not experience the support of the older, more experienced peers that physiology students enjoyed. Philosophy students tended to choose friends from a variety of disciplines that were personally and intellectually pleasing to them. Consequently, philosophy students’ primary reference group association did not lend support to or reinforce a well-defined
occupational title, ideology, or instill a pride in and commitment to specialized skills unique to philosophy.

It is the very avoidance of specialization that philosophy majors found attractive in their degree plan. As they became more connected with an intellectual identity, pursuing their academic interests without any feelings of departmental loyalty, they felt no need to switch fields. Similar to physiologists they also experienced reluctance at the thought of changing their major, thinking it would be a waste of time to start anew as that would delay the conferring of a degree they held in high esteem. With the prospect of graduating, philosophy students became more interested in finding a job, and depending on their individual interests, found either philosophy or tangentially related fields equally acceptable. Philosophy students entered the workforce with a far lower level of occupational identification than physiologists or engineers. They did not change their preferences or expectations as a consequence of their graduate program. Rather, their training experiences reinforced a preoccupation with intellectual life. Their occupational identity grew out of their commitment to generalize intellectual tasks and the knowledge that their future job, whatever it would be, would be procured through their philosophical work.

Reference Groups, Mechanisms and Participatory Change

Through the analysis of their results, Becker and Carper identified three principle social groups that affected the development of occupational identification. These were (a) student peer group or cliques, (b) student-professor apprenticeships, and (c) social structures of the academic institutions that included credit hours, grading procedures
and the conferring of degrees. As students moved among these groups, they were exposed to the norms, values, and practices to which each group adhered and associated with. Inherent in each group were mechanisms potentially able to evoke changes in members’ levels of participation and identification with the group, thus also changing their attachment to a specific occupational identity.

Comparing the participatory changes among the three groups of graduate students can highlight the conditions that triggered each mechanism to operate. These mechanisms listed in the authors’ own terminology were: (a) development of problem interest and pride in new skills, (b) the acquisition of professional ideology, (c) investment, (d) the internalization of motives, and (e) sponsorship (Becker & Carper, 1977b, p. 198).

Academic Social Structure and Investment

The investment mechanism was characterized as operative in cultures that depended on age-graded advancement as a rubric for success. Having met the academic entrance requirements of a university, taking the time and expense to travel to its location and finding a residence sets the investment mechanism into play through the irreplaceable personal and financial resources invested in this first step up the occupational ladder. For some students, a change in university or major would prove too costly. The other end of the continuum represented no obligation to bring to completion an academic degree program once begun.

Such was the case with engineers. They felt no compulsion to complete their degree and presented no change in their occupational identification. Physiologists and
philosophers did have a sense of investment, but in differing degrees. Both groups were concerned with wasting time, being reluctant to begin a different degree plan and they were both committed to remaining in their field of study after graduation. The extent to which commitment was authentic for each group depended upon changes in their identification and their desire to work in field-specific institutions and professional appointments.

Academic Social Structure, Problem Interest and Pride in New Skills

Often, admittance to the formal structures of a university, in this case graduate school, brought students in contact with skilled experts who taught about the problems and controversial issues of their field heretofore unsolved. Special techniques and knowledge were required to engage students in the challenging issues of their field. Consequently, opportunities might arise for students to work closely with professors, learning and applying skills within the sphere of their guidance. Students, in the eyes of outsiders, became associated with their professors, as well as the research interests and activities their professors engaged in themselves.

Because students’ occupational future depended on identification with the occupational group, students would be moved to adopt the identity that corresponded with the new skills and interests offered, in order to meet normative work-related expectations. For the mechanism to operate most effectively, academic activities and the skill base needed to accomplish them must be perceived as highly specialized, well defined, and unique to the field of study. There must be ample opportunities for the student to see mentors using these skills within the context of a program of study that is
narrowly defined toward specific goals of which these skills are a critical component.

Physiologists experienced, to a larger extent than engineers or philosophers, a growing appreciation for and pride in the tasks taught and modeled by their professors. Philosophy students were not afforded the same opportunities, as the structure of their graduate program did not identify specialized tasks nor direct their interests along a narrowly specialized trajectory. There were no opportunities to observe their professors in their work or to work with them. Engineering students spent most of their training period honing their individual interests and skills, experiencing little change in their occupational identity; thus, the mechanism of problem interest and pride in new skills operated differently for this student group. The actual change in each group’s identification with an occupation was measured by the degree to which they were committed to field-specific tasks.

Peer Groups, Apprentice Relationships and Acquisition of Ideology

Developing an attachment to an occupational ideology comes into play when socializing informally with peers or professors prompts thoughts, questions, or concerns about the worth of the training activities in which a person is engaged. Self-questioning or the questions of others leads to thought comparisons, ranking one’s present circumstances with other career opportunities unexplored or even those previously discarded. Ideally, students searching for the answers to their inquiry find them in the ideology of their chosen profession and through interaction with more experienced students and professors, choosing to acquiesce to the norms and values of the occupational group. Fortified with conventional knowledge, students become skilled in
Physiologists and engineers acquired a strong sense of occupational ideology. Physiologists, through their graduate training, were transformed from their individual notions and concerns about their field into persons with a strong adherence to their professional ideology. Engineers entered their graduate training already established in the ideological expression of their field that their training experiences did not alter. Philosophers were not aware of, or previously schooled in any specialized ideology associated with philosophy. This might be due to little group collaboration or informal socialization with peers or teachers. Strong identification with an occupational ideology can produce strong commitment to the occupational title the ideology might imply.

Student Cliques, Apprentice Relationships and Internalization of Motives

An internalization of motives can help to strengthen a personal preference for job positions that closely resemble an occupational title and ideology. Through peer interactions, especially with more experienced colleagues and informal discussions among professors, students become aware of those job situations most coveted by the occupational group. Students are often privy to the kinds of sponsorship conversations that place individual students in specific job situations. Students learn to distinguish stated job preferences over others, understanding and internalizing the choices and activities of others seeking employment. Of all graduate student groups studied, physiologists utilized the strongest degree of association with student cliques and apprenticeships.
Academic Structure and Sponsorship

Sponsorship of its students offers universities an opportunity to showcase their degree programs through the skills, accomplishments, and especially the successful employment of their alumni. For students, academic or professorial sponsorship represents a move up the occupational ladder, passing by students who were not selected for special consideration by their mentors. Sponsorship, however, implies several social-psychological functions that can affect the change or development of occupational identities.

Students who were sponsored became responsible, both to the professor who recommended them, and to the profession at large. There was a sense of obligation to behave as model members of the profession and to persevere in the field, thus repaying the trust with which they were selected. Obligation further strengthened students’ allegiance to occupational commitments and attitudes, fearing a change in career would represent a betrayal of trust, which in turn strengthened the attachment to the occupation and its ideology. Physiologists experienced a well-developed, functional sponsorship system, and through it achieved a correspondingly strong identification. Philosophers did not receive much sponsorship, having to search for jobs on their own. Their occupational identity was correspondingly weak. Engineers did not need sponsorship as they were more engaged with that aspect of their professional lives than with their degree plan, thus their occupational identification as a consequence of graduate training changed very little.

It is through interactions with peers and professors within the social confines of academia that mechanisms causing changes in students’ participatory status occurred.
These changes also altered students’ identification with an occupation. By comparing three groups of graduate students, Becker and Carper (1977b) discovered that behavioral and attitudinal changes between groups occurred in differing degrees. They concluded that these mechanisms were functional to the degree that training programs developed or arrested occupational identities as defined by three of the four elements of identification with an occupation: (a) the attachment to an occupational title, (b) a commitment to occupational tasks, and (c) a commitment to a specific organization or a position within it.

Adjustment of Conflicting Expectations in the Development of Identification with an Occupation

In the final installment of their seminal work on occupational identity, Becker and Carper (1977c) investigated how the expectations of three reference groups operated in graduate students’ degree of identification with an occupation and the potential problems that arose when group expectations collided. Cultural expectations can imply a generalized theoretical range of appropriate career choices based on age, with a mandate to succeed in a chosen field. Familial expectations can further define societal expectations by stipulating specific criteria for occupational success. After an individual enters occupational education, the expectations of the occupational reference group come into play. What follows is a discussion concerning issues of adjustment and resolution particular to each graduate student group concluding with the Becker and Carper theoretical model describing the interactions between graduate groups and broader reference group expectations, and the effect of that interaction on developing occupational identities.
Engineers

Engineering students met cultural expectations in the successful and timely completion of their undergraduate training and came to their graduate work with an established record of financial and professional success. Knowing they could successfully interview for a high-paying job at any time, they approached their degree work as an opportunity to augment a successful career. Because the field of engineering was representative of a variety of work settings, its professional ideology cultivated a sense of inevitable success. The ubiquitous nature of engineering minimized any conflicts between cultural and parental expectations since each of those groups, cultural and parental, could conceptualize many prestigious work roles either of friends or family members, especially a father. Consequently, the potential for conflict to occur due to a choice of occupation for engineers was minimal.

Physiologists

Fourteen of 18 physiology students had hoped to become doctors, a dream that was shared and perpetuated by their parents. Sensitive to their thwarted parental expectations, these students chose physiology, not entirely as an alternate career, but as a means to buy time until they might reapply to medical school. The families of physiology students were characteristic of closely-knit interpersonal relationships with strong male role models. The occupational role of doctor was concretely understood either by experience or in layman’s terms through media representations and hardly supported by both the wider social culture and the familial group. The role of physiologist was less understood both culturally and by their families. Students felt the
need to justify their choice, especially since their attachment to physiology grew and ultimately replaced their desire to practice medicine.

Some chose high paying alternatives, hoping to appease parental expectations of financial success. Other students reminded parents that physiologists were physicians, but in a different way. So attached were parents to the title of physician that they did not recognize the title of physiologist as equal to that of a physician in status despite students’ references to personages held in high regard in the field. Eventually, however, students learned to prefer physiology over medicine, as they progressively clung to its associated ideology, and leaned on it as a way to discount and replace parental ideals, thus validating their own.

Philosophers

Rather than portraying the role of philosopher as being committed to a specific way of life, graduate school became a means to avoid an occupational commitment to any specified skills, behaviors, or specific institutional positions. So independently minded were philosophy students that they felt no compulsion to adhere to or be bothered by the expectations of any group. Instead, philosophy students felt constrained by having to choose a specialization, forcing them to curtail their aimless exploration through the arts and sciences.

Philosophy students came from families of foreign born, divorced or single parent living situations. Parents were entirely unsure about what the role of philosopher would entail, expressing a general low-grade uneasiness about students’ occupational choice. Had there been cases where familial expectations strongly conflicted with students’
choice of occupation, it would not have mattered since there was no strong authoritarian figure enforcing familial ideals. Thus, parental expectations were routinely ignored. In the minds of philosophy students the study of philosophy was isolated from the rest of society, making the rejection of conventional group expectations an ideological mainstay.

Model of Group Interactions

Becker and Carper found a theoretical interaction between familial and occupational expectations complicit in the development of occupational identities. While not substantiated by case data, this model of interaction was constructed from a sequenced order of events documented through interview sessions. A description of the model concludes the Becker and Carper contribution to the construct of occupational identity.

Broad cultural expectations of occupational normality have dictated that an occupation, chosen at the appropriate time can be the gateway for other adult responsibilities, such as marriage and raising a family, which are normally contingent upon financial independence. General cultural expectations are pronounced specifically and brought to bear in and through family members who are in positions of authority. Familial expectations translate generalized societal expectations into precise and strong decrees that could influence a person’s occupational choice to the degree that family expectations are successfully enforced.

Families with precise expectations, and a strong authoritarian figure capable of enforcing family ideals, tended to have first hand credible knowledge about students’
occupational choice, which in many cases was chosen well before college. Family expectations also closely aligned with culturally-dictated occupational norms. Families with less-defined expectations indulged their students in more freedom to experiment with career possibilities that served to delay definitive career choices. The student’s concern for family ideas became weakened as attachment to the occupational title strengthened, even if a degree plan had not been formalized. Should the ensuing familial reaction be unfavorable, the student, already de-sensitized to familial desires, would have to find acceptance and support through adhering to the expectations of the occupational group.

Thus, a conflict among these three social groups was not a guaranteed consequence of choosing an occupation. If parental expectations were met, the expectations of the broader culture or the occupational group became irrelevant. When conflict arose it was usually due to disparities between familial and occupational expectations. These disparities included how families enforced their occupational ideals, the type of career, the nature of the career’s ideology, the time at which an occupational commitment became expedient, the amount of social support for the profession, and finally the time at which familial and occupational expectations were negatively felt.

Summary

One of the most compelling events in adult life is the growth of an occupational identity. An occupational identity is an image a person has of a work-related self that suggests a particular and specialized occupational position within a larger social setting. Occupational identities are internalized as a person progresses through a course of training and continues in the actual performance of one’s professional position. Rather
than being an exclusively personal process, broad cultural expectations of normality can interact with personal considerations in the choice of an occupation. These broadly-defined expectations are brought to bear through familial expectations that translate generalized societal norms into precise and strong decrees.

The nature of Becker and Carper’s research was to encapsulate the process of occupational identity in context of authentic human endeavors in actual social settings. The purpose of their multifaceted, three-part study was to dissect the construct of occupational identity into smaller components for a comparative analysis of specific social and personal issues among three discrete groups of male graduate students. Through the analysis of their results, Becker and Carper showed that work identification involves a personal commitment to particular organizations reflective of specific skills and behaviors that are recognized by an occupational title and ideology.

Attachment to a particular occupation is evaluated in light of personal behaviors and attitudes that either intensify or diminish levels of participation and identification with an occupation. It was through interactions with peers and professors within the social confines of academia that mechanisms causing changes in students’ participatory status often occurred. By comparing three groups of graduate students, Becker and Carper discovered that behavioral and attitudinal changes between groups occurred in differing degrees. They concluded that these mechanisms were functional to the degree to which training programs developed or arrested occupational identities as defined by three of the four elements of identification with an occupation. In the context of the current study this information was vitally important in that it led to the formation of test items that might reveal patterns in music teachers’ behaviors and attitudes at various
stages in their educational programs. The discussion of the development of occupational identity continues with Lortie’s study of the socialization of law students.

The Occupational Socialization of Lawyers

Researcher, sociologist, and professor emeritus of education at the University of Chicago, Lortie wrote prolifically on the inner nature of social and occupational groups. His work most relevant to this discussion is a study concerning the occupational socialization of lawyers (1959) and his later, landmark research on public school teachers (2002).

At the time Lortie investigated law schools, the complex relationships between work institutions and higher education were under-researched in the social sciences. Lortie’s research addressed this oversight by examining issues related to the legal profession that were similar in other occupations. One issue was that the legal profession is comprised of many occupations, under the common title of lawyer (Lortie, 1959). Lortie’s discussion centered on broad structures of the legal training apparatus within the context of occupational diversity and the social influences that perpetuated their existence. Lortie’s research on lawyers brings to the current discussion the influence that training institutions can exert in the early career development of lawyers.

Lortie’s random sample consisted of one female participant and 71 male participants who represented 20% of law graduates from all six law schools in the Chicago area in 1951. All known income brackets among metropolitan graduate law students were included. Lortie used research techniques including intensive interviews of each lawyer totaling two to three hours. His results were reported in narrative...
descriptions of participants’ occupational socialization experiences in light of the type of training institution they attended. Lortie conceptualized a highly socialized member of a profession as one who played an occupational role so completely that it appeared to be an integral part of the person’s self-identity (Lortie, 1959). The conjoining of both self and occupational identity described by Lortie was a complex process similar to the development of occupational identity described by Becker and Carper. This discussion of Lortie’s findings are presented here under four headings: (a) the influence of training institution on career development, (b) the occupational socialization of lawyers, (c) the effect of professional training on self-socialization, and (d) respondents’ opinions on the purpose of law school.

The Influence of Training Institution on Career Development

The legal system, at the time of Lortie’s study had not experienced any type of standardization in its professional education. Lortie found that law schools in America emerged from two primary traditions: (a) university schools, based on the Ivy League model of the eighteenth century, and (b) independent schools, (including private Catholic law schools) based on a private law school model founded in 1784. (Lortie, 1959). The schools in Lortie’s study represented all three traditions but were grounded in contemporary social norms.

University-type schools had an enrollment representative of a wide variety of states and nations with faculty noted for their legal prowess and dedication to the education of young lawyers. Enrollment was on a full-time basis without the option of evening classes. This type of law school offered curricula that reflected the broader
issues of both American and international law, and were most often associated with prestigious universities.

Independent law schools, by contrast, recruited their students from neighboring areas and employed faculty on a part-time basis. As most of the students were also employed, courses were designed to fit into either a day or evening class schedule. Independent law schools did not have a professional relationship with another entity and their curricula addressed local and state issues of law stipulated in the state bar examination. Private-Catholic law schools reflected a balance of the aforementioned characteristics from both the university and independent model law schools. Much of the curriculum and teaching was the same as that of non-religious institutions except for a special emphasis on the doctrine of Natural Law and its role in the practice of law. Lortie was interested in finding out whether law schools predestinate students along one career path within the legal profession over another.

Lortie found a relationship between graduates of university law schools and employment at law firms and a second relationship between private law schools and self-employment. Students who graduated from prestigious university law schools were more likely to seek employment with established law firms than students from private institutions. Private school graduates were more likely to seek self-employment as lawyers, or in some unrelated field. Lortie used the term “allocation” (p. 357) to describe how students were groomed by their training institution for legal positions from a global societal point of view rather than an individualistic one.

Lortie noted that occupational socialization continued to mature in the actual performance of the job. It is interesting to note that while both careers were identified by
the title of lawyer, the occupational socialization process of each career and the resulting attachment of the individual to the profession were vastly different. Among students' work socialization experiences are parallels with the Becker and Carper (1977a) elements of work, as well as those mechanisms of change associated with the development of occupational identities.

University law graduates were considered by other law professionals and those outside the profession as social elites, enjoying the social reputation and position of the law school from which they graduated. Consequently, they entered the work force as an associate with a law firm and had the advantage of being tutored and sponsored by experienced and successful lawyers. The goals of the firm became their own as they were introduced into specialized tasks and skills nontransferable to other types of employment or even other legal practices. They practiced these skills with real clients, procured not through personal recruitment, but acquired from their superiors. While there was risk of failure, there was also the comfort of having a salaried position in the profession for which they were trained, benefits, and the ambience and social position associated with successful legal firms.

By contrast, independently employed graduates’ first priority when entering into private practice was to procure enough income to both live on and to support their nascent law practices. They sought any employment flexible enough to include practicing law during their off hours. While most self-employed lawyers expected to drop their non-legal jobs, four years later most had retained their extra employment as an insurance policy against losing their law practice. Not having the benefit of experienced associates or the sponsorship of another entity, they refined their legal skills through
trial and error and the additional advice of friends.

Coming from private law schools, these graduates' social origins were more humble than those of their university counterparts. These social assignments allocated each type of lawyer a particular clientele with particular legal needs. The self-employed lawyer actively had to recruit a client base usually from friends, family, and referrals, transforming any opportunity, whether legal or non legal into a possible career resource. By contrast, a university law graduate’s principle resource and identity was the firm and its ideological goals.

*The Occupational Socialization of Lawyers*

The development of an occupational identity consists of the negotiation of a complicated interaction of perceptional discernment, the perfection of specialized skills, and an adherence to professional norms and values (Lortie, 1959). The desired outcome of this enterprise is a professional identity believable to both insiders and those outside the profession (Lortie, 1959). Lortie was interested in the role that professional training had on the occupational socialization of students.

Training institutions are situated within the broader social community. The type of law school typical at the time Lortie conducted his study no longer followed the apprenticeship model of the previous 100 years. In this historic model, training and the actual practice of law were concurrent, and the kinds of jobs open to legal professionals were more or less homogeneous. Rather, Lortie found that contemporary Chicago law schools were “creators and creatures of social differentiation” (Lortie, 1959, p. 363) in that the modern legal profession had come to represent many diverse occupations.
Training within this system was modeled on a serial curriculum where knowledge and skills were taught prior to any authentic interaction with clients. In order to become a lawyer, students had to learn the norms and values of their profession in general, but also navigate through legal dilemmas and problems prior to any real practice opportunities in moral decisiveness. Additionally, students were not immersed in a professional environment where they could perceive multiple expectations characterizing diverse legal roles. Consequently, students could not acquire the skills necessary to meet occupational expectations.

Ideally, occupational identities are molded as students act in the presence of their peers and professors, perceive how their performance is evaluated by these significant persons, and make adjustments in behaviors in order to match the image and ideology of the occupational group (Lortie, 1959). In fact, this did not happen among Lortie’s participants. The school environment offered little opportunity for students to observe lawyer roles. The considerable knowledge and skill base of these students did not make up for this omission. Most students did not possess the social skills needed for intense interpersonal interactions with angry or anxious clients or to wrestle with the commonplace problems of everyday practice. Law schools appeared to be far removed from the mundane realities of the legal profession, leading Lortie to question whether professional training had any impact on students’ self-socialization.

The Effect of Professional Training on Self-Socialization

Self-socialization, often referred to as anticipatory socialization is a kind of mental role-playing that an individual engages in to experience, theoretically, what it might be
like to occupy a particular role. It is a solitary endeavor, the outcome of which might or might not replicate the social expectations of the role being considered. Anticipatory socialization is an important consideration in the study of occupational roles as it can either assist or hinder role development (Pavalko, 1971).

Lortie asked participants to, first, recall their successive images of legal work, beginning with their first recollection to their most recent, and second, to describe the effect that their legal training had on those images. Lortie compared responses to the premise of Hughes (1958) that the purpose of professional training is to demystify exotic, sensational, or stereotyped images of a professional role in favor of images gained through scholarship and experience provided by constituents of the occupational group.

**Role Images and Professional Training**

Lortie’s analysis uncovered several common role images among participants. The most popular was a lawyer prototype, brilliant in the passion for justice and courageous in the fight for the common man. Recurrent situational themes included the role of advocate in the defense of a client wrongly accused but acquitted due to the almost mythical abilities of a skilled lawyer. A critical component of this perceived prototype is its charismatic qualities rather than a more prosaic representation (Lortie, 1959).

Half of all participants admitted that their self-ascribed images of legal work began to change, even before law school, as they came to understand that legal work encompassed a variety of roles in contrast to the Perry Mason defense lawyer image.
Changes due to legal school resulted in students’ greater awareness of the emotional and physical demands of their future work. When asked about which aspect of change caused the most dissonance, students noted a disconnect between the tasks in which they expected lawyers to be engaged and the actual skills and tasks introduced to them in their curriculum.

Faced with the reality of employment, students felt unprepared for the practicalities of building a career based on heretofore unknown ethical and moral norms espoused by the profession. Training in the occupational tasks and skills of law work were not enough to transform mythical images of the occupational role into an image more in line with the realities of the profession. Some element of glamour and personal fame associated with their future role persisted for students until they had an opportunity to engage in actual legal work. Practical experience was essential for students to recognize fully that legal work could be, in fact, mundane, routine, and laborious.

Respondents’ Opinions on the Purpose of Law School

Based on Lortie’s sociological assumption that occupational identity crystallizes in contexts that provide for meaningful and authentic role performance, he prompted students to state the function of law school. Students definitively stated that law school should prepare students for practice. In his study, however, law school did not satisfy this condition. Students were given little opportunity to acquire the skills fundamental to the practice of law and actually requested revisions of the curricula toward more pragmatic instruction. Students felt that law school had a minimal impact on their
socialization and initiation into the realities of the profession. In fact the demand for training in the basic social skills necessary for practice was a dominant theme.

After graduation, many students felt awkward or embarrassed by social ineptitudes while with clients, employers, and colleagues. Students had completed their degree with a vague understanding of their work that encouraged them to consider a wide variety of occupational titles under the legal umbrella. Not having a definitive understanding of what law work entailed, they came to relate skills and tasks of individual entry level positions with the concept of practicing law. Lortie concluded that these lawmen were socialized into their profession only partially through law school and that their work experiences after graduation continued the process.

Summary

The purpose of Lortie’s study centered on the broad academic structure of three types of law schools as well as the schools’ effects on the occupational socialization of lawyers. His work was based on the sociological premise that presumed highly socialized members of a profession appear to have enmeshed their personal identity with their occupational role (Pavalko, 1971).

The issue of occupational role was observable on many levels. Students came to their degree plan with images of lawyer prototypes found in popular culture and media. Role expectations were also uncovered at the institutional level. The type of training institution seemed to indicate whether students would seek employment with established law firms (university law graduates) or work as self-employed lawyers (private law graduates). Further, occupational titles qualified by the type of law school
were a source of information used to inference lawyers’ social status.

On whether degree plan experiences provided students with opportunities for meaningful, authentic role performances, Lortie concluded this condition was not met. Law school had a minimal impact on students’ occupational socialization and students did not enter into the work force fully socialized and committed to a narrowly defined occupational role. Lortie found that the occupational socialization of lawyers was partially addressed through law school and would continue through actual professional experience. While Lortie’s study of lawyers was conducted many years ago, his findings parallel that of later research on the development of occupational identity among music teachers (L’Roy, 1983) and were therefore contextual and relevant for the current study. The remaining sociological study considered for the current investigation investigated the occupational socialization of public school teachers.

Occupational Socialization of School Teachers

Lortie’s landmark study, *School Teacher* (2002), originally published in 1975, described the occupational socialization of public school teachers through an investigation of teachers’ perceptions of their daily tasks. The purpose of the study was to identify those sentiments and attitudes unique to the teaching profession, thus revealing the nature and ethos of the occupation. Lortie further proposed that these unique descriptors would reveal the structure of the occupation, those characteristics that set it apart from other occupations, and the meanings that teachers ascribed to their work.

Data for this study were obtained from multiple sources. All viable school
systems from the Boston, Massachusetts, metropolitan area were arranged into household income categories. Subsequent selections of school systems for this study were based on professional consultations that identified school systems as typical of an assigned income category. The final five towns’ sample consisted of 94 in-service teacher interviews selected among 13 public schools from the Boston metropolitan schools. Sample design was constructed to include subjects from public schools representing a diverse range of socioeconomic backgrounds and teaching grade levels. The design was a five-cell sample of equal numbers of teachers ranging from lower to upper income brackets and including grade levels from elementary through high school in each cell. The sample did not include teachers from rural settings, or Boston itself. High school teachers were overrepresented, but the distribution of subjects from this study was closely aligned with reported figures of national samples for the same time period.

A Dade County, Florida sample was obtained as a result of a separate project involving a survey of the professional staff in the Dade county school system in 1964. Data from this sample were used compare with data from the five town study. Differences included that in the Florida sample the school system was comprised of over 5,000 people from whom to collect information. Secondly, this sizable population of professionals was diverse with fewer than 25 percent born in Florida, which at the time made it one of the most culturally diverse school systems among major metropolitan areas in the United States. Interviews were conducted at 12 different locations during school hours.

After a chronological history of the teaching profession, Lortie presented the
results of his sociological study in three parts: (a) processes involved in the continuation of the teaching profession, (b) the attitudes and meanings teachers ascribed to their occupational tasks, and (c) a theoretical application of the findings with ideas for future research. The current study concentrated on Lortie’s results that described the processes of occupational socialization operationalized in his sample of teachers.

While it was assumed that occupations mold people in a particular way (Lortie, 2002), the socialization experiences of novices were not all the same; likewise, they did not produce the same effects in all persons. The difference was in the socialization experience itself. Lortie found that when socialization was potent, the personal selves of participants mirrored the norms and values of their profession, and thus to the creation of occupational identities. When socialization experiences were weak, individuals did not readily assent to occupational norms, but rather retained their previously-held, individualistic biases about the profession.

Throughout the literature reviewed thus far, transformative occupational socialization experiences in other professions indicated a body of knowledge necessitating specialized skills that differentiated insiders of the profession from those without (Becker & Carper, 1977a; Lortie, 1959, 2002; Pavalko, 1971). In other words, socialization was envisioned as a subjective course of action by which people advanced through a sequence of experiences in order to internalize the subculture of an occupational group (Lortie, 2002).

In his school-teacher study, Lortie asked teachers to describe their own socialization experiences. Two questions were of particular interest to this phase of his study. Lortie wanted to know how teachers rated their induction experiences, and if
teachers characterized themselves as members of an occupational group with shared knowledge and skills. He presented his findings in sequential order describing three events basic to induction programs of study. For the purpose of clarity and to minimize linguistic ambiguity, this study will use Lortie's own terminology as headings in the following discussion. They are (a) formal schooling, (b) mediated entry, and (c) learning-while-doing (Lortie, 2002).

**Formal Schooling**

While some occupations require at least a high school education, others insist on four or five additional years of college preparation. Lortie found that two types of education were involved in the occupational socialization of public school teachers, general education and specialized education. The first type of education identified was general education, or what Lortie described as secondary education, and was tremendously influential in the ways it prepared children for their future occupation. This was especially true for children who became teachers. Lortie coined the term “apprenticeship of observation” (2002, p. 61) as a way to refer to children’s protracted exposure to secondary teachers. By the time a young adult entered college, that student had experienced an estimated 13,000 hours in close, collaborative interaction with a teacher, a relationship that was consequential to that child’s educational future (Lortie, 2002). When examined through a symbolic interactionist framework, it could be stated that young students placed themselves in the role of teacher, which was a type of anticipatory socialization event. Part and parcel of taking on the role of teacher was anticipating what a teacher would do in a given situation; i.e., the student projected his or her own thoughts and theoretical actions, and imagined how it would feel like to be a
It would seem that individual experiences typical of the observation model would also be a type of occupational socialization, but this was not the case. Lortie stated two fundamental reasons why student observations of and close proximity to teachers was not occupational socialization.

First, students viewed their teacher’s actions from an isolated vantage point, as if they were watching a movie. Consequently, their imaginings about what it would be like to teach relied heavily on conjecture. Students did not experience or share in the teacher’s private thoughts or understand pedagogical precepts. Thus, students learned to perceive the ends of teaching without knowing the means. They assessed the teacher from a personally biased perspective that was intuitive and individual but driven by teaching personalities rather than based on best practices or technical considerations. Secondly, children typically were not capable of accurately applying empathetic attributions to others or may not have had the ability to assess teacher demands objectively and reliably. What students imagined about teaching, what it felt like to teach, was vastly different from the actual performance of teaching. Lacking cognitive skill, children could not inference appropriate teaching objectives from observing their teacher’s actions.

Lortie concluded, therefore, that the kinds of educational experiences to which children were privy and the assumptions they carried into adulthood were not the same, or even interchangeable with the kinds of occupational experiences typical of an apprentice. Further, secondary educational experiences were not representative of occupational socialization experiences since they did not instill a true understanding of
the unique problems or goals of public school teaching. Lortie’s argument was substantiated by subjects’ comments about how their expectations about teaching compared with actual classroom teaching.

Subjects were not surprised by the kinds of tasks or duties consistent with their jobs. They were, however, mystified by the social milieu in which they tried to implement the skills they had learned. The responsibility of teaching real children made their work more difficult than they imagined it would be. The demands on their time and energies were more than anticipated. Teachers’ tendency to underestimate the difficulties associated with teaching supported Lortie’s contention that those interested in the teaching profession had set ideas about the nature of their future job, ideas that fell short of reality. Lortie, while mindful of the premise that formal occupational socialization should replace lay conceptions of future work with professional associations, also wanted to know how subjects would describe their current difficulties in light of their past training experiences.

Subjects gleaned a lay understanding of teaching from their secondary student experiences and their relationship with their secondary teachers. But what is critical about this result is that subjects did not delineate their childhood conclusions from those gained through training. The assessments made as children held the same weight, that is, the same evaluative authenticity as their more sophisticated ideas. It appeared that formal schooling had not been the delineating point between their lay formations and a more professional, insider conception of teaching. In addition to general education, Lortie identified a second type of specialized education.

Types and amounts of specialized education varied with the profession. For
teachers, specialized schooling was the practicum, sometimes called induction, or the student teaching component of their degree plan. When it was required, specialized schooling was calculated in hours or days, not in years as general schooling is measured. Compared to other professions, medicine or engineering for example, induction experiences have been less intellectually and organizationally complex (Lortie, 2002). One explanation for this discrepancy is that, historically, learning to teach was isolated from scholarship and it was only until recently that pedagogy became integrated with the social sciences. Classroom instruction traditionally relied on conventional wisdom and models of delivery, especially that of lecture and question and answer. Lortie’s research concluded that the pedagogy of teaching, rather than being a light bearer of innovation, was largely centered on traditional modes of instruction and private study (Lortie, 2002). In addition to the types of education, Lortie found a second characteristic of induction programs was mediated entry.

Mediated Entry

Mediated entry, as a form of apprenticeship, was found in a wide array of contemporary occupational training models, from vocational training to programs conducted by professional schools and corporate agencies. Regardless of their length, mediated entry programs shared common elements. The most prominent feature was that they typically guided the novice from small and simple concepts and tasks to more complex ones under the supervision of an expert in the field. This person was not just an expert in the field, but was more importantly a person who was known to exemplify, and, personify the goals and mission of the occupation. As the novice was initiated into
the norms and values of the occupational group, they took on more demanding tasks and assumed greater responsibility for their work-related contributions.

Lortie described the mediated entry process for public school teachers, as compared with other professions, as primitive (Lortie 2002). The only form of mediated entry offered to teachers was student teaching, which was measured in weeks just before college graduation. Lortie’s results revealed that the student teacher normally watched the work of an experienced teacher and was assigned teaching opportunities by the supervising teacher. Lortie found that subjects’ ratings of the effectiveness of their student teaching experiences were dependent on the skill, involvement, and conscientiousness of their supervising teacher (Lortie, 2002). There was little to no uniformity among participants’ experiences. Lortie supplemented the discussion on mediated entry with an investigation of student teaching.

**Induction**

Because the induction experience was considered to be an integral part of teachers’ professional training, Lortie wanted to know how their student teaching operated in the process of occupational socialization. Over all, teachers rated their student teaching higher than their education coursework despite the relatively short duration of their student teaching tenure. Student teaching gave the sense of the daily routine of teaching, rather than learning about teaching or watching others teach. Even a modicum of success at student teaching affirmed participants’ choice of occupation, especially when student teachers and their supervising teacher had a warm and congenial working relationship. However, occupational socialization experiences, as
typified by this educational model, should have replaced novices’ understanding of the profession with those characterized by the norms and values of the occupational group.

Rather, Lortie found that the casual, non-prescriptive, and narrow scope of mainstream teacher induction did not offset students’ prior convictions about teaching. Student teachers were not forced to analyze, evaluate, or choose diverse teaching possibilities, and were in danger of being exposed to a style of teaching that was, in itself, an example of the status quo. In some ways, the very nature of student teaching strengthened a sense of isolation and individualism not consistent with the objectives of occupational socialization. This trend was somewhat perpetuated by the abrupt transition from student teaching to participants’ first professional teaching experiences.

**Learning-While-Doing**

Learning-while-doing was a major theme in American folklore, business, and industry (Lortie, 2002). Learning by doing was the glorification of the small, insignificant, and unskilled laborer working through the ranks of big business, picking up along the way the skills and wherewithal to become the CEO of the company. Lortie pointed out that, historically, teaching had relied on this type of occupational socialization, especially in the lack of transition time student teachers received as they traded student teaching for their first professional teaching position. Teachers in his sample referred to this time as “sink or swim” (Lortie, 2002, p. 71) in that their ability to assume the greater responsibilities, manage daily stressors, and show proof of student learning would determine their academic fitness for the job. Extra training opportunities, teacher in-service, and personal study were all activities rewarded by public education agencies.
either by additional accreditation given to the teacher or through wage compensation.

In the first years of actual teaching, the teachers in Lortie’s sample were not eased gradually into the tasks and responsibilities of their teaching role despite the fact that many new teaching employees were hired on a probationary basis. For many participants, anxiety far outweighed their sense of efficacy in their job-related tasks, anxiety that increased in proportion to the amount of professional support they received. Teachers reported a high sense of isolation from other adults either because of the demands of the job or because any received hours of support was in terms of hours and thus insufficient in their estimation.

Feelings of isolation led teachers to work out their classroom problems individually before asking for help. Even if help was offered, the teachers still had to work out that solution in the classroom without assistance. Consequently, novice teachers’ perceptions and interpersonal skills related to teaching vacillated between external advice and classroom events. The experience of learning by doing was limited by the teachers’ observational acuity and the capacity to apply effective remedies. Lortie concluded that insufficient interpersonal support, in addition to personal teaching weaknesses contributed very little to classroom teachers’ awareness of common norms, values, skills, and knowledge promulgated by the profession.

In agreement with Becker and Carper (1977a), Lortie posited that the lack of a common ideology, skill base, and technical language challenged participants in their teaching. Instead of relying on the best practices of a developed discourse, teachers were forced to discern implementation choices from a position of guesswork or trial and error. Consequently, the effects of teachers’ private ordeals, collectively, were missed
opportunities of sharing the trials and tribulations of their work, and the creation of common work bonds. These missed opportunities could have led to the construction of a shared occupational subculture (Lortie, 2002).

Lortie’s landmark study dealt with the occupational socialization of public school teachers through an investigation of teachers’ perceptions of their daily tasks. The purpose of the study was to identify those sentiments and attitudes unique to the teaching profession, thus revealing the nature and ethos of the occupation. Lortie’s contention was that these unique descriptors would reveal the structure of the occupation, those characteristics that set it apart from other occupations, and the meanings that teachers ascribed to their work.

Lortie found when socialization was potent; the personal selves of participants mirrored the norms and values of their profession, thus creating an occupational identity. When socialization experiences were weak, individuals did not readily assent to occupational norms, but rather retained their previously held, individualistic biases about the profession.

The apprenticeship of observation, a term coined by Lortie as a type of self-socialization, or anticipatory socialization, has been referred to in consequent identity literature of music educators as a robust form of occupational socialization. Lortie’s argument was clear, stating that the kinds of educational experiences children were privy to and the assumptions they carried into adulthood were not the same, or even interchangeable with the kinds of occupational experiences typical of an apprentice. Further, secondary educational experiences were not representative of occupational socialization experiences since they did not instill a true understanding of the unique
problems or goals of public school teaching.

Participants’ own ratings of their coursework, induction experiences, and personal awareness of their occupational group defined their level of occupational socialization. Lortie found that participants’ views of teaching were conceptualized in secondary school and were not replaced by professional training. The tendency toward an individualistic view of teaching continued through student teaching practica where there was little to no uniformity among participants’ experiences, as supervisory teachers were themselves not prescriptive to professional norms, values, skills, or knowledge. Student teaching thus held participants in isolation, reinforcing a sense of individualism not consistent with the objectives of occupational socialization, a trend that made the transition to actual professional work replete with anxiety and low efficacy as to the demands and responsibilities of the job.

Lortie concluded that teachers continued to use their memories of personal interactions with their secondary school teachers to inform their teaching, going so far as assigning these memories the same pedagogical and evaluative weight as those procured through professional training. It appeared that formal schooling had not been the delineating mark transforming their self-imagined roles about teaching into a more professional insider conception of the profession. Lortie’s findings paralleled that of later research (L’Roy, 1983) on the development of occupational identity of music teachers in that participants’ secondary lay memories continued to inform and govern their teaching, even after their professional education programs and actual teaching experience. In the context of the current study then it was vital to include items on the questionnaire that explored these issues concerning formal schooling and occupational
Early sociological research on occupational identity of music educators can be traced to theoretical understandings of work as a web of social relationships through which people became connected, occupationally, with other like-minded individuals (Pavalko, 1971). The work of four scholars has been used to describe common theoretical features associated with the development of occupational identity in various professions. Even in its distilled form, the construct describing the factors associated with occupational choice and the trajectory of personal and professional behavioral changes that might result from the choice one makes remains complex.

Pavalko’s (1971) work described the sociological assumptions associated with the study of occupation, how occupational choices come about and the social norms that undergird the choices. The research of Becker and Carper on physiologist, engineer, and philosopher graduate students codified four elements of identification with an occupation. Together with five mechanisms, their findings were able to record levels of participatory change among the three groups of students. These changes were intrinsic to particular social settings and groups and had the potential to cause behavioral changes in persons either toward or away from commitment to an occupation. An additional source of influence, the occupational expectations of family members, of the occupation itself, and those of the broader social milieu were also critically linked to occupational development.

Lortie (1959) specifically looked at the influence that training institutions had on the occupational socialization of lawyers, and on their future job preferences. He
hypothesized that highly socialized members of an occupation were those who played an occupational role so completely that it appeared to be enmeshed with their personal identity (Lortie, 1959). Lortie (1959) concluded that occupational identity consisted of interactions of perceptual discernment with the perfection of specialized skills and the adherence to occupational norms and values. When both the actual job and training contexts provided for meaningful and authentic role performance, occupational identities crystallized.

Lortie’s study on the socialization of public school teachers confirmed the results from his law study in that when socialization experiences were weak, individuals did not assent to occupational norms, but rather, retained their previously held individualistic biases. Specifically investigating perceptions of preservice teacher training in light of an apprenticeship model of occupational socialization, Lortie surmised that as training progressed, more demanding tasks and greater responsibility would be given to novices. As such, training was thought to be a time for participants to advance through sequenced and structured experiences.

The outcome of these experiences should have resulted in a deeper adherence to the sub-culture of an occupation group ethic. Participants’ sentiments and attitudes should have revealed the structure of the occupation itself, highlighting its unique characteristics that set it apart from other occupations. When training experiences were potent in this regard, the personal selves of participants merged with the norms and values of their profession. Instead, professional individualism and the resulting feelings of isolation some teachers experienced were not consistent with the objectives of occupational socialization or indicative of a potent occupational identity (Lortie, 2002).
If the assumption might be made that occupational identity is important for job retention, then it would follow that it would also be important to measure occupational identity among music education undergraduate students. An examination of research that has focused on occupational identity among music educators has indicated a need for such an instrument. The current study attempted to move in this direction to develop an instrument that might measure occupational identity.

Summary

This section presented the work of the four primary sociologists, Pavalko, Becker and Carper, and Lortie, who emerged as the initial investigators of occupational identity. For the context of this study, designing an instrument that would possibly measure occupational identity among music education undergraduates, it was important to present their work in an historical and theoretical context. In the field of music education, L’Roy and Froehlich (1983) identified these four scholars as the primary ones who looked at occupational identity from a sociological perspective and laid the foundation for further work. The next section explores the research that has emerged from the initial field of occupational identity from a sociological perspective, beginning with an exploration of studies conducted in the field of music education.

Occupational Identity among Music Educators

Initial research on the occupational status and professional socialization of music educators dates back to the 1960s (White, 1967). Subsequent research along this vein has continued to investigate the occupational development of music teachers through a
symbolic interactionist framework drawing from the work of Pavalko, Becker and Carper, and Lortie. Much of this research describes the complexity of music career development, career choice, and the perceived dichotomy between teacher and performer occupational identities. The issues are compounded in music due to the confusing and sometimes conflicting ways that the term identity has been used in the literature. This makes the quest for understanding occupational identity much more challenging.

This section addressed studies that have examined occupational identity in the context of music teaching and learning. Studies chosen for review have used a symbolic interactionist framework and have cited the work of a construct author or researchers who themselves based their investigations on the construct. After a detailed description of introductory and landmark research on music educator occupational identity, this review of literature compared subsequent research to the construct, emphasizing what parts of the construct were used, which parts were excluded, and what was added. A comparison of methodologies, additional theories, and test construction, including reliability and validity, completes the chapter.

*Initial and Landmark Research*

White (1967) conducted one of the first sociological studies on the role status of music educators. His study looked macroscopically at the social characteristics and occupational circumstances of public school music educators. White surmised that music teachers were challenged by their perspectives of occupational identity. His research questions addressed (a) the music educator’s social origin, (b) his or her social
mobility, (c) the differences between men and women, (d) the people who influenced career choice, (e) the reasons for choosing a career in music education, (f) factors, which cause one to leave the profession, (g) the music educator's perception of his special status, and (h) the extent to which professional role behavior is affected by the situational context. Questionnaire responses came from 1000 music teachers employed in primary, secondary, and higher education. As part of the survey, respondents provided contact information for former music teachers who had left the profession.

One hundred returned questionnaires from this sample were compared with those of in-service teachers. Qualitative data consisted of a series of in-depth interviews from 30 participants, representative of each level of music teaching. White's interpretative framework was symbolic interactionism, and was described as a framework that considered occupational roles as an outcome of an interaction between an individual's expectations and the perceived expectations of significant members of a shared social group. Ongoing interactions perpetuated the negotiation and construction of occupational roles.

Among his detailed findings, White reported that two-thirds of music teachers' first occupational choice was music teaching. Decisions to teach were based on a love of music and children, personal ability, and the encouragement of their music teacher. Close family and friends of music teachers “valued music highly and were pleased when they chose their career” (White, 1967, p. 7). Two-thirds of the sample expressed a willingness to commit to from 10 to 20 additional years of teaching if they could gain knowledge of and control of the particular job. In addition, half of the sample never considered changing their profession.
Music teachers who had left music teaching did so for reasons of money and a lack of personal challenge, and insisted, that given the same circumstances, they would do so again. As for opinions concerning their professional training experiences, teachers thought that the responsibilities and duties of their profession would be better served through a broader education found in the behavioral sciences or the humanities rather than a school or department of music. An exception to this finding was ascertained via personal interviews that looked at within-group differences. Band directors showed singular differences from elementary or vocal music teachers in the type and degree of their job orientation and professional relationships. Comparatively, band teachers associated specifically with other band teachers, while elementary and vocal music teachers chose companions from a less-defined occupational group.

White’s conclusions reiterated a fundamental sociological assumption that music teachers were part of a larger social structure that, over time, had moved away from stable and closely knit group relationships and favored contractual relationships and greater mobility. White recommended that the goal of professional music teacher training institutions should be the effective and efficient performance of the occupational role as defined by the norms and values of the society in which they are housed.

L’Roy’s (1983) landmark study was one of the first to look sociologically at the occupational development of music teachers based on the research of Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c) and Lortie (1969, 2002). The purpose of the study was to ascertain whether, when, and how music education students adopted a music teaching occupational identity. L’Roy only reviewed research that used a symbolic interactionist framework.
Three research questions based on the theoretical scholarship of Pavalko (1971) were used: (a) what norms and values were espoused by undergraduate music education majors, (b) were undergraduate music education majors committed to specific agreed upon knowledge and skills consistent with best practices of the profession, and (c) were undergraduate music education majors committed to a music teaching career. A symbolic interactionist framework was used to analyze data, expressed in percentages from 165 survey responses and 38 interviews from subjects enrolled in a music education degree. Cross tabulation analysis was used to account for the following variables: (a) music emphasis, i.e., band, choral or strings; (b) class year, and (c) the types of courses completed by the student. Chi-square statistics were employed as a between group test of difference among scores from three variables, specialization, i.e., band, choral or strings; class year, and the number of courses completed. Weighted scores were assigned to ordinal data of four or more response choices. Higher numbers indicated more evidence of a particular variable. Non-taped focused interviews, based on interactionist theory, were collected from 28 volunteer subjects chosen from the group of participants. Interview findings were reported, anecdotally.

The result of each research question was presented in sub-categories. In the analysis for whether undergraduate music education majors identified with norms and values consistent with the occupational title and ideology of music teacher, the following categories were discussed: (a) role label, (b) professional aspirations and expectations, (c) goals for the field of music education, (d) basic musical experiences for children, and (e) occupational autonomy and reference group choice.
There were differences found in participants’ choice of occupational label both by specialization and class year with professional performer being the first choice and the generic label of musician and music educator ranked as the second highest. The private teacher label was also ranked as a second choice, especially by those participants who most identified with performance. Band students tended to choose a band director label as a third choice, while choral students tended to choose choir director as their third choice. Band, choral and string participants tended to choose performing as their preferred professional activity and expected to give most of their time to its perfection. Ensemble conducting was ranked second followed by elementary teaching and then church music.

Participants had difficulty articulating or even identifying goals for music education and what their accomplishments as professional music educators would or should be, other than providing a creative outlet for people and a basic appreciation for the art. Basic musical experiences for children were articulated through each participant’s musical specialization. String students thought elementary music was important but did not consider teaching elementary music teaching as a job choice, stating it was for “teachers” (L’Roy, 1983, p. 148). Elementary music education was highly rated by choral students. Elementary music was not highly rated by band students, even they thought the elementary experience was an appropriate time for children to begin instrumental instruction.

As for participants’ rankings of professional indicators of their occupational growth and usefulness, results showed that less than 12 percent of students chose to seek the opinions of their pupils or rely on their own personal judgments. College
professors, supervisors, school personnel, contest ratings, or the opinions of pupils’ parents were not considered to be important indicators of job performance or success. The analysis of whether participants developed a commitment to music education knowledge and skills was presented according to these categories: (a) those special skills and knowledge deemed necessary and vital for music teaching, (b) how authentic teaching experiences changed participants’ attitudes, and (c) the opportunities available to participants that allowed them to practice and develop these special skills.

While a high percentage of participants, regardless of specialization, thought that communication was an essential teaching skill, only about 75% thought that communication skills should be used to diagnose learning difficulties and that finding multiple ways to assist student learning was an important skill. Conversely, musical skills such as error detection, singing, playing accompaniments, or arranging and notating music were valued by about half of the sample. As for broader educational considerations, students had difficulty articulating what teachers should know and what they needed to teach. Half of the sample considered educational theories to be essential.

Students who were or had been student teaching did not consider their teaching experiences as an extension of their coursework or a time for them to apply what they learned. They felt unprepared and fearful about their ability to manage an entire class of children. Those students who had previous teaching experiences deemed them invaluable and gained from them a better-defined concept of role as a music teacher. They also reported that they were perceived as being a teacher by others.

Results for the final research question concerning students’ development of
career commitment revealed that music education, for most students, was one choice among several other personally acceptable occupations. The students who were band directors were definite and well informed about their career choice and confident about the logistics of the college to job transition. They expected to be band directors for the entirety of their career. Choral and string students were neither as decisive nor confident about their future.

Students reported that many other careers were as satisfying as music teaching, but were undecided about a particular alternate choice despite their beliefs that they would be successful elsewhere and would not suffer significantly by a change in career. Reasons for choosing music education were a love of children, or for spiritual and personal reasons. Students whose preferred professional activity was performance were anxious about their chances of success in a performing career. On the other hand, they were not confident they would be happy teaching. String students viewed teaching as attractive because they would have summers free.

L’Roy’s research was sociological in its design and in the underlying assumptions about music teaching, drawing inspiration from early pragmatists and the Chicago school of the sociological sciences. These assumptions included the understanding that occupational roles are socially constructed whereby persons take on the role of another in order to try it on, so to speak, for oneself. Socialization, specifically adult socialization, is the term used by sociologists to describe how persons learn occupational roles. Adult socialization (Pavalko, 1971), that is the learning of an occupation, is not the same as the type of socialization experienced in childhood (Pavalko, 1971), nor is it similar to the development of a personal self-identity, which is a paradigm expressed in psychology,
most notably through the work of Erikson (1959).

L’Roy’s discussion and interpretation of these results was through the sociological framework of: (a) symbolic interactionism, specifically the concept of significant others, (b) reference groups, and (c) meaningful symbols, gestures and signs particular to a specific occupational group and its activities. Together these three concepts set the fundamental notion that persons learn to view themselves through a projected image they perceived others to have of them (L’Roy, 1983), and that commitment to an occupational identity was the result of interaction with others with similar occupational interests.

Taken as a whole, L’Roy found two categories of students who sought a music teaching degree: (a) students whose first choice was music teaching, and (b) students for whom music teaching was an alternative choice. The first category of student would have to learn an entirely new occupational role through association with members of that occupational group. The second category of student would have to endure an environment where their natural inclinations and ideas about music teaching would be challenged and questioned. Students’ global understanding of music as a career was expressed as either performance or education, i.e., teaching. Sociologically, these two perspectives represented different occupational reference groups of which students would accept and try to imitate, or reject as counter to their interests. Theoretically, students’ music education faculty, and those faculty considered by the student to be significant to them, would replace former secondary musical role models. A main concern of L’Roy’s research, for both groups, was whether students would grow into an occupational music teaching identity by either replacing individual lay conceptions of
their chosen profession with a more mature and informed one offered them, or by developing an entirely new occupational identity during their music education degree plan.

This did not happen to either group of students. Those whose first choice was music teaching indicated their secondary teacher as a significant role model. Students for whom teaching was second to a performance career preferred the support of their applied teacher rather than music education mentors. Professional training did not prompt either student group to replace their lay conceptions of music teaching for a more professional model.

The results for students’ choices of role label or occupational title were polarized as either professional performer choices or music educator choices. By indicating musician-professional performer or musician-music educator, either in this order or another combination, developing role concepts can be examined on a continuum of choices and used as a predictor of how students might begin to feel a sense of identification with the activities and beliefs of a particular reference group and a resultant growing occupational identity (Pavalko, 1971).

It is important to note that research has cited that it is the identity of the reference group that determines whether a title aligns with either performing or a teaching career, not the title itself (L’Roy, 1983; Pavalko, 1971). L’Roy gave the example of professional performer-private teacher and band director-private teacher. Both of these choices align most with a performing career. In the first case, private teaching might be thought of as a way to supplement performance income. Band directors, too, might conceptualize their teaching as performance rather than education, and so their private teaching
supports and enhances the performance level of their school ensembles as well as supplementing their income (L’Roy, 1983).

Of the three specializations, band, choral, and strings, band students, were more diverse in their choice and understanding of an occupational title. This outcome highlighted the assumption that career choice must be examined in light of the corresponding reference group. Three reference groups were found to be available to band students. These were: (a) performance that was typified by specific and well defined skills, occupational expectations, and norms and values; (b) music educator was typified by vague agreement of specific skills resulting in weak commitment to established norms and values, and (c) band director L’Roy found situated in the middle of this continuum.

Of the three, band students preferred the band director label both in theory and in authentic practice through their professional and personal/interpersonal relationships both before and during their professional training. Their attachment to band directing was nurtured all through their secondary musical experiences, in actual teaching experiences and apprentice type relationships with their band teacher. Activities consistent with band instruction, contests, festival, and sports events served the performance quality and team spirit of their ensembles rather than serving as an educational means toward an end. The band students were intensely loyal to the person and memory of their secondary band teachers. That loyalty, together with additional skills performance and pedagogical skills learned in college methods classes, helped students to solidify a well-defined role label of band director that was, in their way of thinking, likened to the competing reference group of music teaching.
By comparison, choral students were found to have weak role label attachments, ranking performer, music educator, musician, and choir director equally (L’Roy, 1983). These students were less certain about their occupational future and less committed to the field than band students. L’Roy situated these results within the context of adult socialization in the institutional culture of music education, and related findings back to Lortie (1959). Lortie found an affiliation between the rigor and specificity of occupational training experiences and the likelihood that participants’ occupational identities would mingle with the norms and values of occupational reference groups.

In L’Roy’s study, choral students exhibited retention of pre-conceived notions and attitudes about music teaching as they continued to rely on these attitudes for the duration of their college training. The choral students had difficulty articulating broad goals of music education and were vague in their descriptions of how these goals might be realized by the profession as a whole. L’Roy continued to relate her findings to the construct, specifically, the theoretical findings of Becker and Carper (1977a, 1977b, 1977c), which stated that the structure of institutional degree plans could either deter or promote the development of an occupational identity. In L’Roy’s case, choral students’ professional training did not produce defined occupational identities because students were not able to develop characteristics related to specified norms and values, nor did students commit themselves to specific occupational tasks or self-evaluate their competence in the authentic practice of specialized skills.

Findings for orchestra students were inconclusive due to low string education major enrollments resulting in a low sample size for this specialization. Given this qualification, results were reported for 20 string education majors from the total sample
of 165. Of this number, half expected to earn most of their occupational income performing and supplementing that income with private teaching. Consequently, their chosen reference group was performance, with no evidence that training had any effect on their professional allegiances.

As a group, string students did not conceptualize themselves as music teachers and considered public school teaching as a last resort. There was little commitment to specific knowledge and skills or intention to use professionally identified best practices in their teaching. String students’ lay conceptions of the profession prevailed, conceptions that were contradictory to the expectations of school teaching and the norms and values of the reference group. One string student, however, identified with a music educator title perhaps because she, apart from the other string students, had had previous experience teaching children or because an interaction between role acquisition and major instrument came into play.

In addition to L'Roy (1983) were two studies based on the foundational constructs of Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c), and Lortie (1969, 2002). There were also two studies based on labeling perspective (Becker, 1968), a theory from which occupational identity was derived. The first study looked at the self-perceptions of drama, \( n = 19 \), art, \( n = 22 \), and music educators, \( n = 31 \), toward the duality of their artist-teacher occupational roles (Clinton, 1991). Using Becker and Carper’s four elements of identification with an occupation, Clinton compared the progress of occupational development among art, drama, and music educators. Clinton hypothesized that while society at large and school administrators in particular perceived the roles of all fine arts teachers to be similar, the roles of art, drama, and
music teachers represented different occupational groups with differing norms, values, and ideologies. He postulated that the attitudes and beliefs that teachers ascribed to their occupational role would lend credence to and triangulate administrative evaluations of the effectiveness of their teaching.

Clinton’s interest in occupational socialization and reference groups was augmented by Pavalko’s discussion pertaining to how society looks generally at occupations and compares them socioeconomically and in terms of social status. Clinton also looked at smaller reference groups, much like Becker and Carper did in their discussion of parental, occupational, and cultural group expectations, and how these expectations can influence career choice and perseverance in occupational roles (Becker & Carper, 1977c). But when analyzing the nature of outside pressures exerted on career choice and job performance, Clinton did not reference his results within the sociological realm. He, instead, situated this aspect of his investigation within a psychological perspective of societal and parental expectations (Griff, 1963), thus giving a report of perceptions separate from the social underpinnings that may have shaped those perceptions.

Clinton’s study did not include behavioral change mechanisms and their interrelationships with the four elements or any discussion about specific reference groups in which these mechanisms operate. Societal influences that shaped perceptions were not referred to, only the perceptions themselves. Nonetheless, Clinton extended research on the occupational identity of music educators, based on aspects of the foundational construct, by comparing across three fine arts occupational groups with both a performance and teaching component.
Clinton’s results differed from L’Roy’s findings. He found that music teachers were more interested in pursuing teaching careers and the skills they thought were representative of teaching careers than performing careers, although many were dually employed. Teachers preferred to be called educator/artist or simply educator. In Clinton’s study these titles were viewed as the same. Teachers were committed to performance skills, finding applied lessons and ensembles experience most useful in their present teaching situation as well as being personally useful in their performing role. Teachers’ preferred reference group was other music teachers, and they had a positive view of their social position, except when compared to performing musicians.

Clinton’s comparison of results with that of Becker and Carper conceded that differences might have existed in teachers’ perceptual meanings of the titles educator/artist or artist/performer. Music teachers’ conception of their job title appeared to align closest to an educator who teaches music, and it was questionable if those titles were representative of a public music teacher role. L’Roy described in-service teachers as lacking commitment to specific work-related skills. Two questions implied in this difference of findings are:

1. Which skills do in-service and preservice teachers consider work-related?
2. Did actual job experience challenge what teachers considered to be work-related skills?

Clinton’s piloted questionnaire comprised 25 questions categorized according to:

1. The occupational title with which teachers identify,
2. the commitment to the role of artist and/or teacher, and
3. identification with occupational reference groups.

Chi square tests of independence were used to determine, at a .05 level of significance, if fine arts teachers had significantly different perceptions of their careers in light of their
fine arts specialization. Nine interviews were conducted to triangulate group differences. Interjudge reliability remained high throughout the study (.907-.913) and was rechecked at every ninth interview. Clinton suggested that his measurement instrument, applied to in-service teachers, could be used to measure perceptual changes as a consequence of professional training in preservice teachers.

An additional study investigated the role development of elementary general music teachers (Schonauer, 2002). As part of a mixed-method approach, a questionnaire was developed after that of previous research (Clinton, 1991; Cox, 1994; L'Roy, 1983). The questions were based on the four elements of identification with an occupation (Becker & Carper, 1977a) and additional areas such as professional identity, and questions about significant others. The 30-item instrument was subjected to a pilot test. Responses were expressed in frequencies. A detailed description of the construction of the test was not offered.

Sixty-nine questionnaires contributed to the study's findings in addition to 14 interviews. Results showed that this particular population of teachers was highly committed and identified strongly with the role of elementary music teacher. Their preferred occupational title was either elementary music specialist or music educator (Schonauer, 2002). Participants were content in their current institutional position, not desiring to exchange teaching for administrative or other alternate career tracks. Teachers, while cognizant of the fact that society at large did not rate their social position as high as performers or university professors, nonetheless considered their vocation as more important than society credited it. These results contradicted those of L'Roy (1983) and Clinton (1991) who found that preservice teachers and in-service
teachers, respectively, preferred titles of musician or director rather than educator, and were more committed to the norms and values of a performing role.

Roberts (1990, 1991a, 1991b, 1991c, 1993, 1997, 2000) has written prolifically on the socialization of undergraduate music education majors. In a seminal ethnographic study, Roberts collected data from 116 undergraduate music education majors from among five Canadian universities. Using grounded theory, Roberts investigated how music students came to construct meanings from commonly used occupational titles such as musician and music teacher as they pursued their occupational interests. Roberts’ analysis drew heavily from labeling perspective (Becker, 1968). Labeling perspective was the foundation used by Roberts to explain the social actions of the music education students (Roberts, 1991b).

The study of occupational identity is connected to labeling perspective, but is more specific in its aims. Occupational identity deals with the label of what we call ourselves in our work (Becker & Carper, 1977a; L’Roy, 1983; Lortie, 2002; Pavalko, 1971). Consequently, studies by both Roberts (1991a, 1991b, 1991c) and L’Roy (1983) have been characterized as complementary as they shared common theoretical underpinnings and research aims (Woodford, 2002), but differed in their methodological approaches. They also obtained similar results, revealing that university schools of music promoted and rewarded music performance career paths more than music education, first through an implicit assignment of higher social status, and also by evaluating music education students by performance standards.

Consequently, music education majors who entered training having been socialized in the performance of music chose to pursue a performance title and actively
maintained it throughout their professional training. Teacher preparation did not result in students’ commitment to the professional behaviors, norms, and values of music teaching. This finding has been a critical one for the profession of music education in that it suggests that music teaching degree plans might not effectively be transforming students’ occupational identities into that of music teacher identities (Woodford, 2002).

Wolfgang (1990) looked at the development of teacher role socialization during the early field experiences of preservice music education majors. Written under the framework of role theory, the researcher placed the study amidst controversies about the efficacy of field experiences and whether these experiences were a means toward transitioning students from a theoretical role to situations where a teaching role might be practiced. Arguments reviewed about the timing, quality, and overall effectiveness of early field experiences originated in two distinct reference groups in music education: scholar-researchers and teaching-practitioners. Role theory is a perspective within the broad framework of symbolic interaction theory that stipulates that events themselves do not have intrinsic meaning. Rather, the actors, and/or persons involved in these events ascribe meaning to them. Consequently it is the interpretation of events that accounts for differences among persons experiencing the same event (Wolfgang, 1990).

The purpose of this qualitative study was to uncover the perceptions of 21 participants regarding their early field experiences and to compare those perceptions to those of practitioners and researchers using role theory to reconcile or interpret diverse perceptions. The researcher used grounded theory, i.e., the generation of hypotheses drawn from collected data rather than from pre-existing theories about occupational
socialization. In this case, data represented the meanings that students ascribed to their experiences. A researcher-developed questionnaire was used to gather demographic data, subjects' personal expectations, characteristics of the ideal teacher, personal qualities, and other short-answer questions. The origin of the test or the reliability and validity of the test were not mentioned. Among the 20 items were questions about participants' high school music programs and the quality of the students' involvement, career choices, persons who had influenced their career choices, professional memberships, and their occupational hopes for the future.

The results of this study were obtained through grounded theory and interpreted with a symbolic interactionist framework. Consequently, participants' perspectives of their early field experiences were not directly compared with the construct, but rather to the broad perspective of sociology in which the construct was situated. The researcher's use of the term “identity” as an aspect of role theory was in alignment with that of 'L'Roy (1983) and the construct authors, Pavalko, Becker and Carper, and Lortie. The results of this study gave a rich, in-depth understanding of a particular case involving 21 preservice teachers' role development informed by Becker, Hughes, and Strauss (1977) that emphasized the influence of reference group norms, values, and beliefs.

In general, participants from among three reference groups, music education researchers, in-service teachers and preservice teachers held divergent ideas about the professional socialization process. Specifically, preservice teachers resisted interacting with their occupational peer group despite having learned occupational behaviors, maintaining instead an individual approach to their work. For many the practicum experience led preservice teachers to question their career aspirations as their vision of
public school teaching, which was formed within the perspective of a performer, before entering college, and, which prevailed through the duration of the study.

Other studies from among the music education identity literature conducted after the previously discussed studies also remained faithful to the construct, but had also included other theories in an attempt to document the occupational development of music teachers (Cox, 1994, 1997; Harris, 1991; Maltas, 2004; Paul, 1998). A detailed discussion of their findings follows.

Harris (1991) investigated the dualistic nature of musician versus music teaching roles and intrinsic career satisfaction. Role identification was defined by the Becker and Carper’s four elements of occupational identification (Becker & Carper, 1977a). Harris (1991) emphasized that a person might have multiple roles that could potentially lead to role conflicts (Getzels & Guba, 1954). When roles conflict with each other, a choice as to the major role to which a person will commit must be made. Behaviors associated with role choices, rather than perceptions of role choice are used in the measurement of occupational identity development. Behavioral demands come in the form of personal preferences and desires for change, demands for specific work-related behaviors, and behaviors taken on as a way to conform to the perceived expectations of others.

Harris’ assumptions were that teachers with a well-developed teaching identity would experience job satisfaction to the degree that they accepted the values and norms of the instructor/educator role. In the case of college faculty, the motivation to develop an identification with teaching might be hindered by institutional emphases on skills and norms not traditionally considered to be music teaching activities. His decision to use the intrinsic satisfaction model (Getzels & Guba, 1954) in conjunction with a
measure of occupational identity was driven by the assumptions that role identification was defined as changes in behavior and that there would be a positive correlation between intrinsic satisfaction and the degree to which individual professional needs were aligned with how others perceived those job requirements.

Harris developed a questionnaire to measure perceived time spent on occupational tasks, individual preference for occupational tasks and responsibilities, and the identification with teacher and musician occupational roles. Initial items were constructed from related literature investigating college music teachers' job responsibilities, teachers' predilection for these tasks, and hours spent in fulfilling them. Occupational identification items were given to and revised by respondents. Three additional questions asked respondents for their own description of role identity. The body of the questionnaire was revised with the wording given by respondents. Nine interview sessions and several pilot studies further clarified test items.

Test-retest reliability, at a one-year interval was .93 or above for all sections of the test. Fifty test items were categorized as follows by research variables: (a) administrative responsibilities, (b) teaching responsibilities, (c) creative or scholarly activities, and (d) performing or scholarly activities. Items related to job responsibilities also asked respondents to rank their enjoyment of those responsibilities. Job responsibilities were analyzed according to the corresponding level of enjoyment. Five items assessed occupational role preference; an additional item asked respondents to identify their own preferred primary area of teaching expertise. The test was administered to 332 college music teachers that provided a sample of 277 usable questionnaires.
Results showed that, overall, college music teachers identified with a performance role rather than a teaching role, even with years of teaching experience. Teachers who most identified with a teaching role also showed high intrinsic satisfaction with administrative-teaching duties. While teachers who had public school teaching experience identified mostly with their teaching role, the majority of the sample preferred performance over that of teaching.

The Harris study adhered to the construct, insofar as it formed the basis of Harris’ use of occupational identity. Harris’ research referenced the constructs underlying assumptions and definitions of occupational identity applied in L’Roy’s study, but no concrete mention of the construct authors or their research was included in that analysis. Rather, the main focus of the Harris study was intrinsic career satisfaction and its correlation to a measure of occupational identity.

Cox (1994) investigated Arkansas music teachers and the role that influential persons played in participants’ professional socialization as educators and musicians during either pre-college, college or post college years with special focus on the interrelationships between gender and teaching specialization. The study was situated in previous research that found that the music educator role was ambivalent (Clinton, 1991; Harris, 1991; L’Roy, 1983; Roberts, 1990, 1993). A driving question was how, from whom, and during what stage of socialization was that ambivalence first detected. Consequently, the Cox study was the first in this line of research to see occupational identity in light of primary and secondary socialization experiences. Cox based her concept of occupational roles within the framework of symbolic interaction theory, citing the construct authors Becker and Carper (1977a) and Lortie (2002).
Informal interviews asking subjects for their memories about influential persons during childhood, college, and after their college experiences were used to construct the test, along with examples of tests from other areas of study. The researcher used response codes based on the theoretical framework of Berger and Luckman (1967) and other non-construct authors writing from the perspective of the social construction of knowledge and perceived reality. The questionnaire utilized categories of pre-college, college, and post-college years. Pilot participants were given a list of influential role responses under the headings of relatives, directors, teachers, instructors, administrators, and others (Cox, 1994). Raw frequency ratings of influential persons for both musician and teaching roles were totaled. Wilcoxon matched-pairs signed-rank test for significance was used to test the interrelationships between gender and specialization. The results of this study were based on 310 band, choral, and orchestra directors employed in public and private schools in Arkansas during 1992-1993.

The findings of this study were based on subjects’ memories of influential persons at varying stages of their lives. Results were mixed with regard to previous research. Contrary to the findings of L’Roy (1983) and Roberts (1990) this study found that music education instructors were as influential as private music teachers or college music directors, but did confirm previous findings that music teachers viewed themselves primarily as musicians and that college training failed to transform teachers into the occupational identity of music teacher. A follow-up study (Cox, 1997) using the same interview questions with a qualitative methodology gave similar results. In both studies mention of the construct was made in the literature review with little or no linkage to the results. However, results were related to previous studies based either
entirely or in part on the constructs of Pavalko, Becker and Carper, and Lortie.

Paul (1998) looked at the effect of peer teaching on the role development of preservice instrumental music education teachers. An assumption underlying this study was that a person’s degree of commitment to the role of teacher is associated to the ongoing development of teaching abilities. Paul was concerned primarily with teaching gestures, or those behaviors and attitudes that identify a person with a particular occupational group. Consequently, the measurement of a developing occupational identity was found in the actual practice of agreed-upon standards.

Paul looked qualitatively at the development of attitudes among three participants who had completed a two-year instrumental teaching laboratory intensive. Participants reviewed videotaped episodes of both their peer teaching experiences and semester student teaching. The questions asked of them were designed to measure growing professional attitudes toward band directing. These questions were based on previous research (L'Roy, 1983) and the four elements of identification with an occupational role (Becker & Carper, 1977a).

Rather than referring to the four elements of occupational identification in the analysis of his findings, Paul used Fuller’s scale of teacher concerns (1969) as a measure of commitment to the teaching role; the assumption being that teachers who were primarily interested with student learning and the learning environment more than about personal or professional welfare had a strong teaching role identification. Other aspects of the foundational construct, the five mechanisms, group expectations (other than the occupational peer group) (Becker & Carper, 1977b), principles of adult occupational socialization (Pavalko, 1971) or the quality of training experiences (Lortie,
2002) were not mentioned in this study or used in the discussion of results.

The final study that addressed the theories of the foundational constructs of Pavalko, Becker and Carper, and Lortie, and their description of occupational identity, but utilized additional theories to document the development of occupational identity was an investigation that looked at rural music teachers and the relationship between their professional socialization experiences and career satisfaction (Maltas, 2004). This study was unique in that it looked at socialization from the perspectives of three particular reference groups: (a) educational institutions where the language and gestures of an occupation are learned, (b) the community associated with a particular job, locale, or employer, and (c) the larger community of which the work place is a part.

The study was premised on the principles of occupational identity as defined by the foundational constructs, but emphasized the influence that individual reference groups had in defining acceptable gestures, attitudes, and behaviors particular to an occupation (Becker & Carper, 1977b; Lortie, 2002; Pavalko, 1971). In other words, that reference groups maintained and passed on to new members a body of knowledge for the novice to imitate. The degree to which a person accepted and adopted the behaviors and attitudes of the group indicated the level at which the individual desired to be a member of the group (Maltas, 2004). This assertion was based on the assumption that high career satisfaction was a product of salient professional and occupational socialization (Pavalko, 1971).

In this study, special consideration was given to rural music teachers and the impact that locale and culture, evidenced through reference group affiliations, would have on their career satisfaction. Career satisfaction was, in part, a reflection of
teachers’ commitment to a particular institution where a music teaching identity could be played out. Consequently, occupational socialization was characterized as an event whereby globalized loyalties to the profession of music education would be transferred to an affiliation with a particular school district (Maltas, 2004).

The researcher used a mixed-method design. A pilot questionnaire modeled after previous studies including L'Roy (1983) and Wolfgang (1990) was developed to measure the problems of the study and to see if the questionnaire would accurately measure the symbolic interaction component of the study (Maltas, 2004). Cronbach’s alpha was used to estimate the internal consistency of the questionnaire. Measures of reliability and central tendency were computed. Face validity was used to determine the appropriateness of the questions.

Organized into four sections: (a) demographics, (b) commitment to education, (c) reasons for accepting a particular job, and (d) sources of professional, personal and community support, the purpose of the test was to gather broad data and general trends, which would be further developed through semi-structured interviews. The qualitative portion of the study consisting of 90-minute phone interviews obtained from 10 participants was taken from themes identified from questionnaire data (Maltas, 2004).

The results of this study were expressed in frequencies. Discriminate analysis was used to uncover a predictive model of displeasure consistent with participants’ present job situations. The results of the discriminate analysis did not find any predictive pattern of career satisfaction. Qualitative interviews were used to isolate those factors that contributed to teacher socialization (Maltas, 2004).
The reported findings of this study stated that participants, while understanding the skills and responsibilities of music education, were at the same time not socialized into their respective school districts. Teachers interacted with members from among three social reference groups, (a) school administrators and staff, (b) music teacher colleagues, and (c) the community in which the school was located. The norms and values among these three reference groups were diverse. When conflicts arose or if there were considerable differences between these groups, teachers felt the need to substitute their own individual vision for that of one of the reference groups in order to achieve some level of career satisfaction. Ongoing frustrations of this nature often led to attrition.

Premised on L’Roy’s (1983) identification and use of the foundational constructs of Pavalko, Becker and Carper, and Lortie were a series of studies that used the assumptions of a symbolic interactionist view of occupational identity by reference to some or all of those four scholars. In addition to including some attributes of occupational identity, these studies employed other theories in an effort to uncover those aspects of professional training that would strengthen the development of an occupational identity. The tests used in these studies were in some cases drawn from identified previous literature, unidentified related literature, participants’ personal descriptions of their role identities, participants’ memories of childhood, or other theoretical identity frameworks from among the social sciences.

Reliability and validity procedures of the quantitative tests used in these studies to measure occupational identity varied widely. In some cases reliability and validity procedures were not mentioned. One study used test-retest reliability. Another study
used face validity to determine the appropriateness of the questionnaire prior to administration and item analysis on main study data as a measure of reliability. Data describing occupational identities were characterized in terms of relationships to other theories, or in degrees of strength or weakness. No studies in this group used factors in the construction of their test with which to measure occupational identity based on the construct, a construct implied by reference to L’Roy’s research (1983) either in the literature reviews or in the discussion of results.

The challenges addressed here are a lack of consistency in term definitions associated with occupational identity: (a) a wide variation in instrument reliability and validity, (b) variation in the sources used to create the instrument, and (c) a lack of consistency in the use of the original construct. In terms of this study, it was vital to consider all of these challenges in the construction of a meaningful, useful instrument. More recent research that has focused on occupational identity among music educators has also lacked consistency.

Recent Studies

Recent scholarship on the occupational identity of music educators has built on that of its predecessors, citing research either premised entirely or in part on the foundational constructs of Pavalko, Becker and Carper, and Lortie. In pursuing literature, it has become evident that the term identity has been used under many different guises, drawing from mixed perspectives from among the social sciences, while adding to the body of knowledge on which it was predicated.

In a qualitative cross-case analysis of four music education students, Prescesky
(1997) described the emergence of personally unique expressions of musician and teaching identities. The theoretical foundation of the study was premised on the empowerment of a self-identity (Knowles, Cole, & Presswood, 1994). Biographical data and the emergent interpretations of the researcher figured heavily into the interpretation of the development and merging of four participants’ personally-defined professional selves as musician or music educator. The researcher referred to previous research based on a sociological perspective of occupational identity (L’Roy, 1983; Lortie, 2002; Paul, 1996; Roberts, 1991a, 1991b, 1993) and identity research from a psychological perspective (Cooley, 1996; Sloboda & Howe, 1991) to triangulate research findings. The results of this study revealed that participants experienced conflict between musician and music teacher expressions of self that were not resolved during their professional training. The use of the term identity in this study referred to a self-identity reflective of personalized images of music teaching (Prescesky, 1997) rather than an occupational identity based on established norms and values of a profession.

Broyles (1997) described qualitatively at the possible effects that videotape analysis had on the role development of 12 music education majors enrolled at three universities in Oklahoma. Twenty public school supervisory teachers and eight university supervisors also participated in the study. Using three of the four elements of identification with an occupation (Becker & Carper, 1977a) and Fuller’s model of teacher concerns (1969), Broyles described the degree of strength of participants’ occupational role development. An assumption of this study was that role development would be enhanced by participants’ self-evaluation of their teaching experiences recorded on video tape.
An entry questionnaire was designed to gather data on background, concerns and expectations, personal attributes, as well as characteristics of the ideal teacher. An exit questionnaire contained some of the same inquiry categories in addition to participants’ reactions to their teaching experiences and videotaping procedures. Supervising teachers and university faculty also completed an additional exit questionnaire asking about any changes in student teachers’ attitudes and self-images that might have occurred as a result of their educational obligations. Each of the questionnaires varied in length, including multiple-choice responses, open-ended responses, and responses to demographic questions. There was no discussion on the construction of the questionnaires or how the four elements of occupational identification (Becker & Carper, 1977a) factored into them. The terms self-image and self-as-teacher (Broyles, 1997) were used rather than Fuller’s model of teacher concerns (1969) throughout the method section of the study. The results triangulated an interpretation of teacher role development based on Fuller (1969), with an interpretation of occupational identity based on the four elements of occupational identification (Becker & Carper, 1977a). This study used additional evaluative data obtained from participants’ supervisory teachers and from university faculty who triangulated students’ self-reported experiences and perceptions; however, these data were mostly in regard to videotape analysis. Results of the study showed that role development and occupational development increased.

Using a grounded theory methodology, Bernard (2004) investigated how six elementary music teachers found personal meaning in the formulation of both their music teaching and music performing identities. The results of dominant research on
the topic of identity from a psychological perspective and occupational identity from a sociological one were comparatively considered and then rejected in favor of the formulation of an a priori divergent perspective of identity based on the researcher’s personal experience (Bernard, 2004). Implicit in this viewpoint was the recognition that individuals are the sole arbiter of their developing self-constructed identities, and that their decision making in this regard is without outside influences. The dominant result in this study was that participants, when prompted to talk about their work, spoke of their performing experiences rather than their teaching experiences.

Dust (2006) investigated qualitatively how six secondary music teachers, who had formally been professional musicians, negotiated and reconciled both their performing and teaching identities. The researcher drew from a literature review representing diverse definitions of the terms identity such as, occupational identity and self-identity as the justification for the study, comparing the results of these studies irrespective of the theories and assumptions on which these terms were defined.

The study relied on a definition of self-concept by Gergen (1971) that described identity as the compilation of a person’s self-reflections, interpretations, and assigned meanings. The researcher triangulated the results with previous research based on the assumptions of a sociological definition of occupational identity (Clinton, 1991; Cox, 1999), and based on Huberman’s theory of teacher life cycles (1989) and grounded theory (Bernard 2004).

A common thread among participants’ personal sense of self-identity was a feeling of stress, characterized as conflict, in their efforts toward balancing the title of performer with that of teacher. The researcher suggested that the most salient strategy
that participants used to manage the conflicts they experienced in maintaining both their performing and teaching identities was the unequal amalgamation of both self-concepts. Most participants felt that their predominant self-concept was that of a performing musician. It was this self-concept that sustained their interest in secondary school teaching.

Isbell (2006) conducted a quantitative investigation of the socialization and occupational identity of preservice music education majors. The purpose of the study was to investigate occupational identity through the influences that primary and secondary socialization experiences wield identity development. A secondary purpose was to determine if the quality of one’s occupational identity might influence career confidence.

Tests from a variety of sources (Broyles, 1997; Cox, 1994; L’Roy, 1983; Schonauer, 2002) were used to gather a pool of possible test items. Items referring to teaching concerns were drawn from literature based on Fuller's model of teacher concerns (1969). The items were arranged according to the construct they represented resulting in six subsections of the test: (a) socialization experiences before college, (b) socialization experiences during college, (c) occupational identity, (d) teaching concerns, (e) career confidence, and (f) demographic information. When the categorization of an item was in question, the researcher and another person conferred about the discrepancy until an agreement as to which subsection of the test the item referred to was reached. Face validity assessments were used to avoid redundancy or to improve the psychometric quality of the test. At the end of the test participants were asked to participate voluntarily by responding to additional questions by email. The pilot
test consisted of 128 items, which required about 15 minutes to complete and was sent to 39 participants. Prior to the collection of data, 138 variables was created in preparation for incoming data that was subjected to labeling and coding procedures (Isbell, 2006), and were then implemented in the main study without alterations.

Using an alpha level of .01, a number of statistical procedures was performed on the main study data collected from 578 participants including descriptive statistics and correlation and regression statistics showing the relationships between both the perceived influences from significant events or persons and occupational identity, and secondly between occupational identity and career confidence. Multivariate analyses were used to investigate group differences in occupational identity. Using no a priori assumptions about teacher identity, principal factor analysis was applied to main study data in order to identify any underlying factors defining occupational identity. Three factors were identified from among main study data; a music teaching occupational identity inferred from others, a music teaching occupational identity personally perceived, and a composite musician occupational identity that was both inferred from others and personally perceived. No factor accounted for more than 10% of the variance (Isbell, 2006).

The results of this study indicated that preservice music teachers' occupational identity represented two aspects: that of musician and of teacher. Furthermore, music teacher identity was found to be a composite of participants’ own assessment of their occupational identity and the identity they had inferred from others. Isbell labeled these as “teacher-self identity” and “teacher-other identity” (Isbell, 2006, p. 153). In other words, participants’ own definition of themselves as teachers was distinct from
perceptions of how others might view their occupational identity. An assumption of symbolic interaction holds that a person’s adoption of how others define them occupationally is a fundamental component of the development of occupational identity. Isbell suggested that perhaps this was the case in certain types of identity construction. This finding, however, could also indicate the absence of the development of occupational identity as defined by the construct, which was the case in previous studies based either all or in part on the construct (L’Roy, 1983).

The participants of this study tended to consider their preservice experiences as extremely positive and did not feel stigmatized by their music education status as compared with a music performance one, which runs contrary to previous research (L’Roy, 1983; Roberts, 1990). Participants also reported that interacting with music performance majors and performing in ensembles exerted a beneficial influence on their decision to remain in their chosen degree plan.

Taken together as a whole, Isbell found that the music teaching occupational identity of participants was favorably impacted due to their degree plan experiences so much so that it mitigated their allegiance to their lay notions of the profession acquired in childhood (Isbell, 2006). Isbell hypothesized that a difference of research methods, i.e., qualitative-descriptive methods as opposed to a quantitative method of inquiry might have accounted for the discrepancy of findings between his study and those of L’Roy (1983) and Roberts (1990).

The discrepancy might also be a difference in ideology and assumptions with regard to the development of occupational identity. L’Roy (1983) and Roberts (1990) drew from an a priori sociological understanding of the original construct of occupational
identity, while Isbell did not. Furthermore, results were interpreted using parts of the sociological construct combined with other psychologically based theories on identity (Davidson, Howe, Moore, & Sloboda, 1996) where the relationship between music and an individual was described in terms of how the personal self rather than an occupational self was impacted (Froehlich, 2007). The results of stepwise regression analysis between the researcher’s definition of occupational identity and career confidence resulted in a single factor, the strength of participants’ self-identity as a teacher. Teacher identity as inferred from others was not positively related with career confidence.

In a collective case study, Brewer (2009) qualitatively investigated conceptions of effective teaching in conjunction with role identity among five preservice music teachers. An assumption of this study was that an investigation of music teacher role identity could enhance preservice teachers’ understanding of their personal beliefs about effective teaching. An identified major source of participants’ beliefs about teaching was the hours participants spent in the classroom as primary school children, a collective experience that Lortie (2002) referred to as the “apprenticeship of observation.” (p. 61) A question that Brewer asked was whether teacher educators should encourage preservice teachers to examine the contents of their apprenticeship, ignore it, or find an interim strategy.

Data were obtained through interviews, observations, and artifacts. From the analysis of findings Brewer constructed an “integrated model of role-identity in music teaching” (Brewer, 2009, p. 73) declaring that concepts of effective teaching and the development of music teacher role-identity were possibly inseparable. His conclusion
was based on the implication that people who want to become music teachers want to be effective in their teaching.

Brewer’s model described role-identity as the intersection among three types of skills and knowledge: teaching, musical, and personal. He further stipulated that this model, representative of individuals’ personal perceptions of their abilities, also interacted with other persons’ personal perception of that individual’s skill and knowledge base. Consequently, Brewer’s dialectic model of role-identity outlines three major components: personal perceptions of self, other’s perceptions of an individual’s role-identity, and the interaction between these concepts. The interactions between personal perceptions of identity and those of significant others had the potential to legitimize role-identities in music teaching (Brewer, 2009).

Brewer clearly outlined the perspective from which he defined the term identity, stating that past usage of the terms identity and role was used ambiguously, and borrowed from a combination of psychological and sociological disciplines (Brewer, 2009). Further, Brewer’s role-identity was reflective of the dialect nature of a sociologically defined occupational identity, in that it recognized identity as a process constructed through interpersonal interactions. In the summarized conclusions however, he situated an integrated model of role-identity and effective teaching within a body of literature that was reflective of differing etymological perspectives and theoretical assumptions with regard to the type of identity development he proposed.

A more recent study (Wagoner, 2011) investigated music educators at various stages in their careers, from preservice to in-service, by developing a measurement instrument designed to quantify teacher identity and its effects on effective teaching and
teacher retention. A researcher-developed online questionnaire, the Music Teacher Identity Scale (MTIS) was used to collect data using an online survey software program. The content of the questionnaire was based on the researcher’s review of both psychological and sociological literature wherein a definition of occupational identity was selected by the researcher from among several constructs found in the literature. The two constructs used were music teacher self-efficacy and music teacher commitment (Wagoner, 2011), and did not purport to represent the construct of occupational identification as described in the current study.

Summary

Initial identity research in music education has been drawn from scholarship on the sociology of work or occupation. After seminal research on the occupational identity of music teachers (L’Roy, 1983), only a few mixed-method studies continued in this line of inquiry as did two qualitative studies on labeling perspective (Roberts, 1991a, 1991b, 1991c; Wolfgang, 1990). More recent literature on music teacher identity has been expansive, encompassing many different perspectives and methodologies, but at the same time predicated upon previous occupational identity research faithful to the original construct first investigated by L’Roy (1983). A critical analysis of this literature has shown that the term identity has been used under many different guises, sometimes without consideration of the construct itself or the sociological assumptions from which occupational identity was derived. While multiple perspectives can be a hallmark of sociological inquiry (Froehlich, 2007), and all of these various research directions might be useful for particular purposes, as a whole, the terms identity and occupational
identity employed in this particular body of research have become used interchangeably.

The ambiguity of terminology might be one explanation for why research findings describing the occupational identification of music educators were found to be mixed. This also might be indicative of the reliability, validity, and power with which questionnaire instruments were able to measure what they were designed to measure. No one test in this line of research investigated the entire construct. Also no test included factor analysis of initial test construction as well as before administration in its final form. In most cases the tests that were used were based on previous research that measured occupational identity regardless of the researchers’ implied definition of identity and its related assumptions. In studies that used researcher-designed instruments, the entire construct was not used or measured.

Research addressing the development of occupational identity among music teachers has gone on a rather circuitous path that might have convoluted the issue rather than clarifying it. While this research has been important in its own right, the research has been mixed as to whether or not preservice music teachers develop occupational identities as a consequence of their professional training. This study sought to clarify the assessment of occupational identity among preservice music teachers by re-presenting a particular construct based on sociological scholarship and its initial application in the occupational development of music teachers. It is hoped the instrument developed through this study will help clarify this issue.
Test Development

As the purpose of this study was to develop an instrument to measure occupational identity among music education undergraduate students, it was vital to investigate the literature on test development. This section presents that literature which was crucial in the design and development of the current instrument.

Measurement instruments provide objective data from which educational decisions are based (Hopkins, 1998). In music education, the measurement of musical behaviors, skills, attributes, and attitudes has become a major part of educational research, advancing the profession’s knowledge about theoretical constructs of teaching and learning (Froehlich & Campbell, 2013). The first use of quantitative research methods in music education have been traced to Seashore’s (1966-1949) development of the Seashore Test of Musical Ability (Froehlich & Campbell, 2013). Quantitative research in music education has described the differences and communalities from among large groups of people (Froehlich & Campbell, 2013). Among the variety of measurement instruments typically used in music education to elicit informative data are surveys or questionnaires, adjudication rubrics, tests, and observation forms (Froehlich & Campbell, 2013).

Despite the different types of measurement instruments, there are several key components that are integral to the design of valid and reliable assessment tools (Rohwer, 2013). The components most relevant to the current study were (a) item generation, (b) test validity, and (c) test reliability. The following describes both a brief discussion of each test development component and an analysis of how these components were incorporated into the development of researcher-designed
measurement instruments in music education research. For the purposes of clarity, the term test is intended to mean any measurement instrument reviewed in this analysis.

Forty research studies were selected from among 11 peer-reviewed journals, including 30 studies that developed a questionnaire for a particular research purpose, five studies that developed adjudication rubrics, and five test development studies that investigated the reliability and validity of a particular measurement instrument. The studies were reviewed for procedures related to item generation, test validity, and test reliability toward the development of a measurement instrument. The results of this analysis guided the development of the questionnaire used in the current study. These studies are listed in Appendix A.

Results of Research Analysis

*Item Generation*

There are several possible sources from which researchers can compile questionnaire items. Some sources typically used in educational research are tests in previous research studies, and content from participant interviews and/or open-ended response questionnaires (Fraenkel & Wallen, 2011). Additional issues intrinsic to the initial item generation process are administration format, i.e., paper and pencil or an electronic instrument, and the time needed for participants to complete the assessment (Fraenkel & Wallen, 2011).

The studies reviewed in this analysis represented the development of 30 questionnaires on various research topics, five adjudication rubrics, and five studies that tested the construct validity of a measurement instrument. Among the 40 studies
reviewed for item generation, previous research guided the development of the measurement instruments used in each study. Seventeen studies specifically borrowed items from existing tests to write an instrument, eight studies used previous research in order to construct participant interviews with which to generate test items, and one study distributed an open-ended questionnaire and included interviews for the purposes of gathering content that would later be used to write test questions.

Test administration format was mentioned in 31 of the reviewed studies. Twenty-five studies developed paper and pencil measurement tools and six studies designed tests using an online survey website. Twelve studies reported the time needed for test completion. All of these tests required between eight and 20 minutes to complete.

Test Validity

A measurement instrument is considered a valid measure when it is found to be representative of the content and/or objectives and abilities on which the research investigation is focused (Hopkins, 1998). Depending on the research topic, there are several types of test validity procedures used in music education research from which the researcher can validate his or her instrument. Common types of test validity procedures include face validity, content validity, criterion-related validity, and construct validity. Other issues intrinsic to the determination of test validity include field tests and the use of existing tests.

Field tests give researchers an opportunity to administer their measurement instrument to a small sample of participants. The purpose of the field test is to refine and adapt the language, word usage, and vocabulary of the measurement instrument
for a particular target population. These refinements are achieved through informal conversations that occur between researcher and field test participants (Froehlich & Campbell, 2013).

It is ideal for researchers using existing tests to document descriptive information about an existing test, including any model numbers, publication information, and the reliability and validity of the instrument within the context of past administrations of the test (Huck, 2011). Researchers can also include their own evidence of reliability and validity in their studies (Froehlich & Campbell, 2013; Huck, 2011).

Among the 40 studies reviewed for test validity, 12 researchers used at least one type of validity, with content validity being the most preferred validity procedure. Fourteen studies included additional validity procedures, specifically factor analysis (seven studies), criterion validity (three studies) and concurrent validity (four studies). In the 17 cases where researchers borrowed an existing test and adapted it for use, only 8 of these pre-existing tests were validated before re-administration, and three studies cited validity information from previous administrations of the test in other research. Two studies using existing tests included a field test in their research method. Eleven studies did not document validity procedures.

Test Reliability

A significant contribution to the validity of a measurement instrument is its estimate of reliability (Froehlich & Campbell, 2013). A measurement instrument can be considered reliable when repeated administrations involving different numbers of participants on separate occasions, during a specified time period yield the same results
(Froehlich & Campbell, 2013). A pilot study is primarily used to collect data for an estimate of test reliability, and thus, is considered to be a fundamental element of research protocol (Froehlich & Campbell, 2013; Rohwer, 2013). A pilot study is secondarily considered as a trial run of the measurement instrument procedures on a smaller scale than the proposed main study. Design errors and unforeseen problems that might have a negative impact on the administration of the test or on test results in the main study have a better chance of being averted when pilot tests are included in the research design of a study (Fraenkel & Wallen, 2011).

Depending on the research topic, there are several types of test reliability procedures used in music education research from which researchers can validate their instruments. Types of test reliability include test-retest reliability, parallel forms reliability, split-half reliability, inter-judge reliability, and measures of internal consistency. Other issues that might have an impact on estimates of reliability include sample size, the time it might take to complete the test, and the number of items included in the test. Sometimes statistical procedures are applied to pilot data to determine if the numbers of items in a given test are sufficient for future statistical analyses.

Among the 40 studies reviewed, 31 included reliability estimates in the development of their measurement instruments. A measure of internal consistency (alpha) was used in 28 cases, either as the primary estimate of reliability or in conjunction with Interjudge reliability (two performance rubrics) and with test re-test reliability (three test development studies and three questionnaire studies). One study relied on reliability estimates from past administrations of the test. Another study used main study data to document the reliability of a questionnaire. Seven studies developing
questionnaires did not document reliability procedures.

Twelve studies piloted their test and 11 studies documented descriptive information (mean, standard deviation, item analyses) for each test item. Measurement instruments ranged in length of from six to 100 items taking between 8 and 30 minutes to complete. The determination of an appropriate sample size in relation to test length was computed in six of the 40 studies reviewed. Three studies (one adjudication rubric and two questionnaire studies) used the Keyser-Meyer-Olkin Measure of Sampling Adequacy in order to determine sampling adequacy was at suggested ratios for future statistical analyses. Three other studies (Biasutti, 2010; Gumm, 2011; Smith & Barnes, 2007) used participant-to-test variable ratios (Asmus, 1989) ranging from 3:1, 1:1, and 3.8:1 respectively to determine sampling adequacy. Asmus (1989) concluded that a minimum ratio of participants to variables was 3:1. Ratios of 5:1 or higher were preferable.

Discussion

Experts in education and music education research have affirmed certain procedures for the construction of measurement instruments. Forty research studies were reviewed for item generation, test validity, and test reliability in the development of measurement instruments for assessment in music education.

Just under half of the researchers (43%) favored the use of pre-existing tests for generating test items in their own studies. More than three-quarters (76%) had testing formats favoring pencil and paper tests of between eight and 20 minutes to complete.

With regard to validity procedures, 30% all of the studies documented types of
validity that were appropriate to the purpose of their inquiry. The test development 

studies, in particular, all used multiple forms of validity assessments. Over all, there was 

scant usage of field-testing procedures; those procedures conducted having occurred in 

one test development study and in the development of a questionnaire. 

Reliability estimates were computed in many cases (78%) with an alpha measure 

of internal consistency reported most often over all, and were used at times in 

conjunction with inter-judge reliability and test re-test reliability estimates. The 

determination of sample size was reported using Kaiser-Meyer-Olkin for factor analysis 

studies and/or participant-to-item ratios (Asmus, 1989). 

There might be several reasons why some test development procedures were 

not reported in individual cases, with restrictions of publication, cost and time being 

possible causes. This discussion, however, was limited to describing what was reported 

without speculation as to why a procedure was omitted. Nonetheless, this analysis 

provided critical guidance toward the development of the questionnaire used in the 

current study.
CHAPTER 3

METHODOLOGY

The purpose of this study, which was grounded in the foundational works of Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c), and Lortie (1959, 2002), was to contribute to the field of occupational identity by developing a researcher-designed measurement tool for occupational identity in music education. This tool was focused solely on preservice music educators and their perceptions and demonstrable behaviors associated with the changes that might have occurred over the course of their professional preparation. The second part of the dialectic nature of occupational identity, perceptions of others, was not part of the development of this initial tool. The following research questions were addressed:

1. What components are fundamental to occupational identity?

2. What is the reliability estimate of the Music Educator Scale for Occupational Identification (MESOI)?

This chapter outlines the research design and methodology of this study including research participants, sampling procedures, research design, main study measurement instrument, validity, reliability, and main study data analysis.

Research Participants for the Main Study

Participants were solicited from among music education undergraduates enrolled in colleges and universities in the United States. While the exact size of the population could not be determined, recent enrollment figures published by the National Center for Educational Statistics (2012) listed the total number of music education majors as \( N = 3780 \), including 1561 male students and 2219 female students. Because the invitation to
participate in this study was forwarded to students from their college professors, the exact number of solicitations was undetermined. Of the students who consented to participate in this study \((n = 263)\), 22 did not continue past the consent form. An additional 26 students answered some 16 background questions but then failed to complete the questionnaire.

Background data that was obtained was used to describe the participants that did not complete the questionnaire \((n = 26)\). Dropout participants reported from institutions in the northeast \((n = 11)\) and south \((n = 5)\) regions of the United States. These dropout participants were 19 female and seven male between the ages of 19 and 22 years of age. Dropout participants were enrolled as full-time students, seven of whom also held part-time jobs teaching children \((n = 21)\). Four dropout participants had not yet taught music to children. Dropout participants were evenly spread across year in school, and reported GPA averages of between 3.0 and 4.0. Twelve dropout participants reported having a scholarship of some kind. Music specializations reflected the same ratios as participants who had completed the questionnaire, with band as the predominant specialization \((n = 11)\), choral \((n = 11)\), elementary, \((n = 6)\), and strings \((n = 4)\). Most of the sample \((n = 23)\) had completed introductory and methods music education courses \((n = 25)\) and were engaged in early field \((n = 14)\). There were no dropout participants engaged in student teaching experiences. Responses describing professional membership with either local or national music education organization revealed that 19 dropout participants were current members with either local or national music education organizations.

The majority of the participants who completed the questionnaire reported from
institutions in the southeast region of the United States (46%, \(n = 99\)) and the Midwest region (34%, \(n = 73\)). Participants were 137 female and 78 male undergraduate students, 77% of whom were between the ages of 19 and 22 years of age. All but 2 participants were enrolled as full-time students, 98 of whom held part-time jobs, mostly teaching in after school music programs or private music lessons. Forty-eight participants were student teaching, and 41 participants had never taught music to children.

The mean year enrolled in school was \((M = 3.40, SD = 1.56)\) and GPA scores were reported (60%, \(n = 130\)) within a 3.50 to 4.0 range \((M = 3.51, SD = .68)\). Approximately 86% \((n = 184)\) of the sample received some type of scholarship, 38% \((n = 126)\) of which were non-music related. Music specializations \((n = 301)\) were reflective of percentages found in previous research (L’Roy, 1983) describing band as the predominant specialization (59%, \(n = 126\)), followed by choral (35%, \(n = 75\)), elementary (24%, \(n = 50\)) and strings (15%, \(n = 32\)). Most of the sample (76%, \(n = 198\)) had completed introductory and methods music education courses \((n = 163)\) and were engaged in early field \((n = 164)\) or student teaching experiences \((n = 16)\). Responses describing professional membership with either local or national music education organizations \((n = 215)\) revealed that 79% \((n = 127)\) were current members. Seventy-nine percent \((n = 170)\) reported membership with either local or national music education organizations.

The educational status of participants’ parents was predominantly college level. Participants fathers educational attainment was reported as 31% undergraduate degrees \((n = 67)\) and 32% advanced degrees \((n = 68)\). Participants’ mothers had
completed an undergraduate degree (42%, \( n = 90 \)), but when compared with participants’ fathers, did not continue their education with the same frequency (25%, \( n = 54 \)). Approximately 20% (\( n = 46 \)) of the sample reported family members as either being currently employed or having at one time, been employed as a school music teacher.

**Sampling Procedures**

The researcher utilized a professional music organization, College Music Society (CMS), to disseminate the questionnaire. CMS offers a service to graduate students by sending out approved research opportunities to music education faculty who are members of the organization. There was no recruitment on the part of the College Music Society. The researcher provided CMS with a cover letter addressed to music education faculty describing the study and a solicitation of their assistance. A letter to students asking their participation and the link to the questionnaire were also included (see Appendix B). CMS emailed these documents to 2712 music education faculty listed in their membership directory.

Faculty members were asked to forward this research opportunity, described in the letter of invitation to participate, to their undergraduate music education students. The email to students included a brief description of the study, a link to the questionnaire, and included the researcher’s contact information. Students interested in participating in the study were invited to click on the link provided that took them to a consent form and the questionnaire. A reminder email was sent to music education faculty approximately two weeks after the initial communication.

Students were offered an incentive to participate. Participants who completed the
questionnaire had the opportunity to participate in a random drawing for an ITunes gift card in the amount of $20.00. Fifty gift cards were made available.

Research Design

The research design for this study was a descriptive study investigating the development of a questionnaire using survey research techniques and correlational statistics. The purpose of this design was to determine the reliability of a researcher-designed questionnaire and to identify factors within the instrument.

Previous research (Becker & Carper, 1977a, 1977b, 1977c) theoretically analyzed occupational identity as being a composite of four elements. Five mechanisms related to behavioral or attitudinal participatory changes intrinsically operated in three of these four elements, and under the influence of defined social group norms and expectations. Consequently an exploratory approach was implemented in this study, first to identify whether the four elements were distinct components, second to ascertain whether the five mechanisms formed additional components or if they loaded with particular elements, and third to determine if group expectations formed an additional component.

Four theoretical components as defined by Becker and Carper (1977a) and listed here in their original wording, were considered: (a) occupational title and ideology, (b) commitment to task, (c) commitment to specific organizations or institutions; and (d) significance within society at large. The five mechanisms hypothesized to be operative within three of the four elements, i.e., excluding the element dealing with society at large, and related to behavioral or attitudinal changes were (a) the development of
problem interest or a growing pride in learning new skills, thought to be operative in a commitment to task, (b) the acquisition of a professional ideology, thought to be operative in a commitment to title and ideology, (c) a sense of personal or tangible investment in one’s chosen occupation, thought to be operative in a commitment to task, (d) the internalization of motives, thought to be operative in a commitment to organizations or institutions, and (e) sponsorship, thought to be operative in a commitment to title and ideology. The expressed expectations representative of three social groups, (the family group, the occupational group, and that of the broader social culture) were hypothesized by Becker and Carper (1977b) to influence the pursuance occupational choices.

Main Study Measurement Instrument

The Music Educator Scale for Occupational Identification (MESOI), a researcher-designed online measurement instrument, was used to assess the level of occupational identification among preservice music teachers at various stages in their professional preparation. Using a 5-point Likert scale, participants were asked to indicate their strength of agreement by electronically choosing agreement responses from a high score of 5 (strongly agree) to a low score of 1 (strongly disagree) for 106 questions, 23 of which were reverse scored. Nominal data for 16 demographic questions completed the 122-item questionnaire. The highest possible total score of the MESOI was 530 points, which indicated a high level of occupational identification. The lowest possible score was 106, which indicated a low level of occupational identification. The number of questions arranged in each category according to their original positions
in previous research (Becker & Carper, 1977a, 1977b, 1977c) were: (a) 16 demographic questions, (b) 16 occupational title/ideology questions, (c) 10 commitment to task questions, (d) 10 commitment to specific organizations or institutions questions, (e) 10 significance within society at large questions, (f) 10 development of problem interest or pride in learning new skills questions, (g) 10 acquisition of a professional ideology questions, (h) 10 investment questions, (i) 10 internalization of motives questions, (j) 10 sponsorship questions, and (k) 10 group expectation questions.

*Test Development*

Prior to the implementation of the measurement instrument, the details of this study were submitted to and approved by the University of North Texas Internal Review Board (see Appendix C). Main study participants completed the researcher-designed electronic questionnaire (MESOI) using an online survey protocol hosted by Qualtrics Labs, Inc., version 12,018 (Qualtrics Labs Inc., Provo, UT). Using an online, web-based questionnaire offered the researcher several advantages. It allowed the researcher to: (a) offer participants a survey experience in a format that was convenient and accessible, (b) assess participants’ start and completion days and times, (c) know exactly how long it took individual participants' to complete the questionnaire, (d) produce reports of nominally scored demographic data using graphs, percentages, and frequencies, and (e) the researcher was able to export intervallic data directly into the statistical software package IBM SPSS for windows (version 22) for further analysis. Participants were instructed to begin and complete the questionnaire any time within a two-week time period. A reminder email was sent to music education faculty
approximately two weeks after the initial communication. The questionnaire took approximately 20-30 minutes to complete (Range = 8 – 90, $M = 24$, $SD = 15.9$).

**Item Generation**

The Music Educator Scale for Occupational Identification (MESOI) was developed from an initial pool of 525 possible items gleaned primarily from previous research by authors Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c), and Lortie (1959, 2002), from other literature based on these authors, and finally from two additional tests, the Columbia Questionnaire (Huntington, 1957) and the Wisconsin Significant Other Battery (Haller, Woelfel & Fink, 1969). These two additional questionnaires had been used in previous research from L'Roy (1983) and Cox (1994) to generate items or interview questions. The current study used these two additional tests to generate items for under-researched parts of the foundational construct that required additional questions.

The main premise underlying the test development was to create a questionnaire as representative of the construct as possible that could still be completed in 15 to 20 minutes. There were many matrix-type questions in this initial collection of items. Since each of the sub-questions included in a matrix item would, if retained, be converted to Likert answer responses, each sub-question was counted as an individual item, which is why this initial collection of items was large.

These initial questions were collected in their original wording with a great deal of intended redundancy. The researcher was interested in reviewing redundancies, looking at varied ways of asking a particular question and then deciding on a particular wording
that would produce the best-targeted response. Additionally, a portion of the questions addressed a variety of occupations in addition to music education or music teaching. Another group of questions in the item pool had been used in previous qualitative research as interview prompts. Finally, there were some questions in this initial pool of possible items that were not relevant to this study.

A revision and reduction of the item pool resulted in 338 remaining items. Revisions consisted of rewriting 49 of the questions for an undergraduate music education teacher population. Redundancies were retained and the answer responses for all questions were kept in their original form. Thirty-five questions that could not be adapted to this particular group or were not relevant were removed.

A subsequent revision of the MESOI resulted in 127 items. Revisions in this phase of development included the consolidation and or/removal of 176 redundant items, including those items that focused primarily on musical and educational experiences prior to entrance into a college music education degree program. The answer responses of the items were still representative of nominal, ordinal, and intervallic data. It was this version of the MESOI that was used for the first content validity phase of test development. The MESOI was then prepared for the pilot study.

The pilot version of the MESOI was an online questionnaire that had been further refined so that a Likert answer response could be used to gather intervallic data for each item. Because test length was a concern of the second content validity panel, 20 questions were re-written in an effort to consolidate similar items while at the same time preserving the contextual integrity of the questionnaire. One additional item was removed from the questionnaire. This revision reduced the number of items to 80.
Eighty questions were arranged by the researcher into categories found in the literature and listed in their original wording as defined by Becker and Carper (1977a, 1977b, 1977c). In the current study, no assumptions were made about item arrangement; rather the researcher simply relied on the practices of past studies, specifically how other researchers categorized or described specific items or the topics from which items were generated. The title of each category was taken directly from the Becker and Carper (1977a, 1977b, 1977c).

The number of questions in each category were: (a) 14 demographic questions, (b) 18 occupational title and ideology questions, (c) seven commitment to task questions, (d) six commitment to specific organizations or institutions questions, (e) six significance within society at large questions, (f) two development of problem interest or pride in learning new skills questions, (g) eight acquisition of a professional ideology questions, (h) three investment questions, (i) five internalization of motives questions, (j) four sponsorship questions, and (k) seven group expectation questions. Any references to these categories were not included in participants’ online version of the MESOI.

Sixty-six items (with 5-point Likert scale answer responses ranging from strongly agree (5 points) to strongly disagree (1 point) and 14 demographic, nominally scored questions) were included in the pilot questionnaire. Eleven questions were reverse scored. Four questions were removed in order to improve the reliability estimate of the instrument, which brought the final pilot version of the MESOI to 62 items and 14 demographic questions for a total of 76 items.
In the literature, field tests were used in some studies to collect qualitative data with which to construct interview questions or items for measurement instruments. In this study a preliminary field test of the paper version of the questionnaire and a second field test of the online version of the questionnaire were conducted. Field test participants were two female (junior and senior) and three male (two sophomore and one junior) undergraduate music education majors.

The primary purpose of the first field test was to assure that the language used to describe the educational experiences of music teachers at various stages in their careers that existed in the previous research was understandable to the current population of preservice music teachers. Suggestions given by seven participants included word usage, i.e., using the word colleagues, in place of classmates, using the term cooperating teacher instead of supervising teacher, and using the phrase student teaching instead of student teaching practicum. Other changes included replacing the words used to designate participants’ level of educational preparation i.e., freshman, sophomore, junior and senior” to 1st, 2nd, 3rd, 4th, and 5+ years, and including the word guardian when referring to parents, either in a particular question or in the answer responses of a question.

The focus of the second field test was both to review the readability of the text and to assess technical or procedural issues related to taking an online questionnaire. Since the items of this online version of the test had also been converted to a Likert scale with 5-answer responses, participants were asked to comment on wording and terminology added during the previous field test. Five participants suggested that the
demographic questions be moved to the beginning of the questionnaire. No changes were recommended either in terms of language usage or about the electronic format of the test. Consequently, no further changes were made to the questionnaire.

Validity

*Paper Version of the MESOI*

Because much of the research reviewed in this study was qualitative in design, an initial version of the Music Educators Scale for Occupational Identification (MESOI) consisting of 127 items gathered from the literature was preserved in its original form, adding changes only to address an undergraduate preservice music education teacher population. The answer responses of these qualitative items were representative of mostly nominal or descriptive text data. The rationale behind this phase of test development was to construct a questionnaire that was as representative as possible of the literature in terms of the questions as well as the answer responses. This version of the questionnaire was sent to four experts in the field of music education, specifically selected for their scholarly contributions to the topic of occupational identity in music education. The panel was also sent a short summary of previous research defining occupational identification that included descriptions of the theoretical *a priori* categories that were used to group questions.

All four panel members wrote their dissertations on the topic of occupational identity, and had acknowledged previous research in their documents, especially that of Becker and Carper (1977a), Lortie (1959, 2002) and Pavalko (1971), and had used some or parts of the sociological theories investigated by these researchers it in their
own studies. One expert was a dean of a music school in a large mid-western university. Another expert was on the music education faculty at a university in the northeast. The third expert had written prodigiously on the topic of occupational identity in musicians and music educators and had hosted international research symposia on the topic. The fourth expert wrote seminal research in the field of music education and was a cited author on this topic.

Experts were given descriptions of the four elements of occupational identification, the five mechanisms of change and the social groups where these mechanisms were thought to be operative. Experts were asked to evaluate the questionnaire for content validity by noting the clarity, relevancy, redundancy, and rationality of each item. The experts were also asked if any questions were biased or leading and if there was any content that might not be understandable to preservice music teachers. Based on the panel’s recommendations, the paper version of the questionnaire was revised for content. Twenty matrix questions containing several sub-questions were consolidated into fewer questions one questions was removed. All remaining items were then rewritten in such a way as to be answered using Likert scale answer responses. The resulting 80-item questionnaire was converted to an electronic format using an online survey protocol hosted by Qualtrics Labs, Inc., version 12,018 (Qualtrics Labs Inc., Provo, UT).

**Online Version of the MESOI**

The electronic version of the MESOI was conducted to review the presentation of the content of the questionnaire including font size, the order and categorization of the
questions, and the response format. The second content validity panel was comprised of three additional experts in the field of music education who had written extensively on music teacher identities, and also either acknowledged the previous sociological research on occupational identities or used part of it in their research. One expert’s research interests were about the experiences of music teachers in rural areas of the United States, focusing on how both macro and micro social communities contributed to the developing occupational identities of school music teachers. Another expert had been interested in the ambivalence of music teacher occupational role development. The third expert had written articles on the occupational development of music educators from a sociological point of view.

This second panel was sent the same short summary of previous research on occupational identity that included descriptions of the theoretical *a priori* categories used in previous literature. They were also sent the link to the online version of the questionnaire along with a word-format document of the test. The purpose of sending the word-format of the test was to provide judges with the *a priori* categories under which the test items were organized. These categories were not visible in the online version of the test that participants would see. The experts needed this additional information with which to complete their assessment of the questionnaire.

The specific purpose of the panel was to address: (a) the online layout of the questionnaire, (b) the organization of questions under each specific category, and (c) the content and actual positioning of the demographic questions. Toward this purpose, specific questions included: (a) the online layout of the questionnaire including the spacing of questions, number of questions per page, the ordering of questions, and
whether some questions should be grouped differently, (b) if the font and font size contributed positively to the overall layout and readability of the questionnaire, and (c) if a better response format than the Likert option used would improve the questionnaire.

The experts were also asked about the questions listed under each of the categories (title/ideology, commitment to task, commitment to organization or institution, social standing/position, investment, problem interest/pride in new skills, ideology, internalization of motives, sponsorship, group expectations). Specific questions were: (a) if the questions under each category were summed separately as a subsection of the questionnaire, which items would not represent the content suggested by the category name and description, (b) which questions were needed to represent content in each of these categories; (c) which questions in each category should be reordered to reduce response set or bias, (d) were there biased or leading wording in any of the items, and (e) which professional terms or words would preservice music teachers not understand or misinterpret? Finally, experts were asked about the position of the demographic questions and whether there were irrelevant questions or questions that should be added.

Two experts thought that the questionnaire was too long. The decision was made, however, to let the reliability phase of the pilot study determine if items needed to be removed from the scale rather than to decide at this point which items should be removed. This decision was also supported by the fact that, in spite of length, pilot participants were able to complete the questionnaire in an average of 15 minutes (Range = 5 - 20, $M = 15.3$, $SD = 3.8$).

Two items were thought to be grammatically awkward. The first item “How
people define my job title is unimportant to me as long as I know what my job title is,” used the words “job title” twice in the same sentence. It was suggested that the item should be changed to “How people define my job title is unimportant to me as long as I understand my work role”. While the suggestion to change the wording of the question was valid, it was not certain that students would interpret job title the same as work role. Consequently, the question was kept in its original version. The second item “Music education has a special set of challenges that I want to help find solutions for,” was changed to “The music education field has special sets of challenges for which I want to help find solutions.”

The next item, “In general, the music teaching skills I am learning now are different from the music teaching methods I experienced before” was problematic because of the phrase “I experienced before.” The item was changed to “In general, the music teaching skills I am learning now are different from the music teaching methods I experienced in high school.” For the sake of clarity and because the content of the item remained unchanged, the new wording was adopted.

Finally, one item “Please indicate whether you have been offered or currently have a scholarship” was altered to obtain more specific answer responses. The item was changed so that the answer responses included either non-music scholarships, academic scholarships, or need-based scholarships.

No feedback was offered by the panel on the readability of the online questionnaire or about the order of questions and their categorized positions within the flow of the questionnaire. One expert recommended that the demographic questions should be at the beginning of the questionnaire. Consequently, the demographic
questions were moved to the beginning of the pilot version of the MESOI.

Reliability

The main purpose of the pilot study was to develop further a questionnaire drawn from previous sociological research, from researcher developed instruments cited in previous literature reviewed in this study, and from other instruments cited in past studies as being relevant sources for item generation. The second purpose of the pilot study was to collect data that could be used to estimate the reliability of the questionnaire. The pilot study was submitted to and approved by the Institutional Review Board (IRB) before implementation.

A convenience sample of volunteer undergraduate music education majors \( (N = 17) \) at various stages in their degree plan was used to generate pilot data. Students from several intact music education classes were invited verbally to participate by the researcher during a short introductory speech given during their class. Students were asked to email the researcher if they were interested in participating in the study. A response email was sent to potential participants that included a link to the online questionnaire and a consent form. Seventeen completed questionnaires from a total of 18 submitted questionnaires were collected from a population of approximately 100 students.

Participants were 10 female and seven male undergraduate students between 17 and 22 years of age \( (\text{range} = 8 – 22, M = 2.59, SD = .91) \). All participants were enrolled as full-time students, 13 of whom were working part-time either as private music teachers, or were teachers in after school music programs, and four of whom were
working in non-music-related settings. Five students were enrolled in their second year of school, six were enrolled in their third year, three were enrolled in their fourth year, one participant was enrolled in a fifth and in a sixth academic year and one was enrolled in student teaching. Twelve students reported grade point averages between 3.5-4.0, four students reported grade point averages between 3.0 - 3.49, and one student reported a grade point average between 2.50 - 2.99 ($M = 3.51$, $SD = 0.68$).

Three participants held music scholarships ($n = 1$ applied, $n = 2$ music education) and nine held non-music, academic scholarships. Music specializations were evenly represented with six participants declared as choral, eight as band, five as string, and six as elementary music specialists. All but one participant had completed introductory music education courses or an equivalent introductory course, with 76% having completed professional education courses (elementary or secondary non-music courses, and music methods courses, strings, woodwinds, brass, percussion, and vocal). Five participants had had early field or teaching experiences. No participants were engaged in student teaching at the time of the pilot administration.

Nine out of 17 participants were members of a state-wide music educator association. All participants regarded their family socioeconomic status as average. The educational status of participants’ parents was predominantly college level. Participants fathers educational attainment, was reported as 47% undergraduate degrees ($n = 8$) and 24% advanced degrees ($n = 4$). Participants’ mothers had completed an undergraduate degree (35%, $n = 6$), but when compared to participants’ fathers, mothers did not pursue graduate study with the same frequency (12%, $n = 2$).

A total of 11 family members were reported by participants as either being currently
employed or having been at one time employed as a school music teacher.

An estimate of reliability of the MESOI was established through an internal consistency. Sixty-six of the 80 items (14 items were demographic questions) were entered into IBM SPSS for windows (version 20). Using Cronbach’s alpha, the initial reliability estimate of the MESOI indicated a low alpha level of .75 (Leonhard & House, 1959).

In order to improve the reliability of the MESOI, four of six strongly negative-loading items were removed from the questionnaire, changing the Cronbach’s alpha to a fairly high .81 (Leonhard & House, 1959). The two remaining questions, Item 40, “even if music education is not the perfect job for me, it’s too late to change my major now,” and Item 41, “changing my major now would mean that I am falling behind,” loaded most negatively of the six items, with loading of -.44 and -.49 respectively. Ordinarily, these two items would be the first to remove from the questionnaire in a reliability analysis. The decision to retain these two items was based on several considerations.

The items in question referred to the “investment mechanism of change” variable hypothesized by Becker and Carper (1977b). Because their findings had not previously been factor analyzed, it was possible that other items might also load with these, but that has not yet been determined. Removing these questions before factoring would have impacted the representation of content of the questionnaire. These two questions loaded together, but apart from the other items. It could be that occupational identity is multidimensional, or that these questions should not have been situated next to each other in the questionnaire. The low alpha, caused by the uniqueness of these items could have been due to small sample size or homogeneity of responses (Pike & King,
Changing the total number of items of the test might also have provided an alternate solution to the removal of the items in question. There was a delicate balance between constructing a scale that was not burdensome for participants to complete and yet had enough items with which to conduct statistical analyses. The topic of whether the MESOI was too long was mentioned by some of the content validity judges. Even so, the pilot version of the MESOI had been constructed so that participants could complete it in less than 20 minutes. However, there were too few items for a component analysis. Kline (2005) that there be at least 10 items per hypothesized component.

All these reasons pointed to the probability that more analysis was needed and that removing these items would circumvent that process from unfolding. Given that a high reliability estimate (.81) was achieved due to the removal of four other questions, it was decided to retain these two questionable items and reassess their usefulness using a longer questionnaire.

In order to get a preliminary idea of the number of components that might be extracted, a principal component analysis was conducted on pilot data. Upon examination of the scree plot, five components were hypothesized. Due to the low sample size and the low number of items in some of the a priori categories of the MESOI, this result was preliminary at best. Suggested subject-to-item ratios appropriate for factor analysis in the social sciences were at minimum 2:1 (Kline, 2005). The standard in music education research has been 3:1 (Asmus, 1989). Statistical procedures used to determine whether the sample size was adequate for factoring are commonly not applied to pilot data as the small sample size precluded its use. It has
been suggested that measures of sampling adequacy (MSA) can only be determined with data that have actually been factored (Asmus, 1989), i.e., main study data that have met the minimum requirement for sample size.

Data Analysis for the Main Study

Collected data came from the Music Educators Scale for Occupational Identification (MESOI), a quantitative researcher-designed measurement instrument. Data were entered into the statistical package IBM SPSS for windows (version 22) using a principal components analysis in order to explore underlying dimensions of occupational identification.
CHAPTER 4

RESULTS

The purpose of this study, which was grounded in the foundational works of Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c) and Lortie (1959, 2002), was to contribute to the field of occupational identity by developing a researcher-designed measurement tool for occupational identity in music education. The research questions were (a) what components are fundamental of occupation identity, and (b) what is the reliability estimate of the Music Educator Scale for Occupational Identity? Data were entered into the statistical package IBM SPSS for windows (version 22) and subjected to a principal components analysis in order to find underlying dimensions of occupational identification. This chapter describes the results of this study.

Initial Analyses

A frequency distribution was computed from 215 participants. Measures of central tendency, variability, and normality were calculated (see Table 1).

Table 1

Descriptive Statistics of MESOI

<table>
<thead>
<tr>
<th>Totals</th>
<th>N</th>
<th>Range</th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
<th>Skew</th>
<th>S.E.</th>
<th>Kurtosis</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Score</td>
<td>215</td>
<td>183</td>
<td>278</td>
<td>461</td>
<td>38</td>
<td>32.86</td>
<td>-.42</td>
<td>.17</td>
<td>.40</td>
<td>.33</td>
</tr>
</tbody>
</table>

The highest possible score for the MESOI was 530, indicating a high occupational identification with music education. The lowest possible score was 106 indicating a low identification with music education. Total scores from the current data
ranged from a high score of 461 to a low score of 278. The mean score was 384 \((N = 215, SD = 32.86)\). Data from the MESOI were found to be normally distributed (see Figure 1 for the distribution of test scores).

![Figure 1](image)

*Figure 1. Distribution of test scores.*

**Research Questions**

**Research Question 1**

Data for Research Question 1 “what components are fundamental to occupational identity,” were analyzed using principal components analysis (PCA). The purpose of factor analyses, of which PCA is one distinct type, is to reduce a relatively large number of test items to a smaller set by grouping items in subjectively defined categories. These categories are technically referred to as factors in a factor analysis, and as components in a principal components analysis (Kline, 2005). Factor analysis
has commonly been used in the social sciences for interpreting self-reporting measurement instruments and has been recommended as a way of understanding underlying dimensions of music teaching and learning (Asmus, 1989).

To examine the structure and determine a best-fit solution for the MESOI, 106 items obtained from 215 completed questionnaires were subjected to a preliminary series of principal components analyses (PCA) and comparisons of rotation using both the Kaiser normalized Varimax and direct Oblimin procedures. A preliminary correlation matrix of nonrotated items was examined for correlation coefficients exceeding .30 (Kline, 2005), thus indicating that items accounted for at least 30% of the relationship within the data set. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett’s Test of Sphericity were also computed to assess the suitability of the data set for a PCA. KMO values range from a low value of zero to a high value of 1.00. A value less than .50 is considered unacceptable for factor analyses (Kline, 2005). For the current study an initial KMO measure of .72 was determined as middling (Kaiser, 1974). The Bartlett’s test of sphericity was found significant ($p < .05$) indicating the data set was suitable for factoring. Based on an examination of the scree plot and Eigenvalues greater than 1.00, results were not sufficiently parsimonious, and neither indicated simple structure or a high variance-explained. A series of extractions revealed a greater variance-explained value using a preliminary six-component extraction.

An analysis of communality statistics has been considered an important step in factor analysis (Asmus, 1989; Hinkin, 1998; Kline, 2005). Communality statistics determine the proportions of variance in the variable explained by each of the items (Hinkin, 1998). The more accurate initial communality estimates are, the more reliable
the initial factor extraction (Asmus, 1989).

An examination of the communality statistics revealed 29 items contributing 29% or less to the model. As these 29 items were removed, other items failed to load under any of the six components. A total of 36 additional items were also removed until a comparison of rotations revealed a simple structure with communalities above .30. Up to this point in the analysis, variance-explained gradually improved from a value of 32.70% to a value of 48.35%. In order to reduce the amount of residual error, a seven-component extraction was computed based on a reexamination of scree plot results. This yielded a value of 51.24%. When communalities less than .40 were removed from the analysis, variance-explained increased to 59.24%. Based on these analyses, 41 remaining items out of an initial 106 items were observed to have component loadings above .40, indicating that the items were meaningful and clearly represented the content domain of the underlying construct (Hinkin, 1998). KMO measures had also increased from a middling .72 to a meritorious .88 (Kaiser, 1974).

Throughout these preliminary analyses, Varimax and direct Oblimin rotations were compared for best fit. While very similar in results, the Varimax rotation consistently yielded slightly higher component loadings. However, when components were examined for item content, the direct Oblimin rotation allowed items to group with better clarity.

When components were subjected to preliminary reliability analyses, however, two of the components yielded low-negative reliability estimates. This result might have been due to the fact that only two items loaded under each of these components. While the total reliability estimate \((N = 41 \text{ items})\) was .90, there were still two items that did not
contribute sufficiently to the model. The removal of Items 90, and 116 increased the reliability estimate to .92.

A subsequent series of analyses were computed to see if component loadings yielded at least three items and also had acceptable reliability coefficients. The additional removal of Item 42 raised the alpha level to .93, with 61.03% explained variance from seven components, but some components failed to load three or more variables. Because the remaining 38 test items showed a tendency to group under fewer components, a five-component solution with direct Oblimin rotation was attempted, but reliability coefficients of each component were unacceptable and some items had low loading values.

Low loading Items 40, 113, and 114 were removed. Results showed that when the remaining 35 items were reanalyzed, five components with Eigenvalues above 1.00 (see Figure 2) met the minimum criteria for number of variables (see Table 2). KMO values were .90. A reliability check revealed acceptable component values. While there was a decrease in variance-explained by the five-component solution (56.99% variance-explained) as compared to the seven-component solution (61.03% variance-explained). When Varimax and Direct Oblimin rotation results were compared, the Oblimin rotation offered the simplest solution. Consequently, the five-component solution, with direct Oblimin rotation was observed to be meaningful because it offered clarity in the way items grouped under each component, thus lending itself to descriptive, albeit subjective interpretation. An oblique rotation, however, implies certain limitations in that components are assumed to be correlated. Consequently, the rotated MESOI is not an appropriate measure for future regression analyses.
### Table 2

**Total Variance-Explained**

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>10.60</td>
<td>30.29</td>
<td>30.29</td>
</tr>
<tr>
<td>2</td>
<td>3.83</td>
<td>10.94</td>
<td>41.23</td>
</tr>
<tr>
<td>3</td>
<td>2.58</td>
<td>7.37</td>
<td>48.60</td>
</tr>
<tr>
<td>4</td>
<td>1.71</td>
<td>4.87</td>
<td>53.47</td>
</tr>
<tr>
<td>5</td>
<td>1.23</td>
<td>3.51</td>
<td>56.99</td>
</tr>
</tbody>
</table>

Extraction method: Principle components analysis

Intercomponent correlations were computed among all five components of the MESOI. Pearson correlation coefficients describe the magnitude and direction of the relationship between variables. The numeric value of \( r \) indicates the magnitude of the absolute value, and is often expressed subjectively using the terms **strong**, **moderate** or **low** (Hopkins, 1998). A positive (+) or negative (-) relationship between variables indicates whether the variables vary together (positive relationship) or are inversely related (negative relationship).

All intercomponent relationships were low. The greatest positive correlation (.31) was between components Title and Ideology (TITLEID) and Commitment to Task (CTASK). The variables Commitment to Organization (COI) and Title and Ideology showed the greatest negative correlation (-.24) degree of relationship. There were lesser absolute values of relatedness among the other variables with Mechanism of Change-Pride in New Skills (MCPIPS) and Title and Ideology having the smallest
degree of relationship. Table 3 lists all of the intercomponent correlations.

Table 3

Intercomponent Correlations

<table>
<thead>
<tr>
<th>Component</th>
<th>CTASK</th>
<th>TITLEID</th>
<th>MCIM</th>
<th>COI</th>
<th>MCPIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTASK</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TITLEID</td>
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</tbody>
</table>

Figure 2. Scree plot.
Thirty-five items retained from preliminary analyses represented five dimensions of occupational identification (see Table 4). The component labels subjectively defining these dimensions had been taken directly from previous research (Becker & Carper, 1977a, 1977b, 1977c) in an effort to maintain the integrity of terms historically used to describe occupational identity, thus avoiding any linguistic confusion.

Table 4

Component Matrix (n = 35 Items)

<table>
<thead>
<tr>
<th>Item</th>
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<th>3</th>
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(table continues)
Table 4 (continued).

<table>
<thead>
<tr>
<th>Component</th>
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<td>.26</td>
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</tbody>
</table>

Extraction method: Principal components analysis
Rotation method: Oblimin with Kaiser Normalization
Rotation converged in 25 iterations.

These components were: (a) commitment to task (CTASK), (b), mechanism of change-problem interest & pride in new skills (MCPIPS) (c) title & ideology (TITLEID), (d) mechanism of change-internalization of motives (MCIM), and (e) commitment to organization or institution (COI).

While the goal of this analysis was to find components with clear items loadings, evidence of multicollinearity was found among four item loadings. Multicollinearity refers to the potentially problematic situation where one or more items correlate with one or more components (Huck, 2011). These shared bi-polar loadings were challenging in the labeling and interpretation of components especially in the absence of a supporting hypothesis.

Item 20, “K-12 school children perceive me as a school music teacher,” loaded under the commitment to organization or institution (COI) component (-.37) and under the title and ideology (TITLEID) component (.39). Item 47, “the material covered in my music education courses is boring,” loaded under the mechanism of change-pride in new skills (MCPIPS) component (-.46) and under the commitment to task (CTASK) component (.36). Item 99, “the information I have learned in my music education
coursework has informed my practicing,” loaded under the mechanism of change-pride in new skills (MCPIPS) component (-.41) and under the mechanism of change-internalization of motives (MCIM) component (.30). Item 103, “I help my music education professors with their projects outside of class,” loaded under the mechanism of change-internalization of motives (MCIM) component (.59) and under commitment to organization or institution (COI) component (-.43).

A review of the results for each component and intercomponent correlations completes this discussion. For clarification, components that were originally called mechanisms of change are listed after the corresponding component they were thought to operate in rather than listed by percentage of variance explained.

**Components**

Commitment to Task

The commitment to task component (CTASK) was composed of seven items that referenced specialized skills and knowledge consistent with an occupation in music education, and nine items that specifically referred to a K-12 classroom music teaching career. The variance explained by this component was 30.29%. The largest number of participants indicated agreement (strongly agree or agree) with the associated occupational title questions ($n = 1513$ agreement responses, range = 15 - 45, $M = 37.28$, $SD = 6.34$). Fewer participants indicated agreement with the specialized skills and knowledge questions ($n = 976$ agreement responses, range = 10 - 35, $M = 26.03$, $SD = 4.66$). Table 5 gives component statistics and Table 6 gives item statistics for this component.
Table 5

**CTASK Total and Subscale Descriptives**

<table>
<thead>
<tr>
<th>N</th>
<th>Range</th>
<th>Min. Score</th>
<th>Max. Score</th>
<th>M</th>
<th>SD</th>
<th>% Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>53</td>
<td>32</td>
<td>85</td>
<td>63.32</td>
<td>10.70</td>
<td>30.29</td>
</tr>
</tbody>
</table>

Table 6

**CTASK Item Descriptives (n = 16 Items)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Type</th>
<th>Question</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>111</td>
<td>Title</td>
<td>I feel obligated to contribute to the music teaching profession by becoming the best music teacher I can be.</td>
<td>4.60</td>
<td>.65</td>
</tr>
<tr>
<td>72</td>
<td>Title</td>
<td>A music teaching career fills me with a sense of pride.</td>
<td>4.42</td>
<td>.77</td>
</tr>
<tr>
<td>67</td>
<td>Title</td>
<td>I belong in the music teaching profession.</td>
<td>4.39</td>
<td>.71</td>
</tr>
<tr>
<td>83</td>
<td>Skill</td>
<td>If I were hired today, I would be very happy teaching in my area of specialization.</td>
<td>4.38</td>
<td>.82</td>
</tr>
<tr>
<td>69</td>
<td>Skill</td>
<td>My music education coursework has heightened my enthusiasm for K-12 music teaching.</td>
<td>4.19</td>
<td>.93</td>
</tr>
<tr>
<td>92</td>
<td>Title</td>
<td>Every day I become more confident that I have chosen the right career for me.</td>
<td>4.07</td>
<td>.97</td>
</tr>
<tr>
<td>86</td>
<td>Title</td>
<td>I prefer to do my future professional work in a K-12 school setting.</td>
<td>4.02</td>
<td>.99</td>
</tr>
<tr>
<td>62</td>
<td>Title</td>
<td>If I were offered a K-12 music teaching job and a music performance job but could only choose one of these, I would choose the K-12 music teaching job.</td>
<td>4.01</td>
<td>1.15</td>
</tr>
<tr>
<td>85</td>
<td>Skill</td>
<td>Of all my musical skills, music teaching is the skill I feel most capable of doing.</td>
<td>4.00</td>
<td>.99</td>
</tr>
<tr>
<td>98</td>
<td>Title</td>
<td>My music education colleagues know about my dreams of becoming a K-12 classroom music teacher.</td>
<td>3.97</td>
<td>.98</td>
</tr>
<tr>
<td>21*</td>
<td>Title</td>
<td>I have doubts that a music teaching career is the right one for me.</td>
<td>3.93</td>
<td>1.15</td>
</tr>
<tr>
<td>71</td>
<td>Title</td>
<td>A career in K-12 classroom music teaching is the best career choice I could ever have made.</td>
<td>3.88</td>
<td>1.05</td>
</tr>
<tr>
<td>43</td>
<td>Skill</td>
<td>If I could spend extra time working to develop my talents, I would work on developing my teaching skills.</td>
<td>3.86</td>
<td>.92</td>
</tr>
<tr>
<td>61*</td>
<td>Skill</td>
<td>I prefer private music teaching to a full-time classroom music teaching position in a school district.</td>
<td>3.57</td>
<td>1.04</td>
</tr>
<tr>
<td>64</td>
<td>Skill</td>
<td>Music teaching is so much a part of who I am, I spend my free time learning more about it.</td>
<td>3.45</td>
<td>1.06</td>
</tr>
<tr>
<td>91*</td>
<td>Skill</td>
<td>I don’t expect to spend my entire music teaching career in a K-12 classroom setting.</td>
<td>2.59</td>
<td>1.20</td>
</tr>
</tbody>
</table>

* Item reverse scored
Mechanism of Change-Problem Interest and Pride in New Skills

The mechanism of change-problem interest and pride in new skills (MCPIPS) component was composed of three items that referenced the development of personal interests with regard to specific occupational skills and the desire to acquire these skills (Becker & Carper, 1977a, 1977b). The variance explained by this component was 3.51%. The largest number of participants indicated agreement (strongly agree or agree) for an appreciation of music education course content (n = 180, range = 1 - 5, M = 4.19, SD = .82) and believed that music education faculty members were devoted to their interest in music teaching (n = 186, range = 1 - 5, M = 4.37, SD = .79). The largest number of participants (n = 198) had completed introductory music education and methods courses and indicated that the material they learned in their music education coursework had informed their own personal music practicing (n = 169, range = 1 - 5, M = 3.98, SD = .91). Table 7 gives component statistics and Table 8 gives item statistics for this component.

Table 7

MCPIPS Total Descriptives

<table>
<thead>
<tr>
<th>N</th>
<th>Range</th>
<th>Min. Score</th>
<th>Max. Score</th>
<th>M</th>
<th>SD</th>
<th>% Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>9</td>
<td>6</td>
<td>15</td>
<td>12.53</td>
<td>1.94</td>
<td>3.51</td>
</tr>
</tbody>
</table>
Table 8

**MCPIPS Item Descriptives (n = 3 Items)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>It is clear to me that my music education professor(s) are devoted to my desire to teach K-12 classroom music.</td>
<td>4.37</td>
<td>.79</td>
</tr>
<tr>
<td>47*</td>
<td>The material covered in my music education courses is boring.</td>
<td>4.19</td>
<td>.82</td>
</tr>
<tr>
<td>99</td>
<td>The information I have learned in my music education coursework has informed my practicing.</td>
<td>3.98</td>
<td>.91</td>
</tr>
</tbody>
</table>

* Item reverse scored

**Title/Ideology**

The title/ideology component (TITLEID) was composed of eight items that referenced how attached a person might be to a specific occupational title with its associated set of beliefs, norms, and values that define a particular occupational group of like-minded people. Four of the items asked participants if they thought of themselves as music teachers when interacting among different occupational groups. The other four items asked participants to reflect if the members of these other occupational groups identified them personally as music teachers. The variance explained by this component was 10.92%.

The largest number of participants indicated agreement (strongly agree or agree) with whether they thought of themselves as school music teachers when interacting with music education colleagues \((n = 160, \text{ range } = 1 - 5, M = 3.97, SD = .91)\), when interacting with music education faculty \((n = 128, \text{ range } = 1 - 5, M = 3.60, SD = 1.08)\), when interacting with performing musicians \((n = 122, \text{ range } = 1 - 5, M = 3.55, SD = 1.04)\) and when interacting with applied teachers \((n = 92, \text{ range } = 1 - 5, M = 3.15, SD = 1.11)\). The largest number of participants also agreed that their music education faculty
perceived them as music teachers ($n = 155$, range = 2 - 5, $M = 3.92$, $SD = .82$) followed by participants’ perceptions of music education colleagues ($n = 124$, range = 1 - 4, $M = 3.68$, $SD = .89$), participants’ perceptions of applied faculty ($n = 115$, range = 1 - 5, $M = 3.53$, $SD = .92$) and participants’ perceptions of professional musicians ($n = 60$, range = 1 - 5, $M = 3.19$, $SD = .87$). Table 9 gives component statistics and Table 10 gives item statistics for this component. Table 11 shows the item response trends.

Table 9

**TitleID Total Descriptives**

<table>
<thead>
<tr>
<th>$N$</th>
<th>Range</th>
<th>Min. Score</th>
<th>Max. Score</th>
<th>$M$</th>
<th>$SD$</th>
<th>% Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>25</td>
<td>15</td>
<td>40</td>
<td>28.58</td>
<td>5.75</td>
<td>10.94</td>
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</table>

Table 10

**TitleID Item Descriptives ($n = 8$ Items)**

<table>
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<tr>
<th>Item</th>
<th>Question</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>I think of myself as a music teacher when I am with my music education colleagues.</td>
<td>3.95</td>
<td>.92</td>
</tr>
<tr>
<td>31</td>
<td>Music education faculty perceives me as a school music teacher.</td>
<td>3.90</td>
<td>.84</td>
</tr>
<tr>
<td>28</td>
<td>My music education colleagues perceive me as a school music teacher.</td>
<td>3.66</td>
<td>.88</td>
</tr>
<tr>
<td>24</td>
<td>I think of myself as a music teacher when I am with music education faculty.</td>
<td>3.57</td>
<td>1.08</td>
</tr>
<tr>
<td>27</td>
<td>I think of myself as a music teacher when I am with performing musicians.</td>
<td>3.56</td>
<td>1.04</td>
</tr>
<tr>
<td>30</td>
<td>My applied lesson professor perceives me as a school music teacher.</td>
<td>3.52</td>
<td>.91</td>
</tr>
<tr>
<td>25</td>
<td>I think of myself as a music teacher when I am with my applied lesson professor.</td>
<td>3.15</td>
<td>1.10</td>
</tr>
<tr>
<td>32</td>
<td>Professional musicians perceive me as a school music teacher.</td>
<td>3.18</td>
<td>.87</td>
</tr>
<tr>
<td>Groups</td>
<td>I think of myself as a school music teacher when I am with ___.</td>
<td>___ perceive(s) me as a school music teacher.</td>
<td></td>
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<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------</td>
<td>-------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agreement</td>
<td>Disagreement</td>
<td>Undecided</td>
</tr>
<tr>
<td>Colleagues</td>
<td>160</td>
<td>17</td>
<td>38</td>
</tr>
<tr>
<td>Mued Faculty</td>
<td>128</td>
<td>42</td>
<td>45</td>
</tr>
<tr>
<td>Performing Musicians</td>
<td>122</td>
<td>43</td>
<td>50</td>
</tr>
<tr>
<td>Applied Faculty</td>
<td>92</td>
<td>73</td>
<td>50</td>
</tr>
</tbody>
</table>
Mechanism of Change-Internalization of Motives

The mechanism of change-internalization of motives (MCIM) component was composed of four items that referenced how individuals came to understand the occupational choices and behaviors of other members of a shared occupational group. The variance explained by this component was 7.37%. The largest number of participants indicated agreement (strongly agree or agree) when asked if they were knowledgeable of music faculty’s personal interests ($n = 159$, range $= 1 - 5$, $M = 3.86$, $SD = .96$) followed participants’ agreement responses that they were knowledgeable of music faculty’s research interests ($n = 147$, range $= 1 - 5$, $M = 3.71$, $SD = 1.06$). Fewer participants had assisted music education faculty with research projects outside of class time ($n = 85$, range $= 1 - 5$, $M = 3.14$, $SD = 1.08$). A large number of students agreed that music education faculty would mentor them in their professional life ($n = 175$, range $= 2 - 5$, $M = 4.15$, $SD = .81$). Table 12 gives component statistics and Table 13 gives item statistics for this component.

Table 12

\textit{MCIM Total Descriptives}

<table>
<thead>
<tr>
<th>$N$</th>
<th>Range</th>
<th>Min. Score</th>
<th>Max. Score</th>
<th>$M$</th>
<th>$SD$</th>
<th>% Variance Explained</th>
</tr>
</thead>
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<td>15</td>
<td>5</td>
<td>20</td>
<td>14.86</td>
<td>2.90</td>
<td>7.37</td>
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</table>
MCIM Item Descriptives (n = 4 Items)

<table>
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<th>Item</th>
<th>Question</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>108</td>
<td>I expect that my music education professor(s) will become professional mentors to me after graduation.</td>
<td>4.15</td>
<td>.81</td>
</tr>
<tr>
<td>106</td>
<td>I know something about my music education professor(s) personal interests.</td>
<td>3.86</td>
<td>.96</td>
</tr>
<tr>
<td>107</td>
<td>I know something about my music education professor(s) research interests.</td>
<td>3.71</td>
<td>1.06</td>
</tr>
<tr>
<td>103</td>
<td>I help my music education professor(s) with their projects outside of class.</td>
<td>3.14</td>
<td>1.08</td>
</tr>
</tbody>
</table>

Commitment to Organization or Institution

The commitment to organization or institution (COI) component was composed of four items that referenced places where a specific work identity might be found and sought after. The variance explained by this component was 4.87%. The largest number of participants believed they were recognized as a school music teacher by K-12 school children (n = 132, range = 1 - 5, M = 3.78, SD = .90). The largest number of participants indicated that that music education faculty would recommend them for a teaching position (n = 191, range = 2 - 5, M = 4.32, SD = .71). The largest number of participants also agreed that music education faculty believed in their teaching abilities (n = 186, range = 1 - 5, M = 4.31, SD = .77). Ninety-four participants felt prepared to teach if they were immediately offered a job (range = 1 - 5, M = 3.04, SD = 1.20). A listing of participants’ agreement responses with reported year in school is shown in Table 14. Table 15 gives component statistics and Table 16 gives item statistics for this component.
### Table 14

**Commitment to Organization and School Year**

<table>
<thead>
<tr>
<th>School Year</th>
<th>I feel prepared for the job.</th>
<th>K-12 children perceive me as a school music teacher.</th>
<th>My music education professor(s) will recommend me for a job.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Agree %/n</td>
<td>Disagree %/n</td>
</tr>
<tr>
<td>1</td>
<td>23</td>
<td>22/5</td>
<td>47/11</td>
</tr>
<tr>
<td>2</td>
<td>47</td>
<td>19/9</td>
<td>62/29</td>
</tr>
<tr>
<td>3</td>
<td>42</td>
<td>31/13</td>
<td>43/18</td>
</tr>
<tr>
<td>4</td>
<td>60</td>
<td>60/36</td>
<td>28/16</td>
</tr>
<tr>
<td>ST</td>
<td>16</td>
<td>94/15</td>
<td>0/0</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>55/11</td>
<td>20/4</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>60/3</td>
<td>40/2</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>100/2</td>
<td>0/0</td>
</tr>
</tbody>
</table>

ST = student teaching
Table 15

**COI Total Descriptives**

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>Min. Score</th>
<th>Max. Score</th>
<th>M</th>
<th>SD</th>
<th>% Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>13</td>
<td>7</td>
<td>20</td>
<td>15.45</td>
<td>2.56</td>
<td>4.87</td>
</tr>
</tbody>
</table>

Table 16

**COI Item Descriptives N = 4 Items**

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>I anticipate that my music education professor(s) will recommend me for a job.</td>
<td>4.32</td>
<td>.71</td>
</tr>
<tr>
<td>110</td>
<td>My music education professor(s) believe I have what it takes to be a K-12 classroom music teacher.</td>
<td>4.31</td>
<td>.77</td>
</tr>
<tr>
<td>20</td>
<td>K-12 school children perceive me as a school music teacher</td>
<td>3.78</td>
<td>.90</td>
</tr>
<tr>
<td>57</td>
<td>If I entered the music teaching profession today, I would feel prepared for the job.</td>
<td>3.04</td>
<td>1.20</td>
</tr>
</tbody>
</table>

**Research Question 2**

Research Question 2, “what is the reliability estimate for the Music Educator Scale for Occupational Identification,” was answered through reliability analysis of the total items on the MESOI (N = 35) and also the reliability estimate of each component. Tests of reliability have been used to estimate the consistency of measurement instruments, to give some indication of the variability of scores and in some cases to determine the extent to which test items correlate with each other. The total reliability estimate of the MESOI was obtained using Cronbach’s Coefficient Alpha. A high to very
A high reliability estimate of .93 was obtained across all items (Leonhard & House, 1959). Each of the five components was also checked for reliability. Two components, Commitment to Organization or Institution and Mechanism of Change-Problem Interest and Pride in New Skills, had low reliability estimates with values of .65 and .66 respectively. Table 17 lists each component with its acronym, variable name, mean, standard deviation, and reliability estimate.

Table 17

**Component Acronyms and Descriptive Statistics**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Variable Name</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTASK</td>
<td>Commitment to task</td>
<td>63.3</td>
<td>10.70</td>
<td>.92</td>
</tr>
<tr>
<td>TITLEID</td>
<td>Title/Ideology</td>
<td>29.0</td>
<td>5.74</td>
<td>.89</td>
</tr>
<tr>
<td>MCIM</td>
<td>Mechanism of Change-Internalization of Motives</td>
<td>14.9</td>
<td>2.90</td>
<td>.72</td>
</tr>
<tr>
<td>COI</td>
<td>Commitment to Organization or Institution</td>
<td>15.5</td>
<td>2.56</td>
<td>.65</td>
</tr>
<tr>
<td>MCPIPS</td>
<td>Mechanism of Change-Problem Interest and Pride in New Skills</td>
<td>12.5</td>
<td>1.94</td>
<td>.66</td>
</tr>
</tbody>
</table>

Extraction method: Principal component analysis
Rotation method: Oblimin with Kaiser Normalization

**Summary**

The data in this investigation, subjected to principal components analysis, resulted in a 5-component solution rotated to simple structure using oblique Oblimin rotation. Thirty-five items from a pool of 106 with component loadings > .35 explained 56.99% of the total variance. Reliability estimates using Cronbach’s alpha were .93 for all 35 items and ranged from .92 to .66 for the five components.
CHAPTER 5
DISCUSSION AND RECOMMENDATIONS

The purpose of this study, which was grounded in the foundational works of Pavalko (1971), Becker and Carper (1977a, 1977b, 1977c) and Lortie (1959, 2002), was to contribute to the field of occupational identity by developing a researcher-designed measurement tool for occupational identity in music education. Pioneering research on the occupational identity of music teachers was originally based on a sociological definition developed from the research of these four principal sociologists. Subsequent research has moved away from this original definition of occupation by combining other social science traditions and definitions, resulting in a line of research that could be considered ambiguous in its conclusions. Part of this confusion is the use of multiple definitions of the terms identity, self-concept, and role concept that have become interchangeable.

Consequently, this line of research in the development of occupational identity among music educators can be difficult to decipher, making it problematic to build upon. It was necessary, therefore, to re-examine the original research in order to develop clarity with regard to a sociological definition and understanding of occupational identification, how identity might develop, and the implications this development could pose for music teaching and learning. This study sought to define attributes of occupational identification by designing a measurement instrument based on previous research that investigated occupational identity from a sociological perspective. The discussion and recommendations in this chapter are grounded on not only the results of the research questions, but also on the process of test development.
Design and Analysis

The research questions used to guide this study were:

1. What components are fundamental to occupational identity?

2. What is the reliability estimate of the Music Educator Scale for Occupational Identification (MESOI)?

Principal components analysis was used to analyze data for Research Question 1 and reliability estimates and descriptive statistics were used to answer Research Question 2. The final version of the MESOI is listed in Appendix D.

Summary of Results

Analyses for Research Question 1, “What components are fundamental to occupational identity?” revealed, through principal components analysis, a 5-component solution rotated to simple structure using oblique Oblimin rotation. These components were: (a) commitment to task (CTASK), (b), mechanism of change-problem interest & pride in new skills (MCPIPS) (c) title & ideology (TITLEID), (d) mechanism of change-internalization of motives (MCIM), and (e) commitment to organization or institution (COI). Thirty-five items from a pool of 106 with component loadings >.35 were retained for analysis in the final version of the MESOI. Evidence of multicollinearity was found among four items in the data set.

Analyses for Research Question 2, “What is the reliability estimate of the MESOI?” were arrived at by assessing the internal consistency of the instrument as a whole and also each of the five components using Cronbach’s alpha. A reliability estimate for all 35 items was .93. Alpha levels for each component ranged from .66 to
Discussion and Recommendations

Research Question 1 asked “What components are fundamental to occupational identity?” A discussion of each of the five components in the context of foundational research, the implications of these findings, and recommendations for the practical application of the MESOI follows.

Commitment to Task (CTASK)

In previous research (Becker & Carper, 1977a, 1977b; Lortie, 1959, 2002; Pavalko, 1971), elements of attachment or the lack thereof to specific tasks, and the employment of highly specific strategies used to complete them, were intrinsic toward the development of a strong identification with one’s work. These specific tasks and the ways they might be approached defined the kind of person who engaged in such work, and thus labeled the person as a member within the larger occupational group to the exclusion of any other occupation.

The occupational identities of preservice music teachers can be observed through the demonstrable behaviors, attitudes, and perceptions associated with changes that might occur over the course of their professional preparation. Undergraduates entering a music teaching or performance degree program typically bring with them a highly developed repertoire of knowledge and skills that are specialized and specific to a particular instrument or to vocal performance rather than school music teaching. These skills can be demonstrated by means of a highly
competitive audition process, whereby candidates are chosen to participate in music degree programs. While both a performance and music teaching degree plan share the same general subject matter (music), the tasks, skills, and knowledge of a performance degree are vastly different from that of a music education degree.

Judging by agreement responses, participants in the current study might be characterized as being less clear about specialized knowledge and skills unique to a teaching career while being clearer about the title of school music teacher. In the MESOI skills and knowledge were only alluded to and not specifically defined. It might be that these preservice music teachers had a clear sense of what they perceived the title of school music teacher to mean as opposed to a sense of the knowledge and skills necessary for this occupation.

While these results might seem incongruent, they are not unique to this study. L'Roy (1983) and Roberts (1991b) found that students seeking a music teaching career showed a lack of commitment to specific work-related skills. Paul (1998) also found that specialized activities offered to undergraduate music education majors increased their commitment to tasks, but did not strengthen an associated attachment to a specific music teaching occupation. Roberts (1991b) found that music education students formed attachments to specialized skills consistent with a performing degree plan. L'Roy (1983) found that the operative link between commitment to task and an associated attachment to the occupation where those tasks were practiced and valued was the interaction among faculty, students, and the training environment.

There are two relevant issues that might relate to the results of the commitment to task element of this study. The first is the ambivalence across the profession of an
agreed-upon canon of school music teaching knowledge and skills. Typically, the knowledge and skills uniquely associated with school music teaching are perceived as similar to those of other professions. The nature of music teaching itself might contribute to this difficulty because the profession is multi-disciplinary, being in some ways related to education and in other ways sharing subject matter with musical careers (Froehlich, 2007). The second issue concerns how commitment to tasks can be localized to a specific school district or individual campus. This can further complicate the codification of school music teaching knowledge and skills. Professional socialization at the campus level assumes a more generalized commitment to tasks as the school music teacher encounters the shared values and beliefs, rules, and rituals of the school campus and surrounding community in which it is situated. Consequently, occupational socialization is more apt to be successful at the campus level when loyalties to the music teaching profession, as expressed globally in music teaching degree plans, are transferred to an affiliation with a specific school district.

For faculty in music education programs in colleges and universities, the results of this study might have implications for music education programs. Music education faculty may want to be aware of the effects of primary and secondary music experiences. Preservice music teachers might to their degree plans with an occupational identity that espouses the norms and values of their prior musical experiences. These lay conceptions about school music teaching careers are generally more related to the norms and values of their respective communities and former music teachers than they are to a more professional understanding of school music teaching. Research has shown that preservice music teachers retain their individual impressions
about music teaching well into their degree plans, and in some cases, prefer them to the
skills and knowledge presented in their coursework. The MESOI might be important in
classroom discussions concerning music teaching job requirements specific to a local
community. University faculty might also examine the content of their existing courses to
determine if the content addresses teaching skills or knowledge specific to the school
communities in which their graduates obtain jobs. These specific skills and knowledge
might also be compared with current music education best practices to provide new
insights into curricular choices. Further, faculty could use this collective knowledge to
challenge their students’ perceptions about music teaching, encouraging them to
develop a broader understanding of the profession that reaches beyond their
preconceived ideas.

Mechanism of Change-Problem Interest and Pride in New Skills

Another component revealed through data analysis was Mechanism of Change –
Problem Interest and Pride in New Skills (MCPIPS). This component relates to how
undergraduate preservice music teachers perfect, internalize, and adopt specialized
knowledge and skills. As a mechanism of change, past literature has described
MCPIPS and its potential influence on occupational attachment to be operative within
the formal structures of a college or university (Becker & Carper, 1977a, 1977b). The
effective operation of this mechanism was noted most often in past research when the
skill base needed to accomplish tasks was perceived by students as being highly
specialized, well-defined, and unique to the field of study (Becker & Carper, 1977a,
1977b; L’Roy, 1983). This last detail, that skills must be perceived as highly specialized,
well-defined, and unique to the field of study, is a critical element of this component.

The majority of participants indicated high approval for course content and felt validated in their efforts to learn course material. This result speaks to the function of this particular mechanism of change and assumes that participants also perceived their course content as highly specialized and unique to the field of study. Further, reverse-scored item 47 “the material covered in my music education courses is boring,” also loaded under the commitment to task component”. It might be that this item reflected some dimension of the operative effect (participants’ approval of course content) symbolized by the mechanism of change-problem interest and pride in new skills, on participants’ commitment to task. The results of this particular item and its use as an item in future questionnaires should be approached with caution. With one exception, other items of the MESOI did not define or allude to specific knowledge or skills. Consequently it is uncertain how participants conceptualized the idea of specific or specialized knowledge and skills. The only skill specifically mentioned was in item 99 which stated “The information I have learned in my music education coursework has informed my practicing.” A large number of participants indicated agreement with this item. The object or purpose of their practice, however, whether it was a teaching or a personal performing skill, was unclear.

From a symbolic interactionist view, practicing is considered to be an act, gesture or ritual which serves to strengthen or solidify an attachment to a specific occupation. As such, what people choose to practice would reflect what was important and of value to them, thus symbolizing membership with the larger occupational community (Froehlich, 2002; Roberts, 1991b). Most professions have a defined set of unique skills
and ways to accomplish specialized tasks that all members of the profession are expected to perfect (Pavalko, 1971); however, the skills and knowledge fundamental to music education are typically not separated clearly from some of the same skills and knowledge necessary in a performing career. This implies that undergraduate music education students might have difficulty perceiving the content and skills being taught as highly specialized, well-defined, or unique. Because diverse musical professions share the same subject matter (music), there is disagreement about the boundaries which classify skills and knowledge as uniquely related to performing careers as opposed to school music teaching careers (Roberts, 1991b). Practicing, however, has been considered a symbolic gesture or behavior related to performing careers, that bond “musician to musician rather than teacher to teacher” (Froehlich, 2002, p. 3). In other words, practicing, as a symbolic gesture, signifies occupationally, who individuals are and whom they want to be.

This premise, that individuals’ outward behaviors symbolize what is normative and valued, might explain why the item in question, (item 99) “The information I have learned in my music education course has informed my practicing,” also loaded under the component mechanism of change-internalization of motives. That the item cross-loaded across these two components emphasized the inability to distinguish the independent contribution that personal musical practice represented in school music teaching identities.

While musicianship and teaching skills inform school music teaching (Froehlich, 2002), preservice music teachers generally do not practice classroom teaching skills until the end of their degree plan. Consequently, the idea of what and how to practice
before their student teaching practicum was perhaps nebulous to preservice music
teachers in this study as compared to the kinds of instrumental or vocal practice to
which they were accustomed. Some research has suggested that professional skill
involves the ability to diagnosis, make inferences, and prescribe learning interventions
(Abbott, 1998); these are skills are equally valuable for music teaching (Froehlich,
2002). The practice and perfection of these pedagogical skills might provide continuity
as to what is normative for school music teaching (Froehlich, 2002).

Implications for music education faculty would include embedding more practical
application of teaching skills and knowledge specifically related to school music
teaching into course content. Music education students might benefit from more field
experiences in public school settings during which they first observe, and then begin to
practice their professional skills. While musicianship remains vitally important, having
more opportunities to practice teaching might assist in students being able to define
those skills and recognize how specialized they are to the profession of music
education. Ideally this element of ongoing practice could be implemented early in music
education degree plans.

Title/Ideology

Well-defined kinds of work have been thought to hold specific titles (L’Roy,
1983). As occupational titles tended to import symbolic meaning as to the type of
activities involved, a person’s work-related identity grew in consequence of the
relationship with a particular occupational title (Becker & Carper, 1977a). In highly
identified persons, the associations implied by an occupational title would become
personal characteristics and thus, both the individual and the occupational title itself would come to symbolize the qualities, interests, and goals of the occupation as a whole (Pavalko, 1971). Consequently, titles can be accepted or rejected by individuals on the basis of implied meanings inherent in the title itself. These symbolic meanings have been used to identify the interests and skills of individuals who seek to be linked with the title. When defined sociologically, work titles and occupational roles represent social relationships, frequently specifying the ways in which individuals should behave in relation to others. As such, specific occupational titles locate individuals in certain work roles, linking like-minded people to a larger social structure beyond their own private worlds (Pavalko, 1971).

In the current study, participants thought of themselves as school music teachers when interacting with music education colleagues, music education faculty, and even with their applied music teachers. Participants were equally confident that these significant others also perceived them as a school music teacher. Considering the fact that participants also indicated an attachment to occupational tasks, although not as high as their attachment to occupational title, it might be concluded that this particular sample of preservice music teachers identified with a school music teaching role personally, and also when interacting with others of both similar and diverse occupational status. An exception to this result was participants' perceptions of performing musicians. In this regard, participants perceived themselves as school music teachers but believed that performing musicians did not reciprocate that opinion. Performing musicians might be regarded as either applied music majors or professional performing musicians with whom preservice music teachers might interact on campus.
or at public concerts.

It could be that preservice music teachers’ participation in musical ensembles either with applied students or professional musicians contributed to this result. Ensemble playing requires a specific, well-defined and specialized skill base that is easily observed by others. Success in an ensemble may benefit from strict observance of group behaviors as dictated by a conductor. Individual expression through physical movement may preclude ensemble playing. Consequently it might be easier for performers to distinguish preservice music teachers by their performing activity rather than their preference to teach school children since performance is the observed behavior.

These results are in agreement with Schonauer (2002) who found that music teachers preferred the title of music educator over that of musician, and preferred to be in company of music teachers as opposed to those of other occupational groups not associated with school teaching. Other literature, however, has been mixed as to occupational title preferences, with some participants preferring a teaching role title (Clinton, 1991), some rejecting teaching titles for performing titles (Roberts, 1991b), and others who chose both titles (Paul, 1998). These diverse results might reflect a lack of specificity concerning music teaching titles.

In music education there is a wide array of titles. Some represent the profession as whole (school music teacher, classroom music teacher, school music educator, classroom music educator), or represent a teaching specialization within the profession (band director, orchestra director, choral director, elementary specialist). Other titles imply teaching-performing careers (educator-artist, artist-teacher). In the current study,
the term school music teacher was defined as someone who aspired to teach music in a K-12 educational institution. Even so, it was not certain if participants interpreted questionnaire items with some other music-teaching career in mind, or if each participant characterized school music teacher in his or her own way.

The outcomes of this study and of the test development process emphasize the dialectic nature of a sociologically defined occupational identity and how the perspectives and opinions of others contribute to construction of occupational identities. Collegiate music educators might use the MESOI as a way to scrutinize career choice from a social sciences perspective, comparing and contrasting how self-identity might differ from occupational identity. These discussions might be important for identifying and describing music teaching job requirements and comparing these requirements with students’ occupational identity and personality traits over the course of their professional preparation. Early in their collegiate career, preservice music teachers may want to consider ways of exploring and developing self-awareness so they are then able to delve further into the development of professional/occupational awareness. This would mean a necessary shift in the content of introductory music education courses from that of knowledge and skills to one that would include exercises and activities that might foster self-awareness.

**Mechanism of Change-Internalization of Motives**

Previous research stated that the mechanism of change-internalization of motives described how individuals came to understand the occupational choices and behaviors of other people (Becker & Carper, 1977b). Mechanisms of change were
thought to be operative in social groups such as student peer groups or cliques, and in student-professor apprenticeships. Past research has found that mechanisms were potentially able to evoke changes in members’ level of participation and identification with the group, thus also changing their attachment to a specific occupational identity (Becker & Carper, 1977b).

In the current study, most students responded that they were knowledgeable of music faculty’s personal and research interests but fewer participants indicated that they had assisted faculty with projects outside of class time. A lack of opportunity to experience in a tangible way the occupational attachment of faculty through collaborative applications of tasks associated with the title of school music teacher might explain why participants’ agreement responses were higher for a music teaching title than a commitment to the tasks associated with music teaching. Such was the case for L’Roy’s (1983) sample of preservice music teachers.

While this result, on the surface, may assume that outside projects, including research studies, are consistent with undergraduate degree programs, the essence of this component is more general in that it measured participation in activities and knowledge gained outside the normal course of classroom events. Wolfgang (1990) found that in the absence of task-related interactions with music education faculty, students’ definitions of school music teaching were developed from a musician-performer perspective. Further, in order for music teaching identities to strengthen, students needed to observe their instructors practicing what was taught in the classroom and to engage in those activities with faculty much like in an apprenticeship situation (L’Roy, 1983; Pavalko, 1971).
Previous research (Roberts, 1991b) has pondered if occupational tasks in and of themselves, either executed personally or observed in significant others, contributed to the development of occupation identities. This line of research has proposed that it might be the interpersonal interaction among music education faculty and preservice music teachers that accounts for progress in occupational identification rather than the tasks alone (L’Roy, 1983; Roberts, 1991b). Participants from this study did not indicate extracurricular involvement with their teachers’ research or personal interests, but did indicate an attachment to a school music teaching title. Participants also indicated a personal interest in and an appreciation for course content.

Taken as a whole, these preferences might suggest that participants’ class interactions were meaningful enough to produce an attachment to school music teaching. Participants also believed that their music education professors were devoted to their decision to become a school music teacher. This result might indicate that participants had observed a reciprocal regard and devotion to the profession, and consequently internalized it as their own. L’Roy’s (1983) results add credence to these findings in that preservice music teachers did not develop an attachment to occupational title or a commitment to tasks related to school music teaching due to a lack of interactions among students, faculty, and the learning environment.

Consideration of the contribution that learning environments can have on the attachment to occupational titles and tasks might underscore why item 103 “I help my music education professors with their projects outside of class,” cross loaded with the component commitment to organization or institution. Conversely, the ambiguous loading of this item might also lead to imprecise conclusions. The results of this item
might not clearly indicate if participants were internalizing an attachment to music teaching in a K-12 setting or music teaching in a college or university setting.

Collegiate music educators may want to consider the idea that preservice music teachers can learn to explain and understand the occupational choices and acts of others through time spent together in diverse settings both during and after class time. Music education degree plans might consider the fact that school music teaching relies heavily on the ability of teachers to interact socially with administrative staff, parents, with colleagues and with students. Group and one-on-one activities are cornerstones for performance degree plans in most universities, but these learning experiences are less abundant in music education. As group affiliations have been shown to affect the trajectory of preservice music teacher identities, it might be beneficial to place emphasis on the social aspects of music teaching equal to the dissemination of knowledge and skills.

*Commitment to Organization or Institution*

Previous research has posited that occupational identities imply a specific path along which one's future career can be found (Pavalko, 1971). People could have a tendency to either see their occupational role played out in one type of organization or institution with a specific function, or among many different types of organizations or institutions with varied types of work environs. The degree to which individuals work alongside others, in the pursuit of common goals, could reflect similar dependencies on the organizational work ethic, its characteristics, and its underlying social structures (Becker & Carper, 1977b; Lortie, 1959, 2002; Pavalko, 1971).
On the surface, findings from the current study described preservice music teachers who felt supported and validated in learning a teaching role. Participants felt validated in their desire to teach school music. They valued music education faculty opinions about their career choice and teaching abilities over that of their applied teachers or their music education colleagues. Participants also maintained their identification with K-12 music teaching while interacting with people of the same and even different occupational groups. These findings might indicate that a commitment to music education was reinforced through perceived images of their work identity in the attitudes and behaviors of others. Item 20 “K-12 school children perceive me as a school teacher,” loaded under this component and also under the commitment to organization or institution component. This result, in part, might confirm that participants’ attachment to a school music teaching title was affirmed by their experiences with K-12 school children. However, because the unique contribution of the results of this item cannot be determined no sound conclusions can be drawn. It might be that preservice music teachers interactions with K-12 school children were representative of both K-12 classroom and private music teaching experiences, and as a consequence, participants’ attachment to a music teaching title might have aligned with the subject matter of music and with a specific educational setting.

A large number of participants’ agreed that music education faculty believed in their teaching abilities and would one day recommend them for a teaching position. In previous literature, these three concepts, significant others, reference groups, and gestures, were found to be fundamental to an interactionist view of occupational identity (L’Roy, 1983). Current study findings, however, must be judged in light of the fact that
only just over half of participants were clear about the types of organizations or institutions wherein their future work would be, indicating a preference for full time classroom music teaching over that of private music teaching. Further, only half of participants intended to spend their entire teaching career in a K-12 setting. These results seem to indicate that course content or preservice music teachers’ occupational identities at universities may not transfer to K-12 settings.

The teaching and learning environment and social culture of the university setting as compared to an actual K-12 school music setting may be dissimilar, representing sometimes irreconcilable differences which have the potential of arresting occupational development (Maltas, 2004). The teaching and learning environment characteristic of music teaching degree plans is often highly structured and often predictable through the use of syllabi, assigned coursework and text books, and under the control of experienced faculty. During students’ college tenure, the administrative culture of the university may remain constant to a certain degree, and unless there are serious academic or behavioral issues, most college students would be more aware of their own daily activities than the social structures of the university as a whole. This is especially the case with music majors who tend to sequester themselves and their interests within the confines of music departments rather than the larger social structure of the university (Roberts, 1991b).

When preservice music teachers graduate and take a teaching job, they leave their training environment, which is similar to a classroom-student model, characterized by observation, listening and following directions. They enter another environment that may be quite the opposite, reflective of certified teachers in possession of their own
classrooms. Previous research investigating occupational socialization has found that the development of an occupational identity extends into the actual performance of the job (Cox, 1994; Lortie, 2007; Pavalko, 1971).

A contributing factor for current study participants, possibly in common with those of Paul (1998), might have been inexperience in authentic teaching situations. Cox (1994) and Lortie (1959; 2007) found that professional socialization and the development of occupational identities extended into the actual performance of the job and in work environments were profound enough to replace lingering lay perceptions of the profession with professional experience (Lortie, 2007). Music education degree plans may benefit from recognizing the possibility of a mismatch of gesture, norms, and values between preservice music teachers’ training institutions and their ultimate place of employment (Froehlich, 2007; Maltas, 2004).

Research Question 2

Analyses for Research Question 2, “What is the reliability estimate of the Music Educators Scale for Occupational Identification?” revealed a very high reliability estimate of .93 for the entire scale. Alpha estimates for sub components were .92 for commitment to task (CTASK), .89 for title/ideology (TITLEID), .72 for mechanism of change-internalization of motives (MCIM), .65 for commitment to organization (COI), and .66 for mechanism of change-problem interest and pride in new skills (MCPIPS).

In order to assure a simple solution that would also result in reliable subscales, reliability estimates were conducted in addition to the principal component analyses. An initial reliability estimate for the entire questionnaire was .91, which, while high, showed
room for improvement as communalities for the factor solution still included low loading items. These items also had low alpha values and were thus removed from the analysis. The end result of these analyses was a five component solution that, as a whole, had very high reliability; however, the subscales had varying internal consistencies ranging from .92 to .66.

Pragmatic interpretation of alpha in test construction has been described as subjective (Kline, 2005), which may be why literature discussions describing acceptable alpha levels have also been diverse. Pragmatic uses of alpha coefficients can vary from zero to 1.00. Cut off values for alpha have been documented at .60 in marketing research (Malhotra, 2004), but in the social sciences, acceptable reliability estimates have been documented as ranging from .70 and higher (Nunnally & Bernstein, 1994).

In music education research, reliability estimates have been used to make informed decisions about test performance, using descriptive language, and values ranging from very low-inadequate for use (<.50), to high-very high (.85 - .99). Using this guideline, the alpha values for components COI ($\alpha = .65$) and MCPIPS ($\alpha = .66$) would be characterized as low (Leonhard & House, 1959). Colwell (1970), however, has determined that this particular interpretation of alpha values is more applicable to cognitive and skill area evaluations and not to the measurement of the affective-behavioral domain, which was the content of this study. Educational, non-music research on test construction has considered .70 to be a minimum low reliability estimate (Fraenkel & Wallen, 2011), while Hopkins (1998) declined from giving numeric cut off values and, instead, suggested that other evaluative measures and protocols should be used in conjunction with alpha in order to judge the usefulness of a test.
When applied to the current study reliability estimates, these guidelines were especially valuable in determining the usefulness of the questionnaire in light of the consistency of the data. Data quality, in and of itself, does not imply the trustworthiness or usefulness of the study’s results (Huck, 2011).

Despite the somewhat low alpha values for components COI and MCPIPS, the items included in these two components chronicled participants’ personal experiences in the classroom and the quality of the relationships found with occupationally like-minded people they might encounter in music teaching settings. The information gleaned from these questions could provide insightful and useful information to music education faculty mentoring music education students. However, the findings described by these two components might not be reliable or useful in all circumstances. Music education faculty may want to consider using additional corroborating data from other measures to evaluate the developing occupational identities of preservice music teachers.

The purpose of the MESOI was not meant to replace other forms of diagnostic inquiry, whether descriptive research methods, classroom discussions or student-teacher interactions, but to be used in conjunction with these methods. Practically speaking, the questionnaire was developed as a diagnostic tool to help music education faculty by providing a measurement instrument that could facilitate discussion of classroom music teaching identities and assess the development of identity over time. Such knowledge could aid collegiate music education faculty in knowing if their music education programs, in general, are challenging students’ sense of occupational identity as compared to the actual specific requirements of school music teaching particular to
their region or community.

Given that the overall reliability estimate for the MESOI was considered very high (.93), and, that by all accounts reviewed, alpha values of .65 and .66, while not ideal, could be deemed acceptable, and that reliability and the issue of how large the coefficient must be has been cited as relative (Huck, 2011), it was the decision of this researcher to accept the results of this analysis as reliable data from this particular sample of undergraduate music education majors.

Summary of Recommendations

An assumption of this study was that formal training experiences are transmitters of occupational choices and the development of occupational identification. The music teaching profession might consider the expediency of the research that informed this study as it regards teaching as a social act, and occupational identification as a product of human interactions. This study attempted to add to the body of knowledge by referring to the original sociological construct of occupational identity in order to establish an empirical understanding of occupational identity in music educators. The results of this study might be beneficial in encouraging ongoing discussion about what constitutes specialized knowledge and skills in music education, and how skills and knowledge may be perfected.

Specific occupational titles identify preservice music teachers with certain work environments, linking them to a larger social structure beyond the confines of the university. It might benefit music education faculty to be well informed, theoretically and personally, about the larger social structures of the surrounding communities, including
elementary and secondary educational institutions and fine arts organizations that potentially employ music education graduates. This questionnaire might be helpful to music education departments in matching preservice teachers’ sense of occupational identity with their future student teaching or professional work environment.

Preservice music teachers bring to their degree plans a well developed sense of an occupational identity that is just as easily identifiable as a sense of personal self. Because music learning and music teaching are two distinct components within the field of music education, it is often the case that this sense of occupational identity is based on a lay understanding of music teaching further informed by the norms and values of a music performance identity. Preservice music teachers might benefit from a comprehensive understanding of occupational identity from a sociological perspective, along with a comparative study of identity from other perspectives in the social sciences. With this knowledge base, the MESOI might first be used as a way for preservice music teachers to interpret course content by understanding music teaching as constructed social behavior. A general understanding of the socio-musical cues of others may help preservice music teachers to interpret how others respond to themselves. As teachers, they may better understand the needs of others in the work environment and know how to communicate with administrators, colleagues and students effectively.

Limitations

As is the case of any scholarly investigation, the results of this study should be approached with caution and prudence, taking into account situations beyond the
researcher’s control that might have posed threats to internal validity and thus affected the outcomes of this study. Data from this investigation were obtained from 215 completed questionnaires from a pool of 263 consenting participants, constituting an 82% completion rate. During the design stage of this study, the researcher opted to use the services of a professional college music organization to disseminate the questionnaire rather than using student lists, or asking music education faculty to send the researcher their students’ contact information. This decision was based on an effort to obtain the largest sample size possible and still meet the research requirements of the Institutional Review Board (IRB). Demographic information collected describing the 26 participants who did not complete the questionnaire showed that these subjects were similar to participants who completed the questionnaire. It is uncertain why participants did not follow through with their desire to participate in this study. It might be that they had hoped to be included in the incentive drawing for an ITunes gift card without remembering that only participants with completed questionnaires would be considered.

A location threat might have occurred affecting the results of this study. Students were free to complete the questionnaire wherever and whenever they chose. Students were also able to begin the questionnaire and complete it anytime within a two-week period, and it is unknown if students corroborated in the completion of the questionnaire or completed it alone. An instrumentation threat might have resulted due to the highly subjective nature of the handling and interpretation of results inherent in principal component analysis. It might be that another researcher would have made different interpretative decisions and consequently obtained different results.
Upon receiving the emailed invitation to disseminate this research opportunity to their students, several music education professors contacted the researcher to express personal interest in the research topic and to extend their well wishes for the success of this study. A history threat might have occurred, as some faculty mentioned they would offer an incentive to their students if they consented to participate. This also might have been an occasion for some faculty to discuss the research topic in their classes, explaining how individual participation was important and valuable to music education and music teaching, and thereby encouraging a Hawthorne Effect in some participants. With regard to external validity, the results of this study should not be generalized to other samples or presumed to be reliable in future administrations of the questionnaire, even with subjects of the same demographic.

Finally, in order to achieve the clearest component loadings, Varimax and direct Oblimin rotation results were compared. Previous sociological research had found that the elements and mechanisms defining occupational identification were possibly interconnected. Multicollinearity of the data set was observed across four items. While Kline (1991) stated that in the objective world it is reasonable to expect that aspects of human behavior might be correlated, the results of these four items should be approached with caution. Varimax and Direct Oblimin rotation results were compared, and, the Oblimin rotation offered the simplest solution. An oblique rotation, however, implies certain limitations with regard to the future application of the MESOI, in that the rotated questionnaire is now not an appropriate measure for regression analyses.
Recommendations for Future Research

A sociologically defined occupational identity is dialectic in nature. It is first the changes a person undergoes as a result of professional training, and second, how others perceive these changes. It is these two things together that define an occupational identity. The context of this study was to focus on the first part of the dialectic, designing a diagnostic tool to measure occupational identities among preservice music teachers. Future research could investigate the second part of the dialectic by designing a complimentary tool. Other studies might then validate the use of both tools.

Replication of this study with a larger sample would help extend the parametric integrity of the MESOI. There were several categories of occupational identification discussed in previous studies that did not figure into this analysis, even though items for each of the hypothesized categories were included in the measurement instrument. These items were either found to load under a different component than was expected or were removed from the analysis due to low reliability. Previous literature characterized five mechanisms of change as operative in one of the larger four elements of occupational identification (Becker & Carper, 1977b), describing how and if potential attachment toward an occupation might occur. Table 18 lists MESOI items in their original pre-analysis and post-analysis designation.

Finally, music education faculty might conduct research using this questionnaire longitudinally, tracking the development of occupational identity among students during their entire college tenure and comparing results with other evaluative protocols.
Table 18

MESOI Item Origins (n =106 Items)

<table>
<thead>
<tr>
<th>Item #*</th>
<th>MESOI Questions-Pre Analysis</th>
<th>Original Source</th>
<th>Final Component Version**</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>I attend (K-12) school children's concerts.</td>
<td>Wolfgang (1990)</td>
<td>NA</td>
</tr>
<tr>
<td>18</td>
<td>I read materials related to music teaching outside of class-required readings.</td>
<td>Wolfgang (1990)</td>
<td>NA</td>
</tr>
<tr>
<td>19</td>
<td>I think of myself as a music teacher when I am with K-12 school children.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>20</td>
<td>K-12 school children perceive me as a school music teacher.</td>
<td>Huntington (1957)</td>
<td>COI</td>
</tr>
<tr>
<td>21*</td>
<td>I have doubts that a music teaching career is the right one for me.</td>
<td>L'Roy (1983)</td>
<td>CTASK</td>
</tr>
<tr>
<td>22</td>
<td>The work of a school music teacher in my area of specialization is so specific that anyone without the type of training I am receiving would not be capable of the job.</td>
<td>Clinton (1991)</td>
<td>NA</td>
</tr>
<tr>
<td>23</td>
<td>I think of myself as a music teacher when I am with my music education colleagues.</td>
<td>Huntington (1957)</td>
<td>TITLEID</td>
</tr>
<tr>
<td>24</td>
<td>I think of myself as a music teacher when I am with music education faculty.</td>
<td>Huntington (1957)</td>
<td>TITLEID</td>
</tr>
<tr>
<td>25</td>
<td>I think of myself as a music teacher when I am with my applied lesson professor.</td>
<td>Huntington (1957)</td>
<td>TITLEID</td>
</tr>
<tr>
<td>26</td>
<td>I think of myself as a music teacher when I am with my family.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>27</td>
<td>I think of myself as a music teacher when I am with performing musicians.</td>
<td>Huntington (1957)</td>
<td>TITLEID</td>
</tr>
<tr>
<td>28</td>
<td>My music education colleagues perceive me as a school music teacher.</td>
<td>Huntington (1957)</td>
<td>TITLEID</td>
</tr>
<tr>
<td>29</td>
<td>My family perceives me as a school music teacher.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>30</td>
<td>My applied lesson professor perceives me as a school music teacher.</td>
<td>Huntington (1957)</td>
<td>TITLEID</td>
</tr>
<tr>
<td>31</td>
<td>Music education faculty perceives me as a school music teacher.</td>
<td>Huntington (1957)</td>
<td>TITLEID</td>
</tr>
<tr>
<td>32</td>
<td>Professional musicians perceives me as a school music teacher.</td>
<td>Huntington (1957)</td>
<td>TITLEID</td>
</tr>
<tr>
<td>33</td>
<td>Membership in a professional music education organization is essential to becoming a dedicated school music teacher.</td>
<td>L'Roy (1983)</td>
<td>NA</td>
</tr>
<tr>
<td>34</td>
<td>I would rather talk to my music education professor than my applied teacher to get insights about music teaching.</td>
<td>Lortie (2002)</td>
<td>NA</td>
</tr>
</tbody>
</table>

*(table continues)*
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</thead>
<tbody>
<tr>
<td>35</td>
<td>I ask the advice of music education colleagues who are farther along in their degree plan when I need help with a music teaching problem.</td>
<td>Lortie (2002)</td>
<td>NA</td>
</tr>
<tr>
<td>36*</td>
<td>Choosing the music teaching profession over other music careers means that I am losing other parts of who I am professionally.</td>
<td>Lortie (2002)</td>
<td>NA</td>
</tr>
<tr>
<td>37</td>
<td>I am learning skills in my music education courses that are highly specialized.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>38</td>
<td>Teaching music is different from what I thought it would be.</td>
<td>Lortie (2002)</td>
<td>NA</td>
</tr>
<tr>
<td>39*</td>
<td>How people define my job title is unimportant to me as long as I know what my job title is.</td>
<td>Pavalko (1971)</td>
<td>NA</td>
</tr>
<tr>
<td>40</td>
<td>The music education field has special sets of challenges for which I want to help find solutions.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>41*</td>
<td>I chose a music teaching career because I was unable to pursue a career in what I truly felt I was called to do.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>42*</td>
<td>Other people have negatively questioned my decision to pursue a career in K-12 music teaching.</td>
<td>Becker &amp; Carper (1977c)</td>
<td>NA</td>
</tr>
<tr>
<td>43</td>
<td>If I could spend extra time working to develop my talents, I would work on developing my teaching skills.</td>
<td>Clinton (1991)</td>
<td>CTASK</td>
</tr>
<tr>
<td>44*</td>
<td>A professor whose specialization lies more in the realm of musical performance and less in classroom music teaching is more useful to me at this point in my career.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>45*</td>
<td>My applied music professor is capable of teaching in a K-12 music classroom.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>46*</td>
<td>A general education teacher is capable of teaching in a K-12 music classroom.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>47*</td>
<td>The material covered in my music education courses is boring.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>MCPIPS</td>
</tr>
</tbody>
</table>

*Table continues*
Table 18 (continued).

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>I express my personal opinions about music teaching to my music education professors.</td>
<td>Becker &amp; Carper</td>
<td>(1977b) NA</td>
</tr>
<tr>
<td>49</td>
<td>When I learn about a particular teaching skill, I think about how I could do it better.</td>
<td>Becker &amp; Carper</td>
<td>(1977b) NA</td>
</tr>
<tr>
<td>50</td>
<td>I ask more questions in my music education classes than the other students.</td>
<td>Becker &amp; Carper</td>
<td>(1977b) NA</td>
</tr>
<tr>
<td>51</td>
<td>My music education professor(s) guide my learning based on what they know about me personally.</td>
<td>Becker &amp; Carper</td>
<td>(1977b) NA</td>
</tr>
<tr>
<td>52</td>
<td>I am looking forward to working with a school principal.</td>
<td>Lortie (2002)</td>
<td>NA</td>
</tr>
<tr>
<td>53*</td>
<td>The main source from which I am learning music teaching terminology is in my applied lessons.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>54</td>
<td>Feedback from my music education professor(s) is the best indication for how well am learning to teach music.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>55*</td>
<td>My own personal self-evaluations are most important in deciding how well I am learning to teach music.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>56*</td>
<td>I would be happy teaching non-music classes.</td>
<td>Pavalko (1971)</td>
<td>NA</td>
</tr>
<tr>
<td>57</td>
<td>If I entered the music teaching profession today, I would feel prepared for the job.</td>
<td>Clinton (1991)</td>
<td>COI</td>
</tr>
<tr>
<td>58</td>
<td>In general, the music teaching skills I am learning now are different from the music teaching methods I experienced in high school.</td>
<td>Becker &amp; Carper</td>
<td>(1977a) NA</td>
</tr>
<tr>
<td>59</td>
<td>The work of a school music teacher in my area of specialization involves specific tasks taught in specific ways.</td>
<td>Clinton (1991)</td>
<td>NA</td>
</tr>
<tr>
<td>60</td>
<td>I am aware of the day-to-day activities that classroom music teachers in my area of specialization perform.</td>
<td>Becker &amp; Carper</td>
<td>(1977a) NA</td>
</tr>
<tr>
<td>61*</td>
<td>I prefer private music teaching to a full-time classroom music teaching position in a school district.</td>
<td>Becker &amp; Carper</td>
<td>(1977a) CTASK</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 18 (continued).

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</tr>
</thead>
<tbody>
<tr>
<td>62</td>
<td>If I were offered a K-12 music teaching job and a music performance job but could only choose one of these, I would choose the K-12 music teaching job.</td>
<td>Lortie (2002)</td>
<td>CTASK</td>
</tr>
<tr>
<td>63</td>
<td>The person I would most likely model in my professional preparation is a K-12 school music teacher.</td>
<td>Pavalko (1971)</td>
<td>NA</td>
</tr>
<tr>
<td>64</td>
<td>Music teaching is so much a part of who I am, I spend my free time learning more about it.</td>
<td>Pavalko (1971)</td>
<td>CTASK</td>
</tr>
<tr>
<td>65*</td>
<td>Using a lesson inhibits my teaching style.</td>
<td>Pavalko (1971)</td>
<td>NA</td>
</tr>
<tr>
<td>66</td>
<td>I imitate my music education professor(s) in my own teaching and learning activities.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>NA</td>
</tr>
<tr>
<td>67</td>
<td>I belong in the music teaching profession.</td>
<td>Pavalko (1971)</td>
<td>CTASK</td>
</tr>
<tr>
<td>68</td>
<td>People who identify with music teaching in the same way that I do attend music education conferences.</td>
<td>Wolfgang (1990)</td>
<td>NA</td>
</tr>
<tr>
<td>69</td>
<td>My music education coursework has heightened my enthusiasm for K-12 classroom music teaching.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>CTASK</td>
</tr>
<tr>
<td>70</td>
<td>It is clear to me that my music education professor(s) are devoted to my desire to teach K-12 classroom music.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>MCIIPPS</td>
</tr>
<tr>
<td>71</td>
<td>A career in K-12 classroom music teaching is the best career choice I could ever have made</td>
<td>Becker &amp; Carper (1977a)</td>
<td>CTASK</td>
</tr>
<tr>
<td>72</td>
<td>A music teaching career fills me with a sense of pride.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>CTASK</td>
</tr>
<tr>
<td>73</td>
<td>Becoming a school music teacher opens up new social opportunities I would not otherwise have.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>74</td>
<td>School music teachers are well respected by the community.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>75</td>
<td>My career choice is a step above my father's/guardian's career choice.</td>
<td>Cox (1994)</td>
<td>NA</td>
</tr>
<tr>
<td>76</td>
<td>My immediate family's socioeconomic status is average.</td>
<td>Broyles (1997)</td>
<td>NA</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 18 (continued).

<table>
<thead>
<tr>
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<th>Final Component Version**</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>One of the reasons I chose a music teaching career was that it would give me financial security.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>78</td>
<td>My career choice is a step above my mother’s/guardian’s career choice.</td>
<td>Cox (1994)</td>
<td>NA</td>
</tr>
<tr>
<td>79</td>
<td>The music teaching profession is of vital service to the community.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>80</td>
<td>The music teaching profession requires its members to work harder than those in other musical professions.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>81</td>
<td>The socioeconomic status of my relatives is above average compared to other people.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>82</td>
<td>As a K-12 classroom music teacher I am obligated to act professionally off campus.</td>
<td>Lortie (2002)</td>
<td>NA</td>
</tr>
<tr>
<td>83</td>
<td>If I were hired today, I would be very happy teaching in my area of specialization.</td>
<td>Clinton (1991)</td>
<td>CTASK</td>
</tr>
<tr>
<td>84*</td>
<td>I will apply for a broad range of job opportunities, even those outside my area of specialization.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>85</td>
<td>Of all my musical skills, music teaching is the skill I feel most capable of doing.</td>
<td>Cox (1994)</td>
<td>CTASK</td>
</tr>
<tr>
<td>86</td>
<td>I prefer to do my future professional work in a K-12 school setting.</td>
<td>Clinton (1991)</td>
<td>CTASK</td>
</tr>
<tr>
<td>87*</td>
<td>The music school I attend could best be described as “A learning environment that places an emphasis on learning the skills necessary to be a performer rather than a school music teacher.”</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>88</td>
<td>I would prefer to begin working with K-12 school children before my semester of student teaching.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>89*</td>
<td>I am concerned that I will not be able to find the music teaching job that I want.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>90</td>
<td>I am not interested in teaching private lessons.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 18 (continued).

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>91*</td>
<td>I don’t expect to spend my entire music teaching career in a K-12 classroom setting.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>CTASK</td>
</tr>
<tr>
<td>92</td>
<td>Every day I become more confident that I have chosen the right career for me.</td>
<td>Lortie (2002)</td>
<td>CTASK</td>
</tr>
<tr>
<td>93</td>
<td>It would be a waste to graduate with a music teaching degree and not actually teach music in a K-12 school setting.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>NA</td>
</tr>
<tr>
<td>94</td>
<td>Even if music education is not the perfect job for me, it’s too late to change my major now.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>NA</td>
</tr>
<tr>
<td>95</td>
<td>Changing my major now would mean that I am falling behind.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>NA</td>
</tr>
<tr>
<td>96*</td>
<td>My music education courses have caused me to re-think my decision to teach K-12 classroom music.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>97</td>
<td>The most successful college student is one who knows exactly what type of career he/she wants.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>NA</td>
</tr>
<tr>
<td>98</td>
<td>My music education colleagues know about my dreams of becoming a K-12 classroom music teacher.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>CTASK</td>
</tr>
<tr>
<td>99</td>
<td>The information I have learned in my music education coursework has informed my practicing.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>MCPIPS</td>
</tr>
<tr>
<td>100*</td>
<td>Participating in performing ensembles has caused me to re-think my decision to teach K-12 classroom music.</td>
<td>Becker &amp; Carper (1977a)</td>
<td>NA</td>
</tr>
<tr>
<td>101</td>
<td>My parents/guardians expected me to enter college right after high school.</td>
<td>Becker &amp; Carper (1977c)</td>
<td>NA</td>
</tr>
<tr>
<td>102*</td>
<td>I wonder if I should go to graduate school after I complete my degree rather than get a job teaching K-12 classroom music.</td>
<td>Lortie (1959)</td>
<td>NA</td>
</tr>
<tr>
<td>103</td>
<td>I help my music education professor(s) with their projects outside of class.</td>
<td>Huntington (1957)</td>
<td>MCIM</td>
</tr>
<tr>
<td>104</td>
<td>What I know about the music education faculty at my school I gained through casual meetings with them outside of class time.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
</tbody>
</table>

*Table continues*
Table 18 *(continued).*

<table>
<thead>
<tr>
<th>Item #*</th>
<th>MESOI Questions-Pre Analysis</th>
<th>Original Source</th>
<th>Final Component Version**</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>I anticipate that my music education professor(s) will recommend me for a job.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>COI</td>
</tr>
<tr>
<td>106</td>
<td>I know something about my music education professor(s) personal interests.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>MCIM</td>
</tr>
<tr>
<td>107</td>
<td>I know something about my music education professor(s) research interests.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>MCIM</td>
</tr>
<tr>
<td>108</td>
<td>I expect that my music education professor(s) will become professional mentors to me after graduation.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>MCIM</td>
</tr>
<tr>
<td>109</td>
<td>My music education professor(s) would be disappointed if I changed my major.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>NA</td>
</tr>
<tr>
<td>110</td>
<td>My music education professor(s) believe I have what it takes to be a K-12 classroom music teacher.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>COI</td>
</tr>
<tr>
<td>111</td>
<td>I feel obligated to contribute to the music teaching profession by becoming the best music teacher I can be.</td>
<td>Becker &amp; Carper (1977b)</td>
<td>CTASK</td>
</tr>
<tr>
<td>112</td>
<td>I feel comfortable asking my music education professor(s) for advice on personal (non-music related) matters.</td>
<td>Huntington (1957)</td>
<td>NA</td>
</tr>
<tr>
<td>113</td>
<td>My father/guardian is happy with my career choice.</td>
<td>Haller et al. (1968)</td>
<td>NA</td>
</tr>
<tr>
<td>114</td>
<td>My mother/guardian is happy with my career choice.</td>
<td>Haller et al. (1968)</td>
<td>NA</td>
</tr>
<tr>
<td>115</td>
<td>If my parents/guardians and music education professors had a disagreement about my career choice, I would agree with my music education professor(s).</td>
<td>Haller et al. (1968)</td>
<td>NA</td>
</tr>
<tr>
<td>116</td>
<td>In general, my music education colleagues understand my career dreams more than my parents do.</td>
<td>Haller et al. (1968)</td>
<td>NA</td>
</tr>
<tr>
<td>117</td>
<td>Everyone knew that I would go to college to study music teaching.</td>
<td>Haller et al. (1968)</td>
<td>NA</td>
</tr>
<tr>
<td>118</td>
<td>I consider other music education students to be my colleagues.</td>
<td>Clinton (1991)</td>
<td>NA</td>
</tr>
<tr>
<td>119</td>
<td>The most popular topic of conversation I have with other music education students is about music teaching.</td>
<td>Haller et al. (1968)</td>
<td>NA</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 18 (*continued*).

<table>
<thead>
<tr>
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<th>Original Source</th>
<th>Final Component Version**</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>My parents expected me to choose a major degree program before I attended college.</td>
<td>Becker &amp; Carper (1977c)</td>
<td>NA</td>
</tr>
<tr>
<td>121*</td>
<td>In general, I find that college is too restrictive for me.</td>
<td>Lortie (1959)</td>
<td>NA</td>
</tr>
<tr>
<td>122*</td>
<td>I often wonder if the music school I currently attend is the right one for me.</td>
<td>Lortie (1959)</td>
<td>NA</td>
</tr>
</tbody>
</table>

*Item reverse scored, **NA=Not included in the final analysis of the MESOI.
APPENDIX A

TEST DEVELOPMENT REFERENCES


APPENDIX B

RECRUITMENT DOCUMENTS
The Music Educator Scale for Occupational Identification  
September, 2013

Dear Music Educator,

My name is Christine Rewolinski and I am a doctoral candidate at the University of North Texas. I am conducting a research study as part of my dissertation. I am seeking your assistance in obtaining participants who would be willing to complete an online questionnaire.

The title of my dissertation is: The Measurement of Occupational Identity among Preservice Music Teachers: A Test Development Study. The Music Educator Scale for Occupational Identification (MESOI) is an electronic, online questionnaire based on a critical review of literature documenting a theoretical sociological construct of occupational identity. I am interested in how well my test will discriminate various stages of students’ occupational attachment to the music teaching profession as evidenced by their behaviors and perceptions. All collected data will be confidential. Should you agree to participate in the administration process:

Please click here to download a Word document which contains an invitation to forward to your undergraduate music education students. This letter of instruction and invitation will ask students to participate in the study by clicking on a link that will direct them to the questionnaire.

If you have any questions or concerns please contact either me or my major professor Dr. Donna Emmanuel.

Thank you most sincerely for your assistance.

Respectfully,

Christine Rewolinski  
Doctoral Candidate  
University of North Texas

Dr. Donna Emmanuel  
University of North Texas-College of Music, Division of Music Education

212
Hello,

My name is Christine Rewolinski. I am a doctoral student in music education at the University of North Texas in Denton Texas. I am conducting a study about how undergraduate music education students come to identify themselves as music teachers as they progress through their coursework. I would greatly appreciate it if you would also participate in my study by filling out a short questionnaire. Here are a few items to consider:

The questionnaire is easily accessed and can be completed online (see link below)

The questionnaire will take about 20 or 30 minutes to complete.

Your answers are confidential.

The questionnaire is not a test of your abilities and there is no grade. However, your opinions as music educators are essential to the success of this study and are a valuable contribution to the music teaching profession.

Participants who complete the questionnaire will be selected randomly to receive an iTunes gift card in the amount of $20. Fifty of these gift cards will be available.

If you are willing to participate in this study please click on the link below. Clicking the link does not in any way obligate you; it only provides more information and if you agree to participate, the link will direct you to the questionnaire. You may at any time during this process discontinue your participation.

Sincerely,

Christine Rewolinski, Doctoral Candidate
University of North Texas
College of Music-Division of Music Education

Clicking on this link will direct you to a consent form and the questionnaire
APPENDIX C

INTERNAL REVIEW BOARD DOCUMENTS
April 22, 2013

Dr. Donna Emmanuel  
Student Investigator; Christine Rewolinski  
Department of Music Education  
University of North Texas  
RE: Human Subjects Application No. 13-241

Dear Dr. Emmanuel:

In accordance with 45 CFR Part 46 Section 46.101, your study titled "The Measurement of Occupational Identity among Undergraduate Pre-Service Music Teachers: A Test Development Study" has been determined to qualify for an exemption from further review by the UNT Institutional Review Board (IRB).

No changes may be made to your study's procedures or forms without prior written approval from the UNT IRB. Please contact Jordan Harmon, Research Compliance Analyst, ext. 3940, if you wish to make any such changes. Any changes to your procedures or forms after 3 years will require completion of a new IRB application.

We wish you success with your study.

Sincerely,

[Signature]

Patricia L. Kaminski, Ph.D.  
Associate Professor  
Chair, Institutional Review Board

PKjfh
Title of Study: The Measurement of Occupational Identity among Preservice Music Teachers: A Test Development Study

Student Investigator: Christine Rewolinski, University of North Texas (UNT) College of Music, Division of Music Education

Supervising Investigator: Dr. Donna Emmanuel

Purpose of the Study: Pioneering research on the occupational identity of music teachers was based on a sociological definition developed from the research of 4 principal sociologists. Subsequent research has moved away from this original definition of work combining other social science traditions and definitions, resulting in a line of research that ambiguous and confusing. Because of this, the line of research in occupational identity in music education is difficult to decipher, making it problematic to build upon. It is necessary, therefore, to re-examine the original research in order to develop clarity concerning a sociological approach to occupational identification, how it develops and the implications for music teaching and learning. The purpose of this study is to design a questionnaire about the development of occupational identity based on the original sociological definition.

Procedures: I am conducting a study about how undergraduate music education students come to identify themselves as music teachers as they progress through their coursework. You will be asked to complete a short questionnaire about your experiences as a music education major. The questionnaire will take approximately 20 to 30 minutes to complete. Questions are designed to encourage you to describe your academic and musical training. This questionnaire will be conducted with an online Qualtrics-created survey. Your answers are confidential. The questionnaire is not a test of your abilities and there is no grade. However, your opinions as music educators are essential to the success of this study and are a valuable contribution to the music teaching profession. Your decision to participate or to withdraw from the study will have no effect on your standing in the music education course from which you were invited to participate in this study, or your course grade.

Foreseeable Risks: The risks existing in this study are no greater than the risk occasioned through daily use of the internet. Therefore, no foreseeable risks for participants as members of this research study are anticipated.

Benefits to the Subjects or Others: The knowledge gained through participation in this study will provide material for personal reflection as to the nature of the career they have chosen and how their choice might impact their present and future professional aspirations. Additionally, this research might prove important for identifying and
describing job requirements, and for the comparison of job requirements with students’ occupational identity and personality traits for the purpose of predicting job suitability, and for understanding the relationship between job satisfaction and job requirements. Participants who complete the questionnaire will be selected randomly to receive an ITunes gift card in the amount of $20. Fifty of these gift cards will be available.

**Procedures for Maintaining Confidentiality of Research Records:** The names and/or email addresses of participants will be kept separate from collected data in locked storage on campus in the principal investigator’s office. All data obtained from participants will be kept confidential and will only be reported anonymously in terms of combined results. All questionnaires will be concealed, and no one other than the student investigator and supervising investigator listed below will have access to them. All data collected will be stored in the Qualtrics-secure database and will be deleted after 3 years.

**Questions about the Study:** If you have any questions about the study, you may contact Christine Rewolinski Student Investigator at xxx-xxx-xxxx christinerewolinski@my.unt.edu, or Dr. Donna Emmanuel at 940-565-4090, donnaemmanuel@unt.edu

**Review for the Protection of Participants:** This research study has been reviewed and approved by UNT Institutional Review Board (IRB). UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

**Research Participants’ Rights:** Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

*Christine Rewolinski* has explained the study to you and answered all of your questions. You have been told the possible benefits and the potential risks and/or discomforts of the study. You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time. You understand why the study is being conducted and how it will be performed. You understand your rights as a research participant and you voluntarily consent to participate in this study.
APPENDIX D

MUSIC EDUCATOR SCALE OF OCCUPATIONAL IDENTIFICATION FINAL VERSION
Background Questions:

Q1 What is your gender?
   Male
   Female

Q2 Which of the following professional organizations associated with music education do you belong? Check all that apply.
   American Bandmasters Association
   American Choral Directors Association
   American Orff Schulwerk Association
   American String Teachers Association
   Dalcroze Society of America
   National Association for Music Education (NAfME-Collegiate)
   Organization of American Kodaly Educators
   Suzuki Association of the Americas
   Texas Music Educators Association (TMEA)
   I don't belong to any professional music education organization at this time
   Other. Please write the name of the organization in the text box provided.

Q3 What is your father's/guardian's highest level of education?
   Advanced Degree
   Undergraduate Degree
Some College
High School Diploma or GED
9-12 grades
Less than 9 grades

Q4 What is your mother's/guardian's highest level of education?
   Advanced Degree
   Undergraduate Degree
   Some College
   High School Diploma or GED
   9-12 grades
   Less than 9 grades

Q5 Which of these statements best describes you?
   I am a full-time student
   I am working full-time and taking classes during my off hours
   I am taking primarily online courses
   I am a full-time student and working a part-time job

Q6 In what year are you currently enrolled?
   1st year
   2nd year
   3rd year
4th year
5th year
Student teaching
6th year
7th year

Q7 What is your area of specialization? Check all that apply.

Choral
Band
Strings
Elementary
Other. Please write your response in the space provided.

Q8 Which of the following courses have you completed? Check all that apply.

Introduction to music education or an equivalent introductory course
Methods courses (e.g., strings, woodwinds, brass, percussion, vocal)
Professional education courses (e.g., elementary or secondary non music courses)
Early field experiences or teaching observations
Student teaching in a K-12 school

Q9 What is your approximate grade point average?

2.00-2.49
Q10 Which selection best describes your approximate age

17-18 years of age
19-20 years of age
21-22 years of age
23-24 years of age
25 + years

Q11 Are you teaching music to children in any of the following settings? Check all that apply.

I have not yet taught music to children
Private lessons
Student teaching
After school music program
Other. Briefly describe your teaching experience in the space provided

Q12 In what occupation was your father/guardian engaged at the time you began college? Please write your response in the space provided.

Q13 In what occupation was your mother/guardian engaged at the time you began college? Please write your response in the space provided.
Q14 Do you have any relatives who are or were employed as a school music teacher?
Check all that apply.
- mother/guardian
- father/guardian
- sibling
- aunt
- uncle
- cousin
- grandmother
- grandfather
Other. Please write your response in the space provided
None

Q15 Please indicate whether you have been offered or currently have a scholarship.
- I have not yet been offered a music education scholarship
- I previously had a music education scholarship
- I currently have a music education scholarship
- I have a music performance scholarship
- I have an academic (non-music) scholarship
- I have a need based academic (non-music) scholarship

Q16 In what region of the United States is your college or university located?
Region 1-Northeast: (Maine, new Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey)
Region 2-Midwest: (Wisconsin, Michigan, Illinois, Indiana, Ohio, Missouri, North Dakota, Nebraska, Kansas, Minnesota, Iowa)
Region 3-South: (Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Mississippi, Alabama, Oklahoma, Texas, Arkansas, Louisiana)
Region 4-West: (Idaho, Montana, Wyoming, Nevada, Utah, Colorado, Arizona, New Mexico, Washington, Oregon, California, Alaska, Hawaii)

Answer responses for the following questions were:
5=Strongly Agree 4=Agree 3=Neither agree nor Disagree 2=Disagree 1=Strongly Agree

Q20 K-12 school children perceive me as a school music teacher.
Q21 I have doubts that a music teaching career is the right one for me.
Q23 I think of myself as a music teacher when I am with my music education colleagues.
Q24 I think of myself as a music teacher when I am with music education faculty.
Q25 I think of myself as a music teacher when I am with my applied lesson professor.
Q27 I think of myself as a music teacher when I am with performing musicians.
Q28 My music education colleagues perceive me as a school music teacher.
Q30 My applied lesson professor perceives me as a school music teacher.
Q31 Music education faculty perceives me as a school music teacher.
Q32 Professional musicians perceive me as a school music teacher.

Q43 If I could spend extra time working to develop my talents, I would work on developing my teaching skills.

Q47 The material covered in my music education courses is boring.

Q57 If I entered the music teaching profession today, I would feel prepared for the job.

Q61 I prefer private music teaching to a full-time classroom music teaching position in a school district.

Q62 If I were offered a K-12 music teaching job and a music performance job but could only choose one of these, I would choose the K-12 music teaching job.

Q64 Music teaching is so much a part of who I am, I spend my free time learning more about it.

Q67 I belong in the music teaching profession.

Q69 My music education coursework has heightened my enthusiasm for K-12 classroom music teaching.

Q70 It is clear to me that my music education professor(s) are devoted to my desire to teach K-12 classroom music.

Q71 A career in K-12 classroom music teaching is the best career choice I could ever have made.

Q72 A music teaching career fills me with a sense of pride.

Q83 If I were hired today, I would be very happy teaching in my area of specialization.

Q85 Of all my musical skills, music teaching is the skill I feel most capable of doing.

Q86 I prefer to do my future professional work in a K-12 school setting.
Q91 I don't expect to spend my entire music teaching career in a K-12 classroom setting.

Q92 Every day I become more confident that I have chosen the right career for me.

Q98 My music education colleagues know about my dreams of becoming a K-12 classroom music teacher.

Q99 The information I have learned in my music education coursework has informed my practicing.

Q103 I help my music education professor(s) with their projects outside of class.

Q105 I anticipate that my music education professor(s) will recommend me for a job.

Q106 I know something about my music education professor(s) personal interests.

Q107 I know something about my music education professor(s) research interests.

Q108 I expect that my music education professor(s) will become professional mentors to me after graduation.

Q110 My music education professor(s) believe I have what it takes to be a K-12 classroom music teacher.

Q111 I feel obligated to contribute to the music teaching profession by becoming the best music teacher I can be.


Froehlich, H. (2002). Thoughts on schools of music and colleges of education as places of “rites and rituals”: Consequences for research on practicing. In I.M. Hanken, S. G. Nielsen, and M. Nerland (Eds.), *Research in and for higher music education*. Festschrift for Harald Jorgensen (pp. 149-165).


