

**DEVELOPING AN ORGANIZATIONAL UNDERSTANDING OF  
FACULTY MENTORING PROGRAMS IN ACADEMIC MEDICINE  
IN MAJOR AMERICAN RESEARCH UNIVERSITIES**

by

**Darlene Fischer Zellers**

BS, Individual and Family Studies, Pennsylvania State University, 1979

MA, Administrative and Policy Studies, University of Pittsburgh, 1988

Submitted to the Graduate Faculty of  
School of Education in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy

University of Pittsburgh

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

This dissertation was presented

by

Darlene Fischer Zellers

It was defended on

March 28, 2013

and approved by

Maureen W. McClure, PhD, Associate Professor, Administrative and Policy Studies

Ellen Olshansky, PhD, Professor, University of California, Irvine

Cynthia A. Tananis, EdD, Associate Professor, Administrative and Policy Studies

Dissertation Advisor: John C. Weidman II, PhD, Professor, Administrative and Policy Studies

Copyright © by Darlene Fischer Zellers

2013

**DEVELOPING AN ORGANIZATIONAL UNDERSTANDING OF  
FACULTY MENTORING PROGRAMS IN ACADEMIC MEDICINE  
IN MAJOR AMERICAN RESEARCH UNIVERSITIES**

Darlene Fischer Zellers, PhD

University of Pittsburgh, 2013

This study examines the organizational and contextual factors associated with faculty mentoring programs in academic medicine within major research institutions in the United States, and explores the usefulness of organizational behavior theory in understanding these relationships. To date, many formal faculty mentoring programs are in operation in higher education, yet little is known about why certain practices are favored or thought to be more effective than others, as differentiated from mentoring programs in the business sector. The original conceptual framework of this qualitative multiple cross-case study was based upon faculty mentoring program success factors gleaned from the literature being grouped by one of three perspectives of organizational behavior theory, i.e., structural, political, or symbolic, and examining these variables through the perspective to which they were assigned. Using this approach, very few organizational similarities were found among the twelve faculty mentoring programs in this study. However, by reversing the conceptual framework, and examining each program variable from the three organizational perspectives, six multi-dimensional organizational themes emerged that transcend the program variables: commitment, expectations, responsibility, accountability, community, and transformation. Three of these themes are evident across all organizational perspectives: commitment, expectations, and responsibility. Accountability is evident from a dual structural/political perspective. Community is evident from a dual structural/symbolic

perspective. And, transformation is evident from a dual political/ symbolic perspective. Although specific “how to” advice is limited, this study provides support for a multi-dimensional theoretical framework for academic organizations to optimize formal faculty mentoring relationships. This study demonstrates that maximizing these six dimensions within a faculty mentoring program, to the fullest potential within organizational constraints, provides the ideal faculty mentoring program format for that particular academic culture. This model also situates these six dimensions within an academic culture, which allows faculty development professionals to identify the organizational domains that exert the most influence over these dimensions within their faculty mentoring programs. The redesign of how organizational behavior theory was applied within this study revealed a new organizational understanding of faculty mentoring programs within academic cultures. This discovery provides a promising new direction for further study.

## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS .....</b>	<b>XV</b>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
<b>1.1 PURPOSE OF STUDY.....</b>	<b>1</b>
<b>1.2 PROBLEM STATEMENT .....</b>	<b>2</b>
<b>1.3 CONCEPTUAL FRAMEWORKS .....</b>	<b>4</b>
<b>1.3.1 Organizational behavior theory .....</b>	<b>4</b>
<b>1.3.2 Mentoring program success factors .....</b>	<b>8</b>
<b>1.4 RESEARCH QUESTIONS.....</b>	<b>10</b>
<b>1.5 DEFINITION OF TERMS .....</b>	<b>11</b>
<b>1.6 EXPECTATIONS.....</b>	<b>12</b>
<b>1.7 SIGNIFICANCE OF STUDY.....</b>	<b>13</b>
<b>1.8 SUMMARY .....</b>	<b>14</b>
<b>2.0 REVIEW OF LITERATURE .....</b>	<b>17</b>
<b>2.1 INTRODUCTION .....</b>	<b>17</b>
<b>2.2 EMERGENCE OF FORMAL MENTORING PROGRAMS .....</b>	<b>18</b>
<b>2.3 ACCESS TO INFORMAL MENTORING RELATIONSHIPS .....</b>	<b>21</b>
<b>2.4 MENTORING LITERATURE REVIEWS IN HIGHER EDUCATION ....</b>	<b>28</b>

2.5	FACULTY MENTORING PROGRAM LITERATURE REVIEWS .....	29
2.6	ORGANIZATIONAL CULTURE .....	42
2.7	SUMMARY .....	44
3.0	OVERVIEW OF RESEARCH DESIGN .....	47
3.1	INTRODUCTION .....	47
3.2	VARIABLES .....	47
3.3	METHODOLOGY .....	51
3.4	PILOT STUDY .....	54
3.5	SAMPLE.....	55
3.6	DATA COLLECTION.....	61
3.7	DATA ANALYSIS.....	67
3.7.1	Content analysis.....	67
3.7.2	Case study vignettes.....	68
3.7.3	Basic descriptive statistics.....	69
3.8	COMPUTER ASSISTED QUALITATIVE DATA ANALYSIS.....	69
3.8.1	QSR NVivo9 qualitative data analysis software .....	69
3.8.2	Coding systems.....	70
3.9	STUDY DESIGN REVEALS NEW EMERGENT FRAMEWORK.....	72
3.10	CREDIBILITY OF NEW RESEARCH DESIGN.....	73
3.11	FRAMING THE DATA WITHIN THE LITERATURE .....	75
3.12	REFLECTIONS AS A PRACTITIONER-SCHOLAR .....	76
3.13	SUMMARY .....	77
4.0	RESULTS .....	81

<b>4.1</b>	<b>INTRODUCTION .....</b>	<b>81</b>
<b>4.2</b>	<b>STRUCTURAL PERSPECTIVE.....</b>	<b>82</b>
4.2.1	Introduction .....	82
4.2.2	Criteria and process for qualifying mentors.....	84
4.2.2.1	Mentor training.....	84
4.2.3	Strategies for matching pairs on the basis of professional compatibility. 85	
4.2.3.1	Mentoring teams .....	85
4.2.3.2	Centralized versus decentralized matching processes.....	87
4.2.3.3	Peer mentoring .....	92
4.2.4	Orientation on the dynamics of mentoring .....	93
4.2.5	Formative evaluation for continuous improvement.....	94
4.2.6	Summative evaluation to determine outcomes .....	94
4.2.7	Emergent variables.....	96
4.2.7.1	Frequency of mentoring interactions .....	96
4.2.7.2	Tools for engendering mentoring commitments .....	97
4.2.7.3	Developing professional skill sets.....	97
4.2.8	Summary .....	97
<b>4.3</b>	<b>POLITICAL PERSPECTIVE.....</b>	<b>99</b>
4.3.1	Introduction .....	99
4.3.2	Visible support of senior administration.....	101
4.3.2.1	Internal support .....	101
4.3.2.2	External support .....	103
4.3.2.3	Changes in senior leadership .....	103



4.3.2.4	Generating internal support for programs.....	105
4.3.3	Linked to other personnel practices.....	105
4.3.3.1	Annual appraisals of leadership .....	105
4.3.3.2	Financial incentives for departments or divisions .....	108
4.3.3.3	Financial incentives for mentors.....	109
4.3.3.4	Promotion criteria.....	111
4.3.3.5	Awards .....	112
4.3.4	Allocated sufficient resources .....	113
4.3.4.1	External support .....	113
4.3.4.2	Internal support .....	114
4.3.5	Input in the development of the format of the program .....	114
4.3.6	Voluntary participation of mentors .....	116
4.3.6.1	Lack of interest.....	116
4.3.6.2	Power differentials .....	117
4.3.6.3	Conflict management.....	117
4.3.7	Coordination team responsible for program oversight and support.....	118
4.3.7.1	Program directors .....	118
4.3.7.2	Departmental/divisional liaisons.....	119
4.3.8	Emergent variables.....	120
4.3.8.1	Academic policies: requirements versus guidelines .....	120
4.3.8.2	Dynamics of clinical departments.....	122
4.3.8.3	Organizational reputation and status .....	123
4.3.8.4	Founding directors.....	124

4.3.8.5	Sustainability .....	125
4.3.9	Summary .....	126
4.4	SYMBOLIC PERSPECTIVE.....	129
4.4.1	Introduction .....	129
4.4.2	Aligned with organizational goals and objectives.....	130
4.4.2.1	Contributing to retention .....	130
4.4.2.2	Facilitating career success and satisfaction .....	131
4.4.2.3	Achieving promotion and tenure .....	132
4.4.2.4	Fostering collaboration.....	133
4.4.2.5	Building a sense of community .....	133
4.4.3	Inclusive design that instills mentoring as a cultural value .....	134
4.4.3.1	Selective or limited mentee participation.....	135
4.4.3.2	Voluntary mentee participation.....	136
4.4.3.3	Required mentee participation .....	136
4.4.4	Strategies for identifying the developmental needs of participants .....	138
4.4.4.1	Faculty surveys .....	138
4.4.4.2	Focus groups .....	139
4.4.4.3	Organizational indicators of attrition and low morale.....	139
4.4.4.4	Modeling other peer organizations.....	139
4.4.5	Clarity with regard to goals and expectations .....	140
4.4.5.1	Goals .....	140
4.4.5.2	Expectations.....	140
4.4.6	Emergent variables.....	141

4.4.6.1	Passion of program leadership and mentors .....	141
4.4.6.2	Academic culture expectations .....	142
4.4.6.3	Generational differences regarding mentoring expectations.....	142
4.4.6.4	Culture change .....	143
4.4.6.5	Sustainability .....	144
4.4.7	Summary .....	145
4.5	SUMMARY .....	147
5.0	DISCUSSION OF RESULTS .....	149
5.1	INTRODUCTION .....	149
5.2	NEW EMERGENT VARIABLES .....	150
5.2.1	Structural observations .....	151
5.2.2	Political observations.....	152
5.2.3	Symbolic observations.....	153
6.0	NEW CONCEPTUAL FRAMEWORK .....	155
6.1	INTRODUCTION .....	155
6.2	MULTI-DIMENSIONAL ORGANIZATIONAL THEMES .....	157
6.2.1	Introduction .....	157
6.2.2	Structural/Political/Symbolic organizational themes.....	158
6.2.2.1	Commitment .....	159
6.2.2.2	Expectations.....	168
6.2.2.3	Responsibility .....	175
6.2.3	Structural/Political organizational theme .....	182
6.2.3.1	Accountability.....	183

6.2.4	Structural/Symbolic organization theme.....	189
6.2.4.1	Community .....	190
6.2.5	Political/Symbolic organizational theme .....	194
6.2.5.1	Transformation .....	195
6.3	SUMMARY .....	202
7.0	CONCLUSION.....	208
7.1	VARIANCES WITH FINDINGS IN BUSINESS LITERATURE .....	208
7.2	IMPLICATIONS FOR FACULTY MENTORING PRACTICES.....	210
7.3	LIMITATIONS OF STUDY DESIGN .....	212
7.4	FUTURE DIRECTIONS FOR INVESTIGATION .....	214
APPENDIX A : AMERICAN MEMBERSHIP OF AAU .....		217
APPENDIX B : SAMPLE INFORMED CONSENT LETTER .....		218
APPENDIX C : INTERVIEW QUESTIONS PROVIDED TO RESPONDENTS.....		219
APPENDIX D : CASE VIGNETTE TEMPLATE .....		220
BIBLIOGRAPHY .....		221

## LIST OF TABLES

Table 1: Comparison of Theoretical Frameworks .....	7
Table 2: Mentoring Program Success Factors .....	8
Table 3: Faculty Mentoring Program Studies .....	34
Table 4: Operational Definitions of Faculty Mentoring Programs .....	48
Table 5: Mentoring Program Success Factors by Organizational Perspectives .....	50
Table 6: Faculty Mentoring Program Models.....	59
Table 7: Faculty Mentoring Programs by Number of Years Operating .....	60
Table 8: Interview Questions and Relationships to Variables .....	63
Table 9: Faculty Mentoring Programs by Degrees of Structure .....	83
Table 10: Mentoring Program Success Factors: Structural Perspective .....	84
Table 11: Mentoring Program Success Factors: Political Perspective .....	100
Table 12: Contributors to Faculty Mentoring Program Designs .....	115
Table 13: Mentoring Program Success Factors: Symbolic Perspective .....	130
Table 14: Emergent Variables by Organizational Perspectives.....	150
Table 15: Emerging Themes by Organizational Perspectives .....	158

## LIST OF FIGURES

Figure 1: Interrelated Attributes of Mentoring .....	32
Figure 2: Administrative Structures Contributing to Matching Strategies .....	91
Figure 3: Administrative Structures Contributing to Decentralized Authority .....	106
Figure 4: Administrative Structures Contributing to Mentee Participation.....	135
Figure 5: Intersection of Structural/Political/Symbolic Organizational Themes.....	159
Figure 6: Intersection of Structural/Political Organizational Theme.....	183
Figure 7: Intersection of Structural/Symbolic Organizational Theme.....	189
Figure 8: Intersection of Political/Symbolic Organizational Theme .....	195
Figure 9: Multi-Dimensional Faculty Mentoring Program Organizational Themes .....	202

## **ACKNOWLEDGEMENTS**

This study is dedicated to the scientists and clinical investigators in the health sciences who dedicate their lives to improving the human condition. I would also like to acknowledge the faculty development professionals who support these researchers and who foster academic cultures in which faculty members can thrive, and be personally and professionally fulfilled in their life's work. This study would not have been possible without the generous participation of the twelve faculty development professionals who provide leadership to the faculty mentoring programs included in this study. I am deeply appreciative of their time, and for the experiences that they shared.

I would also like to thank my dissertation committee for their time and for their investment in my growth and development as a practitioner-scholar. I am especially grateful to my advisor, Dr. John Weidman, for the support he has provided me throughout my graduate studies. More so, I am thankful that he didn't follow through with his threat to disown me when I was preoccupied with other professional pursuits, and consequently, lagged behind in my progress towards my doctoral degree.

I hadn't imagined that it would "take a village to write a dissertation." I am deeply indebted to the village of support I received from: my executive editor and motivational manager, Mary Martin; my motivation coach, Dr. Steve Wendell; my transcriptionists, Mary Beth Bawden, Tammy Dennis, and Lena Zellers; my graphic artist, Codi Berk; my readers, Drs.

Georgeanna Robinson and Karen Schmidt; and my personal cheering squad, who never failed to slip the “D” word in when we would meet, Drs. Katy Baty, Chenits Pettigrew, Ora Weisz, and Jennifer Woodward.

Aside from my current network of support, I would also like to recognize those individuals who have been major influences in my professional life and who have left lasting impressions upon me as a practitioner-scholar-citizen: Mr. George Wright, from the Community College of Allegheny County, who offered me my first position in higher education administration and who inspired my passion for adult continuing higher education; Dr. Roberta Aronson, from Duquesne University, who taught me the value and strength of team-leadership where I discovered that my “blue collar” roots were an asset, rather than a liability in a “blue blood” academic culture; Dr. Susan Kinsey, formerly from the University of Pittsburgh, currently with New York University, who encouraged me to convert an internal report into my first article, and subsequently, realized my potential as a publishable author; and Dr. Cindy Tananis, from the University of Pittsburgh, who recognized that my “proclivity for the narrative” was highly conducive to qualitative research, and that being a practitioner did not preclude being a scholar, but rather, enhanced my potential to contribute to scholarly discourse in continuing higher education and professional development.

Personally, I am deeply grateful for my loving parents, Joan and the late Ray Fischer Sr. Their value of education, and their personal sacrifices, allowed their children to be first-generation college educated, and to have opportunities that had not been available to them. I am truly fortunate that my mother was ahead of her times, and believed that her daughters, as well as her sons, were entitled to a college education, which was counter to the attitudes of her peers at that time.



I have been further blessed with the support of my two children, who are truly the joys of my life: Lena and Michael Zellers. They don't remember a time when I wasn't working and going to school, and they also sacrificed so that I could achieve my educational goals. When my children were younger, my son especially, wondered why I didn't cook and clean as much as other mothers. They understand now, and are my most avid supporters.

And lastly, I would like to thank everyone who helped me keep my promise to my late husband, John Krill. His untimely illness and death while I was working on this dissertation impaired my ability to focus and persist with this study. John was critically ill and he knew that while I was caring for him, I was neglecting my work on this dissertation. He made me promise that I wouldn't use him "as an excuse for quitting". Although I lost faith in my ability to persevere, my family, friends, and colleagues kept my dream alive until I could regain my fortitude. By that time, John wasn't my excuse for quitting; he became my inspiration to prevail.

## **1.0 INTRODUCTION**

### **1.1 PURPOSE OF STUDY**

This study examines the organizational and contextual factors associated with faculty mentoring programs among major research institutions in the United States and explores the usefulness of organizational behavior theory in understanding these relationships. During the late twentieth century, many American colleges and universities followed the lead of the business community and instituted formal faculty mentoring programs to address organizational barriers to the recruitment, retention, promotion and tenure of women and minority faculty members (Johnson, 2007; Merriam, 1983; Perna, Lerner, & Yura, 1995; Tillman, 2001). Wunsch (1994) attributes the implementation of formal faculty mentoring programs in higher education to the popularity and reputed success of these programs in the business sector, rather than empirical evidence of their effectiveness. To date, many formal faculty mentoring programs are in operation in higher education, yet few empirical studies have examined this professional development activity among major American research institutions.

## **1.2 PROBLEM STATEMENT**

Allen, Eby, and Lentz (2006) consider the popularity of formal mentoring programs within the business community to be based more on speculation rather than empirical evidence. Formal mentoring program models vary widely among organizations, yet little is known about why certain practices are favored or thought to be more effective than others. “With practice leading science in this regard, our lack of empirical research regarding formal mentoring programs represents a major gap in the mentoring literature” (p. 126). Perna et al. (1995) echo a similar concern with regard to the paucity of empirical research on mentoring particular to university faculty career development. Based upon a review of the literature, Perna et al. found substantial anecdotal evidence to support the value of faculty mentoring, albeit data-based substantiation was very limited.

Universities seeking to foster academic cultures responsive to the diverse professional development needs of their faculty have few studies upon which to inform their formal mentoring practices. Moreover, the limited studies of formal mentoring programs in business and academia are commonly single case studies, with relatively small samples, utilizing self-reported data (Merriam, 1983; Sambunjak, Straus, & Marusic, 2006; Seibert, 1999). Consequently, they fail to underscore the highly contextual nature of mentoring and the organizational cultures in which the programs operate (Hegstad & Wentling, 2005).

In the three decades since Kanter (1977) identified the benefits of informal mentoring among managers and professionals, most discourse on mentoring has been in the context of employment relationships in the business sector. Consequently, many researchers investigating faculty mentoring relationships in higher education have based their assumptions upon mentoring studies conducted in business settings. In a review of literature of faculty mentoring

programs, Zellers, Howard, and Barcic (2008) found evidence that academia should be cautious in over-generalizing mentoring experiences lived within corporate cultures; few organizational parallels exist between the academy and the business sector. This study built upon the initial groundwork of Zellers et al. and enhances our understanding of faculty mentoring programs by exploring those organizational and contextual variables particular to academic cultures within major American research universities that contribute to successful formal faculty mentoring programs.

Hegstad and Wentling (2005) examined organizational antecedents and moderators that had an impact on the effectiveness of exemplary formal mentoring programs in *Fortune* 500 companies headquartered in the United States. After reviewing related documents and interviewing mentoring coordinators from 17 companies, Hegstad and Wentling found that senior-level management support is a necessary antecedent of the organizational environment. A team-focused environment, an open work area with opportunity for interaction, and a work ethic based on cross-functional operation, collaboration, and networking were antecedents that also hastened the success of formal corporate mentoring programs. Hegstad and Wentling identified open communication processes and effective selection and matching processes as the most instrumental moderators of exemplary formal mentoring programs.

Based upon Hegstad and Wentling's (2005) observations, one could deem traditional academic cultures to be incompatible to hosting high-quality formal faculty mentoring programs. Independent, disciplinary-based scholarship and research are valued and rewarded within the collegial cultures of large research universities (Bergquist, 1991). Such environmental conditions appear to be in contrast to the milieu in which Hegstad and Wentling found formal corporate mentoring programs to flourish (i.e., team focused, cross-functional, and collaborative). Yet,

formal faculty mentoring programs flourish within a number of major American research universities. Thus, the need exists to examine faculty mentoring programs from a cultural perspective and determine the organizational and contextual factors associated with their effectiveness, as differentiated from those variables that influence employee mentoring programs in business.

### **1.3 CONCEPTUAL FRAMEWORKS**

#### **1.3.1 Organizational behavior theory**

Two theoretical frameworks are interwoven to guide this study. The first framework is drawn from organizational behavior theory. Based upon organization development theory, Schein (2004) defines organizational culture as “a pattern of shared basic assumptions that was learned by a group as it solved its problems...to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (p. 17). Although an abstraction, culture manifests itself through structures and artifacts, espoused values and politics, as well as beliefs and underlying assumptions. Bergquist (1991) emphasizes that organizational culture provides meaning and context and helps to define the nature of reality for a specific group of people.

Ancona, Kochan, Scully, Van Maanen, and Westney (2005) identify three classical perspectives of organizational behavior theory that overlap with Schein’s (2004) concept of organizational culture and provide a multi-faceted approach to analyzing behavior within an organization: the strategic design, the political, and the cultural perspectives. The strategic design lens examines how organizational roles are assigned and how tasks are accomplished, the

political lens looks at how power and influence are distributed within an organization, and the cultural lens focuses upon organizational socialization and the communication of shared values and beliefs.

These three organizational behavior perspectives provide multiple vantage points from which to inform our understanding of an organization. Collectively, the strategic design, political, and cultural perspectives also provide a highly useful theoretical framework from which to analyze and compare the organizational and contextual factors associated with individual faculty mentoring programs.

The theoretical framework of this study deviates slightly from the conceptual framework applied by Hegstad and Wentling (2005) in their study of exemplary *Fortune* 500 mentoring programs, where only two classifications of antecedents were identified—either structural or cultural. In a review of research on formal mentoring as a strategy for human resource development, Hegstad (1999) posits that “Mentoring is influenced at the organizational level primarily by culture and structure” (p. 386). Hegstad and Wentling classify organizational antecedents in their study of exemplary *Fortune* 500 mentoring programs as either cultural or structural; however, they do not provide succinct operational definitions of these influences. Expanding upon their framework and utilizing a three-dimensional theoretical perspective, vis-à-vis the strategic design, political, and cultural perspectives, provides a more definitive view of institutional power and its impact on the establishment and sustainability of formal faculty mentoring programs.

Bolman and Deal (2003) also isolate the political perspective in their multi-frame theory to understanding and managing organizations. Bolman and Deal’s four-frame model utilizes a structural, human resource, political, and symbolic approach to viewing an organization. This

study's theoretical framework correlates with that of Bolman and Deal, with the exception of excluding the human resource lens. Since the focus of this study, formal mentoring programs, are human resource manifestations within institutions, there is little utility of a human resource frame for the purpose of this study. The Bolman and Deal four-frame model is intended to be applied to an overall organization, rather than to one component such as a mentoring program.

For clarity, the nomenclature used to identify frames replicates Bolman and Deal's (2003) terminology, that is, structural, political, and symbolic perspectives; although in concept, these terms mirror the descriptions Ancona et al. (2005) assign their strategic design, political, and cultural perspectives. The terminology of symbolic (Bolman & Deal, 2003) is preferred over cultural (Ancona et al., 2005; Hegstad & Wentling, 2005) in agreement with Schein's (2004) overarching definition of organizational culture as incorporating structures, politics and values, as well as beliefs and underlying assumptions. Table 1 provides a comparison of the aforementioned conceptual frameworks: the conceptual model of the Hegstad and Wentling (2005) study, the Ancona et al. (2005) theoretical model, the Bolman and Deal (2003) theoretical model, and the framework applicable to this study, noted as Zellers. The columns of Table 1 note the theoretical frameworks; the rows indicate the terminology used by the authors to identify their relatively similar perspectives.

Table 1: Comparison of Theoretical Frameworks

Hegstad and Wentling	Ancona et al.	Bolman and Deal	Zellers
Structural	Strategic Design	Structural	Structural
–	Political	Political	Political
Cultural	Cultural	Symbolic	Symbolic
–	–	Human Resource	–

Based upon the aforementioned modifications to the theoretical frameworks of Hegstad and Wentling (2005), Ancona et al. (2005), and Bolman and Deal (2003), for the purpose of this study, the organizational culture of faculty mentoring programs were examined from three organizational perspectives: structural, political, and symbolic.

1. The *structural framework* refers to the operational model of the faculty mentoring program. This includes how the program operates, how participants are selected, how mentors and mentees are matched, the roles of the participants, etc.
2. The *political framework* refers to how power is distributed and how it is exercised within the faculty mentoring program. This includes who championed the program, how the program is funded, who oversees the program, who had input in the development of the program, who has input in the future of the program, the rewards or consequences to participation, etc.
3. The *symbolic framework* refers to the beliefs associated with mentoring and the institutional value assigned to the faculty mentoring program. This includes the goals of the program, how the goals align with larger organizational goals, whether the program is institutionalized, whether it is inclusive or selective, etc.



### 1.3.2 Mentoring program success factors

The second theoretical framework of this study is based upon mentoring program success factors cited in the literature. Table 2 represents the range of factors most frequently associated with successful formal mentoring programs that Zellers et al. (2008) compiled from descriptive, evaluative, and research-based literature in both business and higher education.

Table 2: Mentoring Program Success Factors

Factors	References
Visible support of senior administration	Girves, Zepeda, & Gwathmey, 2005 Hegstad & Wentling, 2005 Wilson, Valentine, & Pereira, 2002
Aligned with organizational goals and objectives	Hegstad, 1999 Lindenberger & Zachary, 1999
Linked to other personnel practices such as performance appraisals, promotions, and systems of rewards and recognition	Hegstad, 1999 McCauley & Van Velsor, 2004 Tillman, 2001
Allocated sufficient resources	Luecke, 2004 Murray, 2001
Inclusive design that instills mentoring as a cultural value and core institutional responsibility	Gunn, 1995 Murray, 2001 Lindenberger & Zachary, 1999
Input from mentors and mentees in the development of the format of the program	Allen, et al., 2006 Lindenberger & Zachary, 1999
Voluntary participation of mentors	Allen et al., 2006 Boyle & Boice, 1998
Strategies for identifying the developmental needs of participants	Lindenberger & Zachary, 1999
Criteria and process for qualifying mentors	Daloz, 1999 Luecke, 2004
Strategies for matching pairs on the basis of professional compatibility	Hegstad & Wentling, 2005 Tillman, 2001 Wilson et al., 2002

Table 2 (continued)

Factors	References
Orientation for both mentors and mentees on the dynamics of mentoring (roles)	Allen et al., 2006 Hedstad, 1999 Ragins & Cotton, 1999
Clarity for both mentors and mentees with regard to goals and expectations	Allen et al., 2006 Murray, 2001 Tillman, 2001
Contingencies for interventions, i.e., no-fault terminations or reassignment of participants	Boyle & Boice, 1998 Murray, 2001 Tillman, 2001
Coordination team responsible for program oversight and support	Boyle & Boice, 1998 Lindenberger & Zachary, 1999
Formative evaluation for continuous improvement	Boyle & Boice, 1998 Girves et al., 2005
Summative evaluation to determine outcomes	Boyle & Boice, 1998 Girves et al., 2005 Tillman, 2001

Reprinted with permission from Zellers, D. F., Howard, V. M., & Barcic, M. A. (2008). Faculty mentoring programs; Reenvisioning rather than reinventing the wheel. *Review of Educational Research*, 78(3), 579.

These critical success factors gleaned from the literature provided a benchmark of organizational features to compare among faculty mentoring programs. By clustering these organizational features across the three organizational perspectives—structural, political, and symbolic—faculty mentoring programs were examined on an organizational level.

## **1.4 RESEARCH QUESTIONS**

1. From a structural perspective, what are the organizational similarities among faculty mentoring programs in major American research universities? For example: How do the programs operate? How are participants selected? How are mentors and mentees matched? What are the roles of the participants?
2. From a political perspective, what are the organizational similarities among faculty mentoring programs in major American research universities? For example: Who championed the programs? How are the programs funded? Who oversees the programs? Who had input in the development of the programs? Who has input in the future of the programs? What are the rewards or consequences of participation?
3. From a symbolic perspective, what are the organizational similarities among faculty mentoring programs in major American research universities? For example: What are the goals of the programs? How do the program goals align with larger organizational goals? Are the programs institutionalized? Are the programs inclusive or selective?

## 1.5 DEFINITION OF TERMS

**Academic culture:** Complex interplay of six cultures “defining patterns of perceiving, thinking, and feeling about the nature and scope of [postsecondary] education” characterized by “the paradoxes and polarities that are inherent in the interactions among these six cultures” (Bergquist & Pawlak, 2008, p. xv).

**Faculty mentoring program:** An organized institutional effort to facilitate mentoring relationships among faculty (Zellers et al., 2008).

**Faculty mentoring program organizational model:** Organizational parameters to membership in a faculty mentoring program, e.g., cross-institutional, institutional, institutional for women, discipline-based, discipline-based for women (Zellers et al., 2008).

**Major American research university:** Member of the Association of American Universities

**Mentoring:** A reciprocal learning relationship in the workplace that provides support for one’s professional and personal development (Zellers et al., 2008).

**Mentoring program success factors:** Compilation of organizational and contextual factors drawn from literature in business and higher education that are most frequently associated with successful mentoring programs (Zellers et al., 2008).

**Political organizational perspective:** One dimension of a multi-faceted approach to analyzing behavior within an organization, drawn from organizational behavior theory that examines how power and influence are distributed within an organization (Ancona et al., 2005; Bolman & Deal, 2003).

**Structural organizational perspective:** One dimension of a multi-faceted approach to analyzing behavior within an organization, drawn from organizational behavior theory that examines how organizational roles are assigned and how tasks are accomplished (Bolman & Deal, 2003).

**Symbolic organizational perspective:** One dimension of a multi-faceted approach to analyzing behavior within an organization drawn, from organizational behavior theory that examines organizational socialization and the communication of shared values and beliefs (Bolman & Deal, 2003).

## **1.6 EXPECTATIONS**

This study was undertaken with the expectation of qualifying the degree of influence attributed to success factors across institutions. It did not speculate upon the discovery of any new mentoring program success factors. The ranking of mentoring program critical success factors, based upon the frequency of their presence or absence, was expected to illuminate the organizational variables most frequently associated with faculty mentoring programs within major American research universities.

Zellers et al. (2008) observed that most studies of faculty mentoring programs, as well as studies of corporate mentoring programs, focused upon the structural dimensions of the programs. This study expected to provide new evidence that, due to the idiosyncratic nature of academic cultures, political factors exert the most influence upon faculty mentoring programs in major research universities, and structural factors have the least impact across institutions.

## 1.7 SIGNIFICANCE OF STUDY

This study fills a void in the literature and provides valuable empirical data for academic administrators seeking to foster academic cultures responsive to the diverse professional development needs of their faculty. Furthermore, this study identifies a new qualitative framework upon which to build more productive research on mentoring in the future.

Although mentoring theorists emphasize the relevance of culture to mentoring experiences, few studies exist that explore the impact of organizational cultures upon mentoring programs. In their review of literature on faculty mentoring programs, Zellers et al. (2008) noted that Hegstad and Wentling's (2005) study of exemplary *Fortune* 500 mentoring programs was the only mentoring study identified that examined organizational factors across mentoring programs. Zellers et al. were unable to identify a faculty mentoring program study that examined or underscored the academic culture in which the program existed. Moreover, Zellers et al. were unable to identify any study that examined multiple faculty mentoring programs.

Zellers et al. (2008) found that models of individual faculty mentoring programs cited in the literature varied widely along several key dimensions: the organizational sponsors; the organizational mentoring models; the length of relationships; the methods of selection and matching; and the degrees of training, structure, and monitoring. Whereas the research designs of most studies of faculty mentoring programs in higher education have focused upon the structure or strategic design of one mentoring program (Zellers et al., 2008), the conceptual framework of this study allowed for the structural, political, and symbolic perspectives to serve as parallel dimensions from which to analyze and compare multiple faculty mentoring programs. By examining a range of faculty mentoring programs from multiple perspectives, we advance our understanding of the organizational and contextual factors particular to academic cultures within

major American research universities that contribute to successful formal faculty mentoring programs, as differentiated from those variables that influence corporate mentoring programs.

Based upon a 2005 benchmarking study of faculty mentoring programs, Zellers et al. (2008) found that,

Formal faculty mentoring programs are flourishing within a number of major American research universities. However, empirical literature is especially quiet concerning these success stories and relatively silent with regard to the organizational cultures that support model faculty mentoring programs. (p. 582)

Emulating the research design of the Hegstad and Wentling (2005) study of *Fortune* 500 mentoring programs and examining organizational factors across a range of faculty mentoring programs provided a fortuitous opportunity to understand the organizational forces specific to academic cultures that contribute to successful faculty mentoring programs.

## **1.8 SUMMARY**

The purpose of this study is to identify the organizational and contextual factors associated with faculty mentoring programs among major research institutions in the United States and determine the usefulness of organizational behavior theory in understanding these relationships. Many formal faculty mentoring programs are in operation in higher education, yet few empirical studies have examined faculty mentoring programs among major American research institutions. Formal mentoring program models vary widely among organizations; however, little is known about why certain practices are thought to be more effective than others. Universities seeking to

be responsive to the diverse professional development needs of their faculty members have few studies upon which to inform their formal mentoring practices.

Although mentoring theorists emphasize the importance of culture to mentoring experiences, few studies have explored the impact of organizational cultures on mentoring programs. Hegstad (1999) noted this void in business literature and identified the need to link mentoring with organizational development in the corporate sector. Hegstad and Wentling (2005) conducted the first comparative study of mentoring programs that examined the organizational variables that had an impact on the effectiveness of exemplary mentoring programs at *Fortune* 500 companies headquartered in the United States. Zellers et al. (2008) identified evidence that academia should be cautious in over-generalizing mentoring experiences lived within corporate cultures. Thus, this study models the Hegstad and Wentling study and empirically examines faculty mentoring programs from a cultural perspective to determine the organizational and contextual variables associated with their effectiveness, as differentiated from those factors that influence employee mentoring programs in business.

Hegstad and Wentling (2005) applied a dual organizational approach to analyzing variables among mentoring programs. Organizational variables were classified as either structural or cultural. The theoretical framework of this study is based upon a multi-faceted approach to analyzing behavior within an organization: the structural, political, and symbolic perspectives. Expanding upon the Hegstad and Wentling framework and utilizing a three-dimensional theoretical framework provides a more definitive view of the impact of institutional power within an organization, and thus provides a more focused approach to analyzing faculty mentoring programs.



The factors most frequently associated with successful formal mentoring programs that Zellers et al. (2008) compiled from descriptive, evaluative, and research-based literature in both business and higher education, presented earlier on Table 2, provide an optimal benchmark of organizational and contextual features to compare among faculty mentoring programs. By linking these organizational features to a corresponding organizational perspective, that is, structural, political, or symbolic, faculty mentoring programs are able to be examined on an organizational level.

## **2.0 REVIEW OF LITERATURE**

### **2.1 INTRODUCTION**

It has only been 35 years since researchers began to investigate the career-related benefits of mentoring relationships in the workplace. In *Men and women of the corporation*, Kanter (1977) provided one of the earliest accounts of the importance of a mentor to one's career trajectory. Based upon interviews and observations of organizational behavior, Kanter noted the career advantages provided by sponsors whom she described as "mentors and advocates upward in the organization" (p. 181). From the perspective of adult developmental theory, Levinson, Darrow, Klein, Levinson, and McKee (1978) cited longitudinal data in *The season's of a man's life* as evidence that mentors were instrumental in one's successful transition to adulthood, which included career advancement. However, Roche (1979) is credited with propelling the topic of mentoring to the attention of corporate America in his article, "Much ado about mentors," published in the *Harvard Business Review* (Merriam, 1983). Roche quantified the prevalence of mentoring among executives and found that these informal relationships added measurably to their career success and satisfaction.

Several years later, Kram (1985) published her seminal work on mentoring relationships in organizational life in which she provided evidence of the dual dimensions of mentoring: the career or technical functions and the psychosocial personal functions. The earlier works of

Kanter (1977), Levinson et al. (1978), and Roche (1979) were based primarily upon male study participants and therefore overemphasized career-based competencies and overlooked the acquisition of psychosocial competencies (Kram, 1985). Although the focus of Kram's investigation was informal mentoring relationships, she cautioned against trying to engineer mentoring relationships through formal mentoring programs for fear of destructive consequences. Subsequent studies have validated Kram's observations with regard to the career and psychosocial functions of mentoring (Chao, Walz, & Gardner, 1992; Noe, 1988), whereas her assumptions regarding the potential negative impact of formal mentoring programs have not been substantiated (Allen et al., 2006; Noe, 1988; Zellers et al. 2008).

## **2.2 EMERGENCE OF FORMAL MENTORING PROGRAMS**

In the late twentieth century, organizations within the business sector began to formalize workplace mentoring relationships as part of the planned career development of junior managers and professionals (Chao, Walz, & Gardner, 1992; Noe, 1988). According to Chao et al., informal mentoring relationships are not managed, structured, nor formally recognized by the organization; formal mentoring relationships are institutionally facilitated, managed, and sanctioned by the organization.

Harshman and Rudin (2000) identified two separate goals associated with formal corporate-based mentoring programs: the acceleration of high-potential hires and the retention of minority employees. Wunsch (1994) attributed the emergence of formal faculty mentoring programs in higher education during the 1980's to colleges and universities attempting to

replicate the latter goal of corporate mentoring programs; that is, to remove barriers to the recruitment, retention, tenure, and promotion of minority and women faculty members.

Although Kram (1985) did not examine formal mentoring programs as part of her study of mentoring in the workplace, she cautioned against the potential negative consequences of engineering relationships. Her concerns included employees feeling coerced into unwanted relationships, being anxious and uncertain about expectations, and the lack of commitment between pairs because the relationships were not self-initiated.

Noe (1988) did not find any evidence to support Kram's concerns regarding the perils of formal mentoring programs in his study investigating the determinants of successful assigned mentoring relationships. Noe surveyed 139 secondary school educators at nine sites across the United States who aspired to advance to leadership positions and were participating in comprehensive professional development programs. Using a self-designed instrument to assess career and psychosocial outcomes, Noe found that subjects in informal mentoring relationships reported more career-related support than subjects in formal mentoring relationships.

In summarizing his results, Noe (1988) surmised that organizations should not expect the same outcomes from assigned mentoring relationships as they would from informal relationships. He indicated that possible reasons for differences in outcomes between the two groups included less interaction between formal pairs and the shorter duration of formal relationships. Noe further suggested that certain characteristics of formal mentoring programs may be more important determinants of the success of the formal relationships than the chemistry of the pair, e.g., clarity of program goals and mentor training.

Chao et al. (1992) conducted one of the most extensive studies of mentoring relationships and concluded that the more that formal mentoring programs mirror informal relationships, the

more favorable the career outcomes. The research design of the Chao et al. study integrated the type of mentoring (formal, informal, or none), the functions served by the mentor (career-related and psychosocial functions), and the outcomes of the relationships (organizational socialization, job satisfaction, and salary). Survey data were part of a longitudinal study of the career development of alumni from a large Midwestern university and a small private institution; the sample included 212 alumni involved in informal mentoring relationships, 53 in formal mentoring programs, and 284 who did not report having mentors. Respondents in informal mentoring relationships reported more career-related support and higher salaries than respondents in formal mentoring programs.

Whereas Chao et al. (1992) recommended that formal mentoring programs mirror informal relationships; in contrast, Allen et al. (2006) have suggested moving beyond simulating informal relationships and developing features within mentoring programs that are not typically part of informal relationships, such as an orientation session and on-going developmental training. Allen et al. examined the relationship between formal mentoring program characteristics and perceived program effectiveness among four different organizations that housed formal mentoring programs: a healthcare organization, an oil company, a technology firm, and a manufacturing firm. Allen et al. concluded that designing formal mentoring programs that engender commitment on the part of the mentors and that help participants better understand the goals and purpose of the program are critical components to developing more favorable perceptions of formal mentoring program effectiveness.

Although a number of studies in the business sector have attributed more career-related benefits to informal mentoring relationships compared to formal relationships (Chao et al., 1992; Fagenson-Eland, Marks, & Amendola, 1997; Noe, 1988; Ragins & Cotten, 1999) other

investigators have found evidence to challenge these findings. In a national gender-balanced study of social workers, engineers, and journalists belonging to professional organizations, Ragins, Cotton, and Miller (2000) found that satisfaction with a mentoring relationship contributed to career attitudes more than whether the relationship was formal or informal.

Chao et al. (1992) acknowledged the possibility that interpersonal differences among the three groups of subjects within their sample may have skewed results, thus accounting for some of the advantages attributed to the groups involved in informal mentoring relationships. Ragins (1999) notes that samples of subjects involved in informal mentoring relationships can have disproportionate representation of high achievers relative to subjects participating in formal mentoring relationships. Without randomization of subjects, biases may exist between study groups (Mertens, 2005). The study of naturally occurring mentoring relationships and assigned mentoring relationships, however, negates randomization of subjects (Chao et al. 1992; Ragins, 1999).

### **2.3 ACCESS TO INFORMAL MENTORING RELATIONSHIPS**

Ragins (1999) attributes corporate interest in facilitating formal mentoring relationships to be driven in part by evidence that substantial disparity exists with regard to one's access to informal mentoring. Women, members of racial, ethnic, and religious minorities, persons with disabilities, and gay, lesbian, and transgender individuals face impediments to establishing these critical workplace relationships. Ragins (1997) cautions over-generalizing experiences between the aforementioned groups since their personal experiences will vary, especially for those belonging

to more than one group. Yet, Ragins identifies “restricted power” (p. 91) as a common organizational phenomenon among marginalized groups.

According to Kanter (1977), informal social networks serve as significant sources of power and influence within organizations. Powerful sponsors, which Kanter defined as “mentors and advocates upward in the organization” (p. 181), were found to be able to promote those they favored as well as facilitate their productivity by circumventing bureaucracy. Kanter further determined that “power begets power” (p. 168). She referred to the tendency for managers to support the careers of others most similar to themselves as “homosocial and homosexual reproduction” (p. 63), thus maintaining the status quo within organizations in which white males occupy the majority of leadership positions.

Johnson-Bailey and Cervero (2004), in their discussion of cross-cultural mentoring, refer to this same phenomenon as the “theory of homogeneity” (p. 19), whereas individuals are more inclined to select or make themselves available to others with whom they identify. Individuals perceived as different, whether on the basis of social class, gender, race, ethnicity, religious affiliation, physical capabilities, or sexual orientation, have less likelihood of developing mentoring relationships naturally within organizational cultures in which they represent a minority. Formal mentoring programs can provide opportunities for both mentors and mentees to bridge differences and thereby facilitate more diverse mentoring relationships.

Harshman and Rudin (2000) note that disparate access to informal workplace mentoring relationships pose legal liabilities in addition to perpetuating or exacerbating gender and/or racial inequities. Claims of discrimination may arise under Title VII of the Civil Rights Act of 1964 when individuals “are treated less favorably than others because of race, color, religion, sex, or national origin where the employer cannot establish a legitimate nondiscriminatory reason for its

conduct” (p. 137). Formal mentoring programs in the workplace can remove the perception of favoritism in this regard.

Interpersonal variables have also been found to bias the selection process involved in informal mentoring relationships. Merely being a white male is not a panacea to acquiring an effective mentor. The similarity-attraction paradigm (Byrne, 1971) refers to the tendency for individuals to be attracted to one another based upon perceived interpersonal similarities. With regard to mentoring in the corporate sector, Burke, McKeen, and McKenna (1993) reported that mentors favored protégés who were thought to be more similar to themselves with regard to intelligence, approach to procedures, personality, background, ambition, education, and activities outside work. In their survey of mentors across seven high-technology companies, “Mentors reporting greater mentor-protégé similarity also provided more career development functions, more psychosocial functions, rated their protégés more promotable and received more work benefits from this relationship” (p. 27).

In academia, Johnson (2007) refers to the “cloning phenomenon” (p. 28) in which faculty are naturally attracted to junior colleagues who conjure images of themselves. Protégés are sought out who show interest in the senior member’s career trajectory, who have similar interests, and who are most apt to become accomplished like-minded researchers, thereby furthering the senior faculty member’s academic lineage. Those individuals with limited interpersonal similarities relative to the pool of workplace mentors are consequently limited in mentoring opportunities. Depending upon the matching process of a formal mentoring program, pairs or groups can be assigned based upon any number of commonalities while still providing a level playing field for those whose perceived fit may not be immediately obvious or ideal. Again,



formal faculty programs can provide opportunity for organizations to encourage mentoring across differences.

One's abilities or perceived potential can also be a factor underlying the formation of mentoring relationships. Kram (1985) found that mentors were attracted to "someone with potential, someone who is 'coachable,' and someone who is enjoyable to work with" (p. 51). Based upon a survey of first-line supervisors employed by a southeastern state government, Allen, Poteet, and Russell (2000) found that mentors frequently chose protégés based upon perceptions regarding the protégé's ability and potential rather than perceptions regarding the protégé's need for help.

In academia, Johnson (2007) asserts that, "Mentors are drawn to talented and high-performing juniors, not those who most need help" (p. 28). Boice (2000) considers the academy's dependence upon naturally occurring mentoring relationships to be an unrealistic approach to supporting a diverse cadre of faculty. He found that "natural mentoring is uncommon and usually ineffective" (p. 238) with regard to new faculty.

The predisposition of mentors to be attracted to those whom they perceive to be high achievers is especially disconcerting for women. The Committee on Maximizing the Potential of Women in Academic Science and Engineering (2006) cited cognitive psychology research, which indicates that most men and women hold implicit gender biases. In general, both men and women are more likely to hire a man over a woman with identical qualifications, are more likely to attribute credit to a man than a woman for identical accomplishments, and are more inclined to give the benefit of the doubt to a man than a woman.

Such tendencies contribute to the "accumulation of advantage" which refers to the social process where benefits afforded an individual significantly multiply over time (Merton, 1968). In

a discussion of the pervasiveness of selectivity with regard to opportunity in academic science, Merton dubbed this phenomenon the “Matthew Effect”, citing the first book of the New Testament, the Gospel According to Matthew (13:12 and 25:29), “For unto everyone that hath shall be given, and he shall have abundance; but from him that hath not shall be taken away even that which he hath.” In modern mentoring rhetoric, the Matthew Effect is a social force that sustains the status quo within organizations and serves over time to widen the gap between majority and minority group members.

Whitely, Dougherty, and Dreher (1992) explored the concept of corporate mentoring selectivity and found three classes of predictors associated with mentoring relationships: protégé demographic characteristics such as age, sex, and socio-economic origin; protégé work involvement; and protégé work situation. Based upon the perspectives of early-career managers working in a variety of business settings, younger, more work-involved respondents from higher socio-economic backgrounds received more career-oriented mentoring. Those higher in the organizational hierarchy also reported receiving more mentoring. In the Whitely et al. study, the perceived potential of the early-career managers, as well as their similarities with their mentors, appeared to have contributed to the degree of mentoring they received. Formal mentoring programs can provide the opportunity for organizations to support employees regardless of their perceived abilities, potential, or socio-economic origins.

Individual differences not only influence being selected by a mentor, Turban and Dougherty (1994) found that personality affected the likelihood that an individual would initiate a relationship with a mentor. “Specifically, individuals with internal loci of control and high self-monitoring and emotional stability were more likely to initiate and therefore to receive mentoring” (p. 698). Individuals who believe that rewards and outcomes are within their control

rather than external to themselves, who can modify their behavior based upon situations and social cues, and who exhibit high self-esteem and confidence, more commonly seek support through informal mentoring relationships. Formal mentoring programs can remove the preliminary burden of initiation from the mentee, thus countering any personality characteristic that may inhibit one from pursuing a mentoring relationship independently.

Formal mentoring programs have the potential to provide a more inclusive environment of support within diverse organizations as well as orient individuals to initiate additional informal relationships on their own. Hegstad (1999) describes formal mentoring as a valid human resource development and intervention strategy, yet few studies link the value of formal mentoring programs to human resource development or organizational development. Framed within the context of human resource training, formal mentoring programs can assist early career professionals over initial hurdles of developing mentoring relationships; can provide training, opportunity to practice, and oversight of mentoring relationships; and can empower individuals to develop successful and satisfying informal mentoring relationships throughout their careers.

After studying mentoring relationships in corporate settings for nearly twenty years, Kram (2004) posits that:

There are no simple recipes. Perhaps the most important lesson from all of these programmatic efforts is that the most effective strategies for fostering mentoring depend on the context in which they are implemented, the purpose for such initiatives, and the values, skills and attitudes of potential participants. (p. xii)

This revelation within the business literature poses a conundrum for academic administrators if the majority of mentoring literature is based upon experiences within corporate rather than

academic cultures. Organizational context shapes mentoring relationships (Kram, 1985); therefore one begins to question how reliable are observations made within the business sector relative to professional mentoring relationships forged within academia.

This study is not intended to challenge earlier findings that have found that informal relationships are preferential to formal relationships. But, rather, this study seeks to gain a better understanding of formal faculty mentoring programs within major American research universities in lieu of Boice's (2000) observation that informal mentoring practices in academia are obsolete and pose as barriers to fostering a diverse academy. Since the degree of satisfaction with a mentor, and the context of the relationship appear to be significant variables relating to mentoring outcomes, the closer examination of faculty mentoring programs that have successfully persisted within research-intensive academic cultures is warranted.

Although admittedly simplistic, the relationship between formal mentoring programs and informal mentoring relationships can be compared to riding a bicycle with training wheels and riding one without. All new bicyclists can benefit from training wheels, yet some agile types never need them. Some individuals need training wheels longer than others. One's use of training wheels doesn't necessarily correlate with how proficient he or she will eventually become riding a bicycle; this temporary accessory merely provides the support to get started without falling over.

Formal mentoring programs should not be viewed as a substitute for informal mentoring relationships, but rather as an equitable method to building mentoring proficiency across an organization. Ragins and Cotten (1999) use a similar analogy in their suggestion "for organizations to use formal mentoring relationships as a springboard for the development of informal relationships" (p. 546). Ragins and Cotton recommend, for example, that formal

mentoring programs include training in how to develop relationships with informal mentors or require that protégés identify informal mentors in the last stage of their formal mentoring programs.

## **2.4 MENTORING LITERATURE REVIEWS IN HIGHER EDUCATION**

Merriam (1983) provided one of the earliest reviews of mentoring literature drawn from business and academic settings “to evaluate the extent to which such enthusiasm [for mentoring] can be substantiated by research” (p. 161). She found that the phenomenon of mentoring was not clearly conceptualized in either business or academia and from a research design perspective, the literature was relatively unsophisticated. However, Merriam’s review of mentoring studies in academic settings only included studies of faculty-student relationships. No reference was made of studies examining the phenomenon of faculty mentoring other faculty.

In their later review of mentoring literature specifically in higher education, Merriam, Thomas, and Zeph (1987) included three studies involving senior faculty members informally mentoring junior faculty. Merriam et al. concluded that,

The paucity of studies on faculty-to-faculty mentoring would seem to suggest that while there is rhetoric to support the effectiveness of this type of mentoring, there have been few systematic efforts to use mentoring to help junior faculty become successful in their careers. (p. 203)

Perna et al. (1995) conducted one of the earliest reviews of research that specifically focused upon mentoring and university faculty career development. Noting that few empirical studies had

been conducted, Perna et al. only reviewed four studies that examined informal mentoring relationships between faculty members. No reference was made to studies of formal faculty mentoring programs. At the time, the Perna et al. review was notable because they observed that informal matching processes practiced among faculty members correlated with results found in the business sector; that is, that mentors informally selected protégés based upon mutual interests. “Academic mentors [of faculty] overwhelmingly identified successful protégés as those who shared similar research interests” (p. 39).

## **2.5 FACULTY MENTORING PROGRAM LITERATURE REVIEWS**

Zellers et al. (2008) conducted a recent review of literature which specifically focused upon studies of formal faculty mentoring programs. They defined formal faculty mentoring programs as organized institutional efforts to facilitate mentoring relationships among faculty members. Their review included studies of faculty mentoring programs conducted over the past ten years in the United States that used research designs and included descriptions of the mentoring program models.

The goals of their review were to frame formal mentoring programs within the context of how mentoring has evolved in philosophy and practice in the United States in both business and academia, to provide insights on the challenges associated with the study of mentoring, and to identify effective faculty mentoring program models for institutions of higher education that are seeking to foster academic cultures responsive to the diverse professional development needs of both current and future faculty members.

Zellers et al. (2008) found the lack of consensus around the definition of mentoring to be a major difficulty. Berk, Berg, Mortimer, Walton-Moss, and Yeo (2005) consider Wrightman's observation over twenty years ago to still be relevant: "There is a false sense of consensus, because at a superficial level, everyone 'knows' what mentoring is. But closer examination indicates wide variation in operational definitions" (p. 66). For example, Levinson et al. (1978), from the prospective of adult developmental theory, described mentoring as an intense, influential relationship developed in early adulthood with an older individual that aided in a man's transition to full adulthood. Whereas Zellers et al. found that:

Mentoring has evolved into a process of partnerships in which individuals engage in the two-way transfer of information and skills, fluidly reversing the roles of mentor and mentee as warranted by the experience each brings to the relationship. (p. 12)

Within recent literature in both business and academia, some authors have begun to codify or categorize types of mentoring relationships. In the business sector, Murrell, Forte-Trammell, and Bing (2009) use the term *reverse mentoring* to refer to mentoring relationships in which a junior or younger employee provides mentoring to a more senior employee. These types of relationships are considered to facilitate knowledge transfer across generations, especially in areas of technology. In academic settings, Thorndyke, Gusic, and Milner (2008) describe *functional mentoring* to describe faculty mentoring relationships that lead to tangible results. The objectives of these mentoring relationships are clearly defined and the effectiveness of the relationships is measured by the production of an end product such as a project, grant application, or paper.

In Kram's (1985) original interviews with managers in a corporate setting, she recognized that "mentor" had a wide variety of connotations and therefore framed the focus of her inquiry as workplace "developmental relationships" (p. 4) rather than using the more subjective terminology of mentoring. Sands, Parson, and Duane (1991) noted how difficult it was to generalize results from one mentoring study to another: "The term 'mentor' has been subject to so many interpretations that it is not known how university faculty members view the concept" (p. 175). Much of the mentoring literature is invalid because it is not clear what kinds of relationships are being examined or whether the expectations of the individuals in the mentoring relationships are similar (Clutterbuck & Lane, 2004).

While acknowledging that a consensus does not exist with regard to a definition of mentoring, Zellers et al. (2008) provided a schema to represent the complementary and interrelated dimensions, roles, functions, and overlapping assumptions found to be frequently associated with mentoring in contemporary literature. Figure 1 illustrates the interrelated attributes of mentoring relationships and was designed by Zellers et al. to represent the largest common denominators of mentoring and demonstrate the broadest parameters cited in professional and academic literature.



<b>M E N T O R I N G</b>			
<b>DIMENSIONS</b>	<b>ROLES</b>	<b>FUNCTIONS</b>	<b>ASSUMPTIONS</b>
Career or Technical	Sponsor	Guides, protects, opens doors, and makes introductions	Engenders Trust  Reciprocates Respect  Demonstrates Commitment
	Coach	Teaches, challenges, and provides feedback	
Psychosocial or Personal	Role Model	Demonstrates behaviors, attitudes, and values	Issues Challenges  Provides Support  Offers Vision
	Counselor	Provides support, advice, and coping strategies	

Reprinted with permission from Zellers, D. F., Howard, V. M., & Barcic, M. A. (2008). Faculty mentoring programs; Reenvisioning rather than reinventing the wheel. *Review of Educational Research*, 78(3), 556.

Figure 1: Interrelated Attributes of Mentoring

Another challenge Zellers et al. (2008) discovered with regard to the mentoring literature was that although qualitative methods are better suited to exploring the complexity of relationships (Creswell, 2007; Mertens, 2005; Speziale & Carpenter, 2007), qualitative methods are not universally accepted within the academic community as empirical or evidence-based. Sambunjak et al. (2006) conducted a systematic review of mentoring literature in academic medicine and included all study designs except qualitative studies without explanation. “Minimum inclusion criteria were a description of the study population and availability of extractable data” (p. 1104).

Zellers et al. (2008) identified four studies of faculty mentoring programs in academic medicine within the same timeline of the Sambunjak et al. study (Benson, Morahan, Sachdeva, & Richman; 2002; Bower, Diehr, Morzinski, & Simpson, 1998; Pololi, Knight, Dennis, & Frankel,

2002; Wingard, Garman, & Reznik, 2004). Two of these studies used mixed-method designs that included both qualitative and statistical methods, yet only Wingard et al. was cited by Sambunjak et al. (2006) as reporting extractable data. This further illustrates the lack of agreement in the academic community with regard to what qualifies as “extractable data.”

A third challenge identified by Zellers et al. (2008) was the paucity of studies of faculty mentoring programs that used research designs and included descriptions of the mentoring program models. Zellers et al. found that the same methodological issues that Wunsch (1994) reported to be true over a decade earlier continue to afflict mentoring scholarship: the prevalence of testimonies and evaluative rather than research-based studies, research designs involving small samples or a single case study, the lack of control groups, and the lack of longitudinal studies.

Zellers et al. (2008) found that the, “Conundrum for faculty development practitioners who are considering establishing a faculty mentoring program is not that there is a lack of programs but rather that little scholarship is being generated and/or disseminated about these model programs” (p. 580). A benchmarking study of ten faculty mentoring programs at eight institutions belonging to the Association of American Universities (Zellers, Howard, & Barcic, 2005) revealed that some institutions were systematically collecting data on their faculty mentoring programs, yet were not publishing their findings, for two reasons. Foremost, the program administrators had not sought approval from their institutional review boards, thus preventing them from publishing their data. Secondly, personnel responsible for administering the mentoring programs were typically practitioners rather than researchers.

The lack of scholarship surrounding mentoring programs can be partially attributed to the *practitioner predicament*: the field is dominated by practitioners who are either

professional staff, academicians with specialties other than faculty development, or faculty members volunteering or dedicating a small portion of their academic effort to the administration of a mentoring program. Such personnel often have limited training, resources, or time to engage in rigorous mentoring-related scholarship. (Zellers et al., 2008, p. 581)

Zellers et al. (2008) did, however, identify seven studies of faculty mentoring programs that had research designs, had included sufficient descriptions of the mentoring program models, and were conducted over the past ten years in the United States. Table 3 identifies the investigators, the organizational sponsors of the mentoring programs, the methodologies, and the conclusions of the studies.

Table 3: Faculty Mentoring Program Studies

Reference	Organizational Design	Methodology	Conclusions
Benson et al., 2002	Discipline-based: Medicine  Medical College of PA and Hahnemann University National Center of Leadership in Academic Medicine	Case study of 33 junior faculty and 88 senior faculty with mixed method analysis of program: participant post-assessment surveys and statistical analysis of publication and retention data versus control group	Self-reported increase in level of satisfaction and productivity, greater retention of junior faculty--particularly minority faculty-- compared to control
Boyle & Boice, 1998	Institutional  A large, public, comprehensive university	Case study of 25 junior faculty with mixed method analysis of program: MI-assigned based upon interviews and observed behaviors statistically compared to MI assigned control group	MI of formal mentoring pairs significantly higher than informal control group indicating more involved relationships over longer period of time

Table 3 (continued)

Reference	Organizational Design	Methodology	Conclusions
Cawyer et al., 2002	Discipline-based: Communication  A large Midwestern doctoral-one research university	Case study of one junior faculty member utilizing field notes and interviews; multiple coders using constant comparison method of analysis	Five mentoring characteristics were found to impact socialization: bonding, social support, professional advice, history, and accessibility
Chesler et al., 2003	Cross-institutional and discipline-based: Engineering  NSF/Engineering Information Foundation women faculty outdoor- adventure professional development program	Case study of 14 junior faculty utilizing reflective self-reports and observations; a deductive coding frame was applied for evidence of informational, psychosocial, and instrumental benefits	Self-reported increase in confidence, improved perspective on personal and professional environments, and increased community and trust
Pololi et al., 2002	Discipline-based: Medicine  East Carolina University Brody School of Medicine, National Center of Leadership in Academic Medicine	Case study of 18 junior faculty with mixed method analysis of program: participant pre-/post-assessment surveys and statistical analysis of learning objectives data	Self-reported improved professional skills, satisfaction, and retention
Wingard et al., 2004	Discipline-based: Medicine  University of California, San Diego, National Center of Leadership in Academic Medicine	Case study of 67 junior faculty with mixed method analysis of program: participant pre-/post-assessment surveys, statistical analysis of retention and return-on- investment data versus control group	Self-reported improved confidence in skills improved retention at UCSD, retention in a career in academic medicine, and program cost effectiveness compared to control

Reprinted with permission from Zellers, D. F., Howard, V. M., & Barcic, M. A. (2008). Faculty mentoring programs; Reenvisioning rather than reinventing the wheel. *Review of Educational Research*, 78(3), 570 – 571.

Only one cross-institutional study met the criteria of the Zellers et al. (2008) review: Chesler, Single, and Mikic (2003) cited a unique intervention program that provided networking and mentoring opportunities for tenure-track female faculty members in engineering competitively selected from a pool of 24 colleges and universities in New England. Sponsored by the National Science Foundation and the Engineering Information Foundation, this three-day program coupled outdoor-adventure education with the development of communication and leadership skills while facilitating mentoring relationships.

The authors used a qualitative deductive coding frame to assess written reflections as well as evaluate interactions during activities and small group discussions to determine the informational, psychosocial, and instrumental benefits they associated with the program. Participants reported increased confidence, increased community and trust, and improved perspective on their professional and personal environments.

One year later, many participants kept in touch and assisted each other through shared reflection and discussion. Chesler et al. (2003) claimed that the positive outcomes associated with this program may contribute to improved retention and advancement and indicated that such would be examined through a longitudinal study. Although there was no mention of a control group, one would have enhanced the significance of the study outcomes.

One study of an institutional faculty mentoring program was identified as part of the Zellers et al. (2008) review: Boyle and Boice (1998) examined the experiences of 25 pairs of faculty members from across the sciences, social sciences, and humanities at a large, comprehensive university who volunteered to participate in a mentoring program funded by the Federal Fund for Improving Post-Secondary Education. Boyle and Boice used a uniquely designed mentoring index to assign criterion-based scores to mentoring pairs on the basis of

weekly interviews and observations. Factors used to determine ratings included the nature and regularity of meetings, the reported quality of interactions and compatibility, and indicators of professional growth.

The mentoring index scores of the 25 formal pairs were found to be higher than those of a control group of new faculty members involved in informal mentoring relationships. The findings of this study are notable on two levels: 1) Other studies in business and higher education have determined that individuals with access to spontaneously occurring mentoring relationships are more likely to be high achievers (Kram, 1985; Johnson, 2007) and 2) studies in business have determined that informal relationships provide more career-related support than formal mentoring relationships (Chao et al., 1992; Noe, 1988; Ragins & Cotten, 1999). Since the subjects of this study, as well as the control group, were volunteers, it is unknown whether differences between the two groups contributed to study outcomes.

The Boyle and Boice (1998) study, in particular, contributed to Zellers et al. (2008) beginning to question whether observations made within the business sector were transferable to academic cultures. Much that we know about mentoring relationships, both formal and informal, has been generated from research within corporate cultures. In contrast to the findings of studies conducted in corporate settings (Chao et al., 1992; Noe, 1988; Ragins & Cotten, 1999), Boyle and Boice concluded that well-planned, simply structured, and continuously assessed mentoring programs in academia allow faculty to dedicate more time to mentoring, and consequently, mentees derive more benefits from these relationships than if they were participating in informal relationships.

The other five research studies of faculty mentoring programs included in the Zellers et al. (2008) review were discipline-specific: four were in academic medicine and one was in

communication. Zellers et al. attributed the unusual concentration of studies in academic medicine to funding provided by the Federal Department of Health and Human Services National Centers of Leadership in Academic Medicine Program (NCLAM), which stipulated the public dissemination of measurable outcomes. Three of the four studies of mentoring programs in academic medicine involved NCLAM programs.

The Brody School of Medicine at East Carolina University (NCLAM) developed a collaborative eight-month peer mentoring program to promote the career advancement of junior faculty in academic medicine (Pololi et al., 2002). The goals of the program were to create an environment for achieving career success and satisfaction, to foster increased awareness of career goals, to facilitate career planning for career advancement, to develop skills for goal attainment, to promote increased awareness of gender and power issues in relation to career goals, and to facilitate team-building and collegiality among participants.

The program was based upon the theoretical learning principles of Carl Rogers, which advocate the provision of a safe and supportive learning environment. It was offered twice between 1999 and 2001 and enrolled 18 junior faculty member volunteers. Using pre- and post-assessment instruments, the authors reported that participants developed skills related to career planning, oral and written communication, negotiation, and conflict management. The program promoted retention through improved workplace satisfaction and increased understanding of the nature of academic medicine. Pololi et al. suggest that this collaborative approach to mentoring is superior to a didactic approach because it was self-empowering and experiential for the adult faculty members. However, the lack of a control group limits the utility of these findings.

Benson et al. (2002) designed a two-tiered mentoring program at the Medical College of Pennsylvania and Hahnemann University (NCLAM) during the reorganization of an academic

medical center. Initially, new faculty members were paired with a more senior faculty member. This mentor helped the participant find other mentors with various strengths for the second tier of the program. Benson et al. reported that 20% of junior faculty and 30% of senior faculty members participated, and the majority indicated a high degree of satisfaction with the program. Compared to the 80% of new faculty who declined the authors' invitation to participate in this program, publication productivity increased, as did minority faculty retention. Since participants were volunteers, it is unknown if differences between the participants and the larger population of new faculty contributed to the outcomes of this study.

Among all of the studies reviewed by Zellers et al. (2008), Wingard et al. (2004) described the most structured faculty mentoring program: a seven-month NCLAM program for junior faculty members in academic medicine at the University of California at San Diego (UCSD). This program included weekly half-day workshops, the completion of a professional development contract, and regular meetings with senior faculty members. Each participant's department was compensated at the rate of 5% of base pay while in the program. The 67 junior faculty members who completed this program between 1999 and 2002 reported increased confidence in skills needed for academic success, and exhibited higher-than-average retention rates at both UCSD (85%) and within academic medicine (93%), compared with national academic medicine faculty retention data. Wingard et al. concluded that the faculty mentoring program was cost effective because the improved retention rates led to significant savings in faculty recruitment costs.

The remaining study in academic medicine was not a NCLAM program, but rather was partially funded by grants in family medicine faculty development from the Federal Department of Health and Human Services. Bower et al. (1998) described a mentoring program at the



Medical College of Wisconsin designed to socialize new faculty into academic medicine. This program was based upon the theoretical mentoring model of Laurent A. Daloz, who advocated that mentors balance the degree of support, challenge, and vision within their mentoring relationships. Senior faculty members received training in the Daloz mentoring model and were subsequently assigned a mentee for two years.

Bower et al. (1998) concluded that the Daloz challenge-support-vision model helps to explain the interactions of effective mentors in academic medicine; the behaviors of mentors in highly rated relationships were classified as “high support/high challenge.” However, only half of the 18 assistant professors who participated in this mentoring program reported that they would recommend their mentors to another colleague. Zellers et al. (2008) found the results of this study to be puzzling in view of the marginal mentoring outcomes. The lack of a control group further detracted from the utility of this study.

In the only discipline-specific study outside of academic medicine cited in the Zellers et al. (2008) review, Cawyer, Simonds, and Davis (2002) describe a case study exploring the relationship between mentoring and faculty socialization. The study involved one new communication faculty member participating in a formal departmental mentoring program. For 16 weeks, the participant maintained field notes describing and reflecting upon her experiences. To augment her field notes, the investigators conducted interviews with the participant, the assigned mentor, and two faculty members involved in informal mentoring relationships with the participant. As a control, interviews were conducted with two other faculty members in their first semester of employment.

Results of this study suggest that certain aspects of formal and informal mentoring eases the anxiety of faculty in adjusting to a new organization. Although the experience of one

individual limits any generalizations, Cawyer et al. (2002) reported that, “Findings indicate that while formal mentoring may be beneficial for facilitating socialization, it is likely that an attitude of mentoring (i.e., willingness to mentor newcomers) among faculty rather than isolated relationships is the primary advantage of mentoring programs” (p. 236). This study is unique among the mentoring literature in that it proposes that a mentoring program demonstrates the “positive attitudes” of community members towards mentoring new members. An institution’s culture is determined in part by the attitudes of its members. This study implicitly suggests that a mentoring program contributes to creating a mentoring culture among faculty.

All of the faculty mentoring programs cited in the Zellers et al. (2008) review reported varying degrees of positive outcomes. Clutterbuck and Lane (2004), however, caution against oversimplifying the outcomes of mentoring studies. It is difficult to isolate all the variables that contribute to one’s professional development. Zellers et al. acknowledge that even those few studies identified with quasi-experimental designs (Benson et al., 2002; Boyle & Boice, 1998; Wingard et al., 2004) lack the randomization of subjects and control groups to establish causal relationships between mentoring, productivity, and career success.

Zellers et al. (2008) concluded that the same methodological issues identified by Wunsch (1994) over a decade ago still exist: the prevalence of evaluative rather than research-based studies, research designs involving small samples or a single case study, the lack of control groups, and the lack of longitudinal studies. “Our depth of understanding with regard to formal faculty mentoring programs continues to be relatively shallow” (Zellers et al., p. 582).

## 2.6 ORGANIZATIONAL CULTURE

Kram (1985) emphasized that organizational context shapes mentoring relationships, yet no faculty mentoring program identified as part of the Zellers et al. (2008) review specifically examined or underscored the culture in which the program existed. Cawyer et al. (2002) introduced the concept that the value of mentoring programs in academia may be cultural, that is, mentoring programs reflect community members' positive attitudes towards faculty mentoring other faculty. When Gibson (2004) examined the mentoring experiences of women faculty, she found that having an organizational culture visibly committed to the success of faculty members fostered the provision of mentoring.

In her review of the historical development of organizational culture as a construct, Bellot (2011) found that multi-disciplinary interest in organizational culture emerged in the early 1980's—similarly to the emergence of interest in workplace mentoring. Although the original notion of studying work environments and organizational climate from a social psychology perspective is attributed to Lewin, Lippitt, and White (1939), Pettigrew (1979) is credited as the first to formally introduce the term *organizational culture* as distinct from and more holistic than organizational climate. From an anthropological perspective, Pettigrew emphasized the psychological, sociological, and anthropological forces underlying the study of organizational culture.

Bellot (2011) found that the widespread popularity of the concept of organizational culture in the business community was the result of early works being, “prescriptive, solutions based, largely atheoretical, and nonacademic” (p.30). Such writing appealed to corporate managers looking for a quick fix and a competitive advantage. As academia took more interest, numerous schools of thought on organizational culture were further developed so that, “it is

widely accepted that there is no singular, correct definition of culture” (p. 30). Bellot found loose consensus around several principles of organizational culture: 1) organizational culture exists, 2) cultures are inherently fuzzy, 3) organizational culture is socially constructed, and 4) each organization’s culture is relatively unique and subject to continual change.

Organizational culture is generally accepted to be a possession or attribute of an organization able to be influenced or changed by its members. Thus, it is dynamic and develops over time. Although Bellot (2011) found several accepted definitions of organizational culture in the literature, in the context of employee socialization, Schein’s (1987) definition of organizational culture, albeit lengthy, is most frequently cited:

Organizational culture is the pattern of basic assumptions which a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, which have worked well enough to be considered valid, and therefore to be taught to new members as the correct way to perceive, think and feel in relation to those problems...it is the assumptions which lie behind values and which determine the behavior patterns and the visible artifacts such as architecture, office layout, dress codes, and so on. (p. 383)

Keyser et al. (2008) developed a conceptual framework and self-assessment tool for measuring an academic institution’s cultural efforts to support research mentorship. They noted that individual institutions have a range of policies, programs, and structures for supporting mentorship “that are unique to its historical, cultural, and organizational circumstances” (p. 220). Accordingly, this study seeks to understand the organizational cultures and circumstances of institutions that house faculty mentoring programs; and thus, provide insight as to the

assumptions, beliefs, and values of its members. Doing so will consequently provide an organizational culture framework for faculty mentoring that other academic institutions might emulate.

## **2.7 SUMMARY**

It has only been thirty-five years since researchers began to investigate the benefits of mentoring in the workplace. Based upon interviews and observations of organizational behavior, Kanter (1977) first noted the career advantages provided by sponsors. Roche (1979) is credited with quantifying the prevalence of mentoring among executives and found that these informal relationships added to these leaders' career success and satisfaction.

In the late twentieth century, organizations within the business sector established mentoring programs to accelerate the advancement of high-potential hires and to retain minority employees (Harshman & Rudin, 2000). During this time, colleges and universities began to replicate corporate mentoring programs for the latter reason; that is, to remove barriers to the recruitment, retention, tenure, and promotion of minority and women faculty members (Wunsch, 1994).

Kram (1985) was the first to provide evidence of the dual dimensions of mentoring: the career or technical functions and the psychosocial personal functions. Kram cautioned against trying to engineer mentoring relationships through formal mentoring programs for fear of negative consequences. Subsequent studies have validated Kram's observations with regard to the dual nature of mentoring (Chao, Walz, & Gardner, 1992; Noe, 1988), whereas her negative

assumptions regarding the impact of formal mentoring programs have not been substantiated (Allen et al., 2006; Noe, 1988; Zellers et al. 2008).

Noe (1988) found that subjects in informal mentoring relationships reported more career-related support than subjects in formal mentoring relationships. He surmised that organizations should not expect the same outcomes from assigned mentoring relationships as they would from informal relationships and further suggested that certain characteristics of formal mentoring programs may be more important determinants of the success of the formal relationships than the chemistry of the pair, e.g., clarity of program goals and mentor training.

Chao et al. (1992) found that the more that formal mentoring programs mirror informal relationships, the more favorable the career outcomes. In contrast, Allen et al. (2006) have suggested moving beyond simulating informal relationships and developing mentoring programs that have features that are not typically part of informal relationships, such as an orientation session and on-going developmental training.

Ragins (1999) found corporate interest in formal mentoring programs to be driven in part by evidence that substantial disparity exists with regard to one's access to informal mentoring relationships. Kanter (1977) indicated that managers, who most commonly are white males, are inclined to support the careers of others most similar to themselves. In academia, Johnson (2007) found that faculty members seek out protégés who show interest in the senior member's career trajectory, who have similar interests, and who are most apt to follow in the senior faculty member's academic footsteps. Interpersonal variables (Byrne, 1971), the perceived potential of protégés (Kram, 1985), and personality characteristics of protégés (Turban & Dougherty (1994) have all been identified as predictors of the likelihood of informal mentoring relationships developing in the workplace. Thus, formal mentoring programs have the potential to provide a

more inclusive environment of support, regardless of perceived abilities, potential, demographic background, or socio-economic origins, and provide a springboard for all members of an organization to initiate additional informal relationships on their own.

In 2008, Zellers et al. conducted a review of literature that included seven studies of faculty mentoring programs that had research designs and included sufficient descriptions of the mentoring program models. Nevertheless, they found the same methodological issues identified by Wunsch (1994), more than a decade earlier. That is, they found a lack of consensus with regard to the definition of mentoring; they discovered that although qualitative methods are better suited to exploring the complexity of relationships (Creswell, 2007; Mertens, 2005; Speziale & Carpenter, 2007), qualitative methods are not universally accepted within the academic community; and that mentoring studies are predominantly evaluative rather than research-based, include research designs involving small samples or a single case study, lack control groups, and lack longitudinal studies.

Although Kram (1985) emphasized that organizational context shapes mentoring relationships, no faculty mentoring program identified as part of the Zellers et al. (2008) review examined or underscored the culture in which the program existed. Bellot (2011) found that multi-disciplinary interest in organizational culture emerged in the early 1980's concurrently with the emergence of interest in workplace mentoring. More fully understanding the organizational cultures of institutions that house faculty mentoring programs, will provide insight to the characteristics of a mentoring culture, and therefore provide a framework for other academic institutions to follow.

### **3.0 OVERVIEW OF RESEARCH DESIGN**

#### **3.1 INTRODUCTION**

To date, most studies of mentoring programs in both business and academia have focused upon the structural dimensions of the programs (Zellers, 2008). Hegstad and Wentling (2005) conducted the first study that attempted to isolate the cultural determinants among exemplary corporate mentoring programs. In review, the research questions guiding this study are:

1. From a structural perspective, what are the organizational similarities among faculty mentoring programs in major American research universities?
2. From a political perspective, what are the organizational similarities among faculty mentoring programs in major American research universities?
3. From a symbolic perspective, what are the organizational similarities among faculty mentoring programs in major American research universities?

#### **3.2 VARIABLES**

Although the sophistication of research on formal faculty mentoring programs has not improved over the past decade, Zellers et al. (2008) found that the range of experiences that have been described as “formal mentoring programs” has grown significantly. Within research-based



literature, the variables that distinguish mentoring programs include the organizational sponsors; the length of relationships; the mentoring models; the methods of selection and matching; and the degrees of training, structure, and monitoring. Table 4 lists the operational definitions of the faculty mentoring programs found by Zellers et al.

Very few programmatic similarities existed among the seven studies. In fact, the programs were more different than similar. Attempting to make any comparisons between the formal faculty mentoring studies presented within this review is akin to comparing apple juice, apple sauce, and apple pie. (p. 576)

Table 4: Operational Definitions of Faculty Mentoring Programs

References	Mentoring Program Models
Benson et al., 2002	School-based (medicine), two-tiered, voluntary, one-to-one pairing, junior faculty assigned a senior faculty mentor in first year to orient to new environment, complete personalized agreement, no dictated structure, assist mentee in identifying mentor in second year to support career development through promotion to associate professor, mentee determines frequency of contact and length of 2 <sup>nd</sup> -tier relationship, low degree of monitoring
Bower et al., 1998	School-based (medicine), two years, voluntary, one-to-one pairing, theoretical framework (Daloz), mentors attend one-hour orientation, no dictated structure, mentee determines frequency of contact, low degree of monitoring
Cawyer et al., 2002	Departmental (communications), first semester of employment (16-week period of unspecified overall period), mandatory for mentee, one-to-one pairing, department automatically assigns new faculty a senior faculty mentor, unclear if mentors volunteer, no dictated structure, mentee determines contact, low degree of monitoring

Table 4 (continued)

References	Mentoring Program Models
Chesler et al., 2003	Cross-institutional, discipline-based (engineering), limited to women, three-day, live-in intensive experience, application-based, small matching travel funds required from institution (program fee), peer/group mentoring, theoretical framework (Outward Bound Leadership Program for Professional Women) highly structured physical and professional development experiences, closely monitored
Pololi et al., 2002	School-based (medicine), eight-month, 80-hour, application-based, required permission of chair, peer/group mentoring, theoretical framework (Rogers and adult education), three-day orientation, highly structured, six full-day skill and career development sessions once a month, closely monitored
Wingard et al., 2004	School-based (medicine), seven-month, voluntary or nominated by chair, department compensated 5% of mentee's base pay, one-to-one pairing, complete contract, highly structured, weekly half-day workshops, closely monitored

Reprinted with permission from Zellers, D. F., Howard, V. M., & Barcic, M. A. (2008). Faculty mentoring programs: Reenvisioning rather than reinventing the wheel. *Review of Educational Research*, 78(3), 577.

Within research-related literature, distinguishable factors between employment-related mentoring programs are primarily structural variables; political and symbolic factors have been underrepresented within empirical studies. Therefore, the mentoring program success factors presented on Table 2, which Zellers et al. (2008) compiled from descriptive, evaluative, and research-based literature in both business and higher education, serve as the benchmark variables for this study. This expanded list of organizational and contextual factors more equitably represents the organizational cultures in which faculty mentoring programs operate.

Table 5 illustrates how these variables are linked to a corresponding organizational perspective, i.e., structural, political, or symbolic. By clustering these organizational features

across these three organizational perspectives, one can compare faculty mentoring programs on an organizational level. Mentoring program success factor were assigned to a particular organizational perspective in consultation with two other professionals familiar with faculty mentoring theory and practice.

Table 5: Mentoring Program Success Factors by Organizational Perspectives

Organizational Perspectives	Mentoring Program Success Factors
Structural (Str)	<ul style="list-style-type: none"> <li>A. Criteria and process for qualifying mentors</li> <li>B. Strategies for matching pairs on the basis of professional compatibility</li> <li>C. Orientation on the dynamics of mentoring (roles)</li> <li>D. Formative evaluation for continuous improvement</li> <li>E. Summative evaluation to determine outcomes</li> </ul>
Political (Pol)	<ul style="list-style-type: none"> <li>A. Visible support of senior administration</li> <li>B. Linked to other personnel practices such as performance appraisals, promotions, and systems of rewards and recognition</li> <li>C. Allocated sufficient resources</li> <li>D. Input from mentors and mentees in the development of the format of the program</li> <li>E. Voluntary participation of mentors</li> <li>F. Coordination team responsible for program oversight and support</li> </ul>

Table 5 (continued)

Organizational Perspectives	Mentoring Program Success Factors
Symbolic (Sym)	<p>A. Aligned with organizational goals and objectives</p> <p>B. Inclusive design that instills mentoring as a cultural value and core institutional responsibility</p> <p>C. Strategies for identifying the developmental needs of participants</p> <p>D. Clarity for both mentors and mentees with regard to goals and expectations</p>

It can be argued that some of the factors associated with faculty mentoring programs overlap organizational perspectives, and that relationships could therefore be more explicitly represented by Venn diagrams. Ancona et al. (2005) note that multiple perspectives are not mutually exclusive, but rather provide different vantage points from which to gather information, thereby providing a more complete analysis compared to a singular perspective. For the purpose of this study, mentoring program factors have been assigned to one primary organizational perspective which best represents the organizational frame of reference.

### 3.3 METHODOLOGY

This qualitative descriptive study utilizes a collective, or multiple case study design. Morse (1997) describes qualitative research as a non-numeric approach that seeks to understand what is “going on” (p. 1) and the meaning associated with the human experience. Denzin and Lincoln (2008) emphasize that qualitative research interprets phenomenon in terms of the meaning that

people bring to them. Qualitative research provides a richness of data and is best used when one seeks an in-depth description of a specific program, practice or setting (Mertens, 2005). According to Piantanida and Garman (1999), qualitative studies provide deeper understanding and insights into complex phenomena as they occur within particular contexts. Thus, a qualitative methodology suits the program focus and contextual nature of this study.

Sandelowski (2000) notes that the increasing complexity of qualitative methods has compelled some investigators engaged in qualitative research to seek “epistemological credibility” (p. 334) by defending his or her efforts as something more than mere description:

The general view of descriptive research as a lower level form of inquiry has influenced some researchers conducting qualitative research to claim methods they are really not using and not to claim the method they are using: namely, qualitative description.

(p. 334)

That is not to say that this study and other qualitative descriptive studies are not interpretive. Sandelowski uses the terms *basic* or *fundamental* qualitative description to describe studies that are not predisposed towards a particular theoretical or philosophical orientation and entail low-inference interpretation rather than engaging in highly conceptual or abstract rendering of data.

Low-inference interpretation is most likely to result in easier consensus among researchers and is most appropriate when a descriptive mode produces a complete and valued end product rather than serve as an entry point for another qualitative study. Since this study seeks to understand the organizational and contextual similarities and differences among faculty mentoring programs in major American research universities, and to determine the usefulness of

organizational behavior theory in understanding these relationships, a descriptive, collective case study design was determined to be best suited to achieving these aims.

Merriam (1998) differentiates case studies from other types of qualitative research in that case studies are intensive descriptions and analyses of a single unit such as an individual, program, or event. The focus of a case study is process rather than outcome, context rather than a single variable, and discovery rather than confirmation. Yin (2003) notes that case studies are particularly well suited to situations in which the phenomenon, or case, cannot be separated from its context. “You would use the case study method because you deliberately wanted to cover contextual conditions—believing that they might be highly pertinent to your phenomenon of study” (p. 13). Although some theorists view the case study as a method of ethnographic research rather than a type of research, Mertens (2005) justifies the case study as a distinct form of qualitative research since a variety of methods are used to collect case study data.

Creswell (2007) identifies case study research as one of the five approaches to qualitative inquiry most frequently used in social, behavioral, educational, and health science literature, i.e., narrative, phenomenology, grounded theory, ethnography, and case study. Creswell describes case study research as the exploration of an issue within a bounded system, such as a setting or context. In collective case studies, multiple cases within different bounded systems are selected to illustrate the issue or concern. Multiple case study research designs use the logic of replication, in which the investigator replicates data collection for each case, but such practices still limit the degree of generalization because the contexts of the cases will differ (Creswell, 2007; Yin, 2003).

### 3.4 PILOT STUDY

The frameworks of this study emerged from an unpublished benchmarking study of faculty mentoring programs (Zellers et al., 2005).<sup>1</sup> This earlier study contributed to the conceptualizing of this current study and helped determine the feasibility of the research design. After reviewing the institutional web sites of the 60 American AAU-member universities, twelve faculty mentoring programs were identified in which their descriptions matched a number of the mentoring program success factors identified within the literature. Although not hosted by an AAU-member institution, a model faculty mentoring program cited in the literature was not able to be found on the institution's Web site, which gave cause to emphasize length of sustainability as a key indicator of program success.

Contact was initiated by email with the twelve mentoring program representatives identified on the Web sites. One contact person was on a leave of absence and a knowledgeable colleague was not able to be identified within the time constraints of the pilot study. Only one institution declined to participate, even after repeated persuasive communications with representatives of progressive authority. Although this one experience aroused suspicions with regard to the authenticity of information ascertained from Web sites, this overall exercise provided confidence that a sufficient number of programs could be identified that would fulfill the criteria of this study.

The benchmarking study also provided evidence that the range of interview questions were adequate to address the research questions. However, several issues were raised that did not directly relate to a study variable found in the literature: how many years the programs were in

---

<sup>1</sup> This study did not have approval of an Internal Review Board, so consequently only the research design is referenced; pilot data are not discussed.

operation, the degree of program structure, length of mentoring relationships, and how the programs were marketed. For this study, these questions have been added to the list of interview questions and are noted with asterisks on Table 7 as not directly relating to a study variable, but otherwise noteworthy.

During the benchmarking study, telephone data collection was identified as a concern. The reliance upon the interviewers to take notes during the telephone conversations was found to be a significant shortcoming. Although this technique was satisfactory in capturing factual data, the lack of verbatim responses seriously limited the identification of more subtle themes that would have had a higher likelihood of being detected through the exact transcription of audiotaped interviews (Seidman 1998). Based upon experiences when collecting data during the benchmarking study, it was determined that recording interviews would significantly enhance the value of data able to be collected during this study. Consequently, permission to record telephone interviews was requested from study respondents.

### **3.5 SAMPLE**

The target population for this study is faculty mentoring programs within major American research universities; therefore, members of the Association of American Universities (AAU) served as the sampling frame. Membership in the AAU is by invitation and the member universities are distinguished by their breadth and quality of graduate education and research.

Founded in 1900 to advance the international reputations of U.S. research institutions, the AAU currently consists of sixty American and two Canadian universities (Association of American Universities, 2010). Thus, the AAU served as an optimal sampling frame of major American



research universities from which to draw the sample faculty mentoring programs for this study. See APPENDIX A.

Based upon a pilot benchmarking study of faculty mentoring programs, Zellers et al. (2005) found that faculty mentoring program organizational models ranged from institutional, institutional for women, discipline-based, and discipline-based for women. Faculty mentoring programs can also be designed for junior, mid-career, or senior faculty members, as well as being open to faculty members across the spectrum of their career stages. To minimize the impact of discipline-specific differences among institutions, and the differences in faculty members professional development needs across career stages, the scope of this study was narrowed to focus upon junior faculty mentoring programs in schools of medicine<sup>2</sup> within institutions belonging to the AAU. Junior faculty members within research-focused institutions are especially at risk with regard to acclimating to academic expectations and advancing within an academic culture (Grigsby, 2004; Santucci et al., 2008).

The discipline of academic medicine was selected as being representative of those disciplines deeply entrenched in a traditional, research-intensive, academic culture. Medicine was selected over other academic disciplines for two reasons: 1) Zellers et al. (2005) found four junior faculty mentoring program models within schools of medicine in their benchmarking study, providing confidence that a sufficient number of junior faculty mentoring program models could be identified within schools of medicine for this study; and 2) the culture of academic medicine is frequently identified as relying substantially upon faculty individualistic achievement and the acquisition of external funding as metrics for career advancement (Brutkiewicz, 2010; Reis et al., 2009; Shea et al., 2011).

---

<sup>2</sup> The names of the organizations participating in this study varied, e.g., college of medicine, however school is used generically to represent these academic units.

I used a multi-step process to identify a purposeful sample of 12 junior faculty mentoring programs for this study. First, I searched the Web sites of the 60 American AAU-member institutions to determine if they had a school of medicine or equivalent unit. If they did, I searched the Web site of this unit to determine if it housed a school-level junior faculty mentoring program. I excluded faculty mentoring programs for mid-career or senior faculty members. I only located seven school-based junior faculty mentoring programs using this approach. I identified an eighth school-based junior faculty mentoring program through a referral from a colleague. This faculty mentoring program did not have a Web presence because the program was still in a developmental stage.

I did not consider a sample of eight junior faculty mentoring programs to be sufficient to address the research questions of this study, so I included two health sciences-based junior faculty mentoring program models in the sample. Literature in academic medicine refers to university-based health sciences systems as academic health centers (Feldman et al., 2009; Grigsby, 2004). The two health sciences-based junior faculty mentoring program models in this study included faculty members from medicine, dentistry, nursing, and pharmacy; however, I considered these junior faculty mentoring programs to be relevant to this study since the majority of the participants in these faculty mentoring programs were from their schools of medicine.

One of the health sciences-based models was from an institution that did not belong to the AAU. Nevertheless, I included this junior faculty mentoring program since this institution ranked among the upper tier of American universities relative to research funding (National Institutes of Health, 2012). Although AAU members are distinguished by their breadth and quality of graduate education and research, the AAU is not inclusive of all institutions that

warrant such distinction. The Chronicle of Higher Education (2010) found six institutions that were not AAU members, but whose research dollars exceeded those of 19 members of the AAU.

Midway through the collection and coding of data, I became concerned that the ten models of junior faculty mentoring programs would not provide sufficient confidence that all possible themes had been covered. The junior faculty mentoring models were so diverse that I considered more institutions necessary to achieve saturation of data; that is, the point at which no new evidence emerged from the existing data. Every known school-based model had been included, as well as every known health sciences-based model, so I added two department of medicine-based junior faculty mentoring programs. I identified these two programs during my initial Web search for junior faculty mentoring programs, but I passed over them because they were not school-based models. Each department of medicine was from an institution that belonged to the AAU. The organizational models of these large departments of medicine, each with a significant number of subdivisions, mirrored the organizational structure of a small school, and thus I included them in the sample.

The second step to identifying a purposeful sample of junior faculty mentoring programs was to contact an organizational representative of each faculty mentoring program by email and request his or her participation in a 45- to 60-minute audiotaped telephone interview. The email included an attachment that served as informed consent, as required by the University of Pittsburgh Institutional Review Board.<sup>3</sup> See APPENDIX B.

While attempting to contact program representatives, but prior to expanding the sample of faculty mentoring programs beyond schools of medicine to include other models (health sciences and departments of medicine), I discovered that one school-based faculty mentoring

---

<sup>3</sup> This study was approved by the University of Pittsburgh Institutional Review Board IRB# PRO10120171.

program was no longer in operation. Although a faculty mentoring program description still appeared on the organization's Web site, I discovered that the founding director had retired five years earlier and that the program no longer existed. With the exception of this one program, a representative from all of the other institutions contacted agreed to be interviewed. One organizational representative changed institutions during the course of this investigation, but nevertheless still agreed to contribute to this study.

Thus, the final sample for this study included twelve junior faculty mentoring programs: eight were school of medicine junior faculty mentoring programs, two were health sciences junior faculty mentoring programs, and two were department of medicine junior faculty mentoring programs, with all programs except one, being from an institution that belonged to the AAU (Table 6).

Table 6: Faculty Mentoring Program Models

Type of Organizational Model	Number of Program Models
School of Medicine	8
Health Sciences System	2
Department of Medicine	2

One junior faculty mentoring program was in a planning stage at the time of this study. The other eleven junior faculty mentoring programs have been in operation from one year to over ten years. Table 7 represents the distribution of sample junior faculty mentoring programs by number of years in operation.

Table 7: Faculty Mentoring Programs by Number of Years Operating

Number of Years Operating	Number of Sample Programs
In planning stage	1
1	1
2	2
3	1
4	1
6	3
7	1
Over 10	2

Ten of the respondents were women and two of the respondents were men. Whereas, eight of the programs were directed by women and four of the programs were directed by men; one male director was out of the country at the time of this study, and another male director referred me to a female senior staff administrator to contribute to this study on his behalf.

Nine of the institutions were public and three of the institutions were private. The institutions were geographically dispersed across the United States with representation from the east coast, midwest, west coast, and the south. To protect the identities of the respondents and the junior faculty mentoring programs<sup>4</sup> included in this sample, some quotes used in this study have been edited to remove any identifiable references.

---

<sup>4</sup> Subsequent references to the sample junior faculty mentoring programs in this study have been simplified to “faculty mentoring programs.”

### **3.6 DATA COLLECTION**

For this study, I implemented two data collection strategies: 1) a review of the Web site and electronic documents related to each organization's faculty mentoring program, and 2) telephone interviews with administrative representatives of each faculty mentoring program. In case study research, a dual data elicitation strategy allows for a more thoroughly detailed account of the case (Creswell, 2007; Merriam, 1998; Yin, 2003).

As one of the data collection strategies chosen for this study, interviewing allows the inquirer to "understand the experience of other people and the meaning they make of that experience" (Seidman, 1998, p. 3). Since organizational culture includes the meaning members attribute to experiences (Bergquist, 1991), interviewing served as an optimal mode of inquiry for the purpose of this study. Rubin and Rubin (2005) consider qualitative interviewing projects to be especially good at describing social and political processes; that is, how and why things occur, which also suited the objectives of this study well. The preliminary reviews of the Web sites and the printed artifacts provided background context for the interviews, as well as authenticated information acquired during the interviews.

I conducted eleven telephone interviews and one in-person interview between December 2011 and May 2012. In ten cases, the faculty mentoring program director agreed to be interviewed; in two cases a knowledgeable colleague contributed on behalf of the program director. I scheduled telephone interviews by email and sent a confirmation email closer to the time of the telephone interview. A situation developed in which I was able to conduct one interview in-person. Conducting all of the interviews in person would have allowed me to note more of the nonverbal behavior of the respondents, and would have provided more rich data collection; however, travel expenses limited me to telephone interviews in all but one case.

All interviews were audiotaped with the exception of one telephone interview; the respondent had overlooked this detail in the preliminary email communication, and at the time of the interview, requested that it not be recorded. In this one case, I depended exclusively upon taking notes for interview data. In all other cases, others were retained to transcribe the audiotapes of the interviews. Some researchers express concern that recording interviews could inhibit respondents, but the authenticity derived from direct transcription outweighed this risk (Seidman, 1998). In the one case in which the interview was not recorded, the lack of verbatim responses that would have been afforded if the interview had been audiotaped was not considered a serious limitation.

Interview questions were based upon the mentoring program success factors Zellers et al. (2008) compiled from descriptive, evaluative, and research-based literature in both business and higher education. However, interviews were semi-structured to allow respondent flexibility (Seidman, 1998). Table 8 presents the interview questions and their relationship to the study variables. Questions were purposely ordered so that study variables were “shuffled” throughout the interview, rather than grouped by organizational perspective to minimize any instrument biases. Interview questions that appeared to be relevant based upon a pilot study (Zellers et al., 2005), although did not directly relate to a study variable, are noted with an asterisk.

Table 8: Interview Questions and Relationships to Variables

Interview Questions	Organizational Perspectives			
	Structural	Political	Symbolic	Perspective Identifier
1. Tell me how the faculty mentoring program came to be established on your campus? A white paper, committee report, grassroots initiative Sub questions: A. Who originally championed this program? B. Who currently sponsors it (if different from champion)? C. Who is the targeted audience? (all faculty, junior faculty, women, etc.) D. Is participation voluntary? a. For mentees? b. For mentors? E. How are mentors identified? F. When was it established? a. Operating for how long? b. Timeline to develop? G. Is it a part of a larger initiative?		✓ ✓	✓ ✓	Pol-A Pol-A Sym-B Sym-B Pol-E Str-A Sym- Str- Sym-B
2. How is funding provided? Sub questions: A. What is its annual budget? B. What is the long-term commitment? (hard/soft funding)		✓ ✓		Pol-C Pol-C
3. How is mentoring defined? Sub questions: A. Why is it important to your institution/school? B. What are underlying assumptions?			✓ ✓	Sym-B Sym-B
4. How did you determine need? Sub questions: A. Formal or informal needs assessment			✓	Sym-C
5. What are the program goals? Sub questions: A. Institutional? B. For mentees? (Who are they?) C. For mentors? (Who are they?)			✓ ✓ ✓	Sym-A Sym-D Sym-D



Table 8 (continued)

Interview Questions	Organizational Perspectives			
	Structural	Political	Symbolic	Perspective Identifier
6. How does the program operate? Sub questions: A. Description of the model a. What is selection/matching process? b. Fixed versus flexible structure? c. Open versus fixed timeframe? d. What training is provided for mentors/mentees? e. How was the model developed? By whom? B. How is administrative oversight provided? a. Staffing? Percent of effort? Qualifications? Training? b. Advisory body? C. How are participants recruited (mentor/mentee)? a. Marketing strategy? b. Placement on Web site? D. What are participation data (mentor/mentee)? a. Percent of total faculty? b. Rank, gender, race? c. Data management system?	✓ ✓ ✓ ✓	✓		Str-B Str-* Str-* Str-C Pol-D
7. How is the program evaluated? Sub questions: A. Are there tangible outputs? a. Individual development plans/goal setting b. Mentored projects? B. If not, what are assessment criteria/measurable outcomes? a. Method/length of tracking?	✓ ✓ ✓	✓ ✓	✓ ✓ ✓ ✓	Pol-F Pol-F Sym-* Sym-* Sym-B Sym-B Str-DE
8. What do you see as motivating factors for participation? (mentor/mentee)? Sub questions: A. Incentives B. Are supervisors supportive? C. Release time/service credit? D. Program-related recognition?		✓ ✓ ✓ ✓		Pol-B Pol-B Pol-B Pol-B

Table 8 (continued)

Interview Questions	Organizational Perspectives			
	Structural	Political	Symbolic	Perspective Identifier
9. How is mentoring represented (or valued) within larger institutional culture? Sub questions: A. Are there institutional awards/recognition? B. How do schools represent mentoring (formally or informally)? a. Is it recognized in the promotion/tenure process? b. Is it referenced in faculty handbooks?		✓		Pol-B
		✓	✓	Pol-B Sym-B
10. Tell me what seems to make this program work? Sub questions: A. Strengths?	✓	✓	✓	Str-? Pol-? Sym-?
11. Tell me about any barriers or obstacles to this program? Sub questions: A. Weaknesses?	✓	✓	✓	Str-? Pol-? Sym-?
12. In hindsight, would you do anything differently? Sub questions: A. Observations/suggestions?	✓	✓	✓	Str-? Pol-? Sym-?

\* Question does not directly relate to a study variable, however was identified during the pilot study as potentially relevant to research questions.

I provided interview questions to the representatives in advance so they could familiarize themselves with the context of the interview. This practice was intended to allow for reflection and fuller responses from respondents; however, doing so did pose the risk that responses were scripted and politically correct as opposed to being spontaneous (Seidman, 1998). The document provided to the organizational representatives to inform them of the interview questions did not include the organizational perspectives or the sub questions. See APPENDIX C.

After being transcribed, I compared the audiotapes and transcriptions for accuracy. For confidentiality, I labeled the electronic files of the twelve transcripts with Greek letters and this labeling was used in all subsequent notes or charts, rather than the names of the institutions or

the names of the organizational representative. All printed records were kept in a locked file cabinet in a private office and electronic material was kept in a password-protected file. I was the only person aware of all of the organizational representatives who participated in this study; the three transcriptionists were able to ascertain the identities of some of the institutions from the interviews that they transcribed. However, they were advised that this was confidential information and that the identities of the participants in this study were not to be disclosed.

I provided the respondents the opportunity to authenticate or modify the written transcriptions of the interviews prior to coding. Mertens (2005) cites member checks as the most important criterion in establishing the credibility of qualitative research; therefore, it was important to obtain this feedback from the organizational representatives. Several respondents provided minor modifications or additional information.

Data collection was an iterative process; interviews were transcribed and analyzed so that results helped shape subsequent interviews. LeCompte and Schensul (1999) consider analysis and interpretation to be emergent processes within an iterative research design; data collection, analysis, and interpretation are a continuous and repetitive practice informing the analytic process. During this process, analysis reduces raw data to a more manageable form to tell a story, whereas interpretation associates meaning to the results.

After coding half of the interviews, this process prompted me to add the two department of medicine faculty mentoring programs to the sample. At this point, I determined that data derived from the interviews were insufficient to support preliminary inferences and that additional faculty mentoring program samples were needed to better identify emerging themes. Finding common threads among the diverse faculty mentoring program models included in this study proved to be very challenging. By increasing the number of faculty mentoring programs

included in this study, I considered the likelihood of establishing relationships between faculty mentoring program models to subsequently be increased.

## **3.7 DATA ANALYSIS**

### **3.7.1 Content analysis**

Sandelowski (2000) considers qualitative content analysis to be the “analysis strategy of choice in qualitative descriptive studies” (p. 338). This form of analysis entails searching for the presence and frequency of certain words or phrases within a specific text and attempting to qualify reasons for their presence. It is a dynamic form of analysis, appropriate for both verbal and visual data, which is oriented toward summarizing the informational content of the data.

According to Bauer (2000), content analysis is “the only method of text analysis that has been developed within the empirical social sciences” (p. 132). Classical content analysis includes numerical descriptions of some of the features of text, however the emphasis is upon “the ‘kinds’, ‘qualities’ and ‘distinctions’ in the text before any quantification takes place” (p. 132). Qualitative content analysis can begin with a pre-existing coding system, a priori coding, or more commonly, can be data-derived, i.e., evolve from the data in the course of the study (Stemler, 2001).

Qualitative research is typically characterized by the concurrent collection and analysis of data, whereby both shape the other. So, in cases where predetermined codes are applied, researchers are encouraged to be open to additional codes emerging during the analysis

(Creswell, 2007; Sandelowski, 2000; Stemler, 2001). Sandelowski (1995) cautions new qualitative researchers against a premature commitment to a particular treatment of data:

Developing expertise in qualitative research means experimenting with approaches that both meet our aesthetic needs as inquirers and fit the purposes of our study and, then, refining them in ways that do not violate any of the rules or spirit of qualitative work. Among the most common and serious violations of rule are premature analytic closure and a tenacious and (often unrecognized) commitment to some a priori view of the phenomena under investigation. Among the most common and serious violations of spirit are cookbook applications of techniques and lack of imaginative play. (p. 371)

### **3.7.2 Case study vignettes**

For studies utilizing a multiple case study design, Seidman (1998) suggests building profiles or vignettes of respondents' experiences as a preliminary step to analyzing and interpreting data gathered through interviews. I developed a vignette template to categorize systematically interview responses or information gleaned from electronic material posted on Web sites, and thereby better facilitate comparisons between faculty mentoring programs. See APPENDIX D.

According to Creswell (2007), a typical format for data analysis in research designs where multiple cases are being examined includes detailed description of each case, a *within-case analysis*, followed by a thematic analysis across the cases, called a *cross-case analysis*. Both within-case and cross-case descriptions include assertions or an interpretation of the meaning of the case. Yin (2003) also suggests cross-case synthesis as an analytic technique when multiple cases are involved. Although I created detailed descriptions or vignettes of each program to facilitate data analysis, to protect the identities of the participating faculty mentoring

programs, these detailed vignettes of the individual programs are not included in this study. For this reason, results are limited to cross-case analysis.

### **3.7.3 Basic descriptive statistics**

Basic descriptive statistics are used in this study to represent frequencies and summarize data. In qualitative studies, summarizing data numerically serves a different purpose than it does in quantitative studies; counting responses is a means to an end, not the end itself.

But the end result of counting is not a quasi-statistical rendering of the data, but rather a description of the patterns or regularities in the data that have, in part, been discovered and then confirmed by counting. (Sandelowski, 2000, p. 338)

## **3.8 COMPUTER ASSISTED QUALITATIVE DATA ANALYSIS**

### **3.8.1 QSR NVivo9 qualitative data analysis software**

To facilitate data management, I used QSR NVivo9 qualitative data analysis software. Creswell (2007) emphasizes that the process for qualitative data analysis is the same when using a computer as it is when hand-coding. That is, the investigator identifies the text or image segment, assigns a code, and then searches for other data segments with the same code labels. The use of a computer program in qualitative data analysis simply provides an organized and efficient means for storing and retrieving data. “At a minimum, CAQDAS [computer-assisted qualitative data analysis software] will do what researchers have always done, but do it more systematically and

more efficiently” (Bauer & Gaskell, 2000, p. 55). Bauer and Gaskell (2000) note that computers “add trustworthiness to a [qualitative] method that has always suffered from the reputation of seducing the researcher into unsystematic, subjective or journalistic styles of inquiry” (p. 293). Bazeley (2007) emphasizes that as a result of features such as memoing, linking, search capacities using Boolean operands, and graphical mapping, QSR NVivo9 goes beyond the mere organization of text towards facilitating more thorough and systematic interpretation.

### **3.8.2 Coding systems**

Since this study was based upon two frameworks, i.e., organizational behavior theory and faculty mentoring program success factors, I determined initial coding deductively. A deductive or a priori coding system is presupposed by experience rather than by analysis (Bazeley, 2007). I created a hierarchical node tree to group faculty mentoring program success factors under the corresponding organizational perspective as presented on Table 5. As explained by Bazeley (2007), QSR NVivo9 uses the language of horticulture and the metaphor of a family to describe data coding relationships, i.e., a hierarchical node tree consists of parent and child nodes.

The three perspectives of organizational culture guiding this study served as the top-level parent nodes: 1) structural, 2) political, and 3) symbolic. The sixteen mentoring program success factors compiled by Zellers et al. (2008) were established as child nodes under the corresponding parent nodes. Admittedly, the theoretical boundaries between organizational perspectives are subjective and some of the mentoring program success factors may be considered borderline rather than definitive. In those cases, I used QSR NVivo9’s “memo” function to capture my thought process about the parent node associations. The ability to search memos allowed me to recover and sort those child nodes whose associations were considered to be discretionary to

determine if these types of associations were relevant. I established one additional a priori parent node to capture and group the data compiled from the case study vignettes. Child nodes were established under the vignette parent node to represent the characteristics depicted on the vignette template (APPENDIX D).

Depending exclusively upon a priori coding limits the power of discovery in qualitative studies, so I incorporated emergent or inductive coding as needed to capture data that surfaced outside the parameters of the established faculty mentoring program success factors. According to LeCompte and Schensul (1999), the iterative and emergent nature of qualitative research necessitates that an investigator use an inductive approach to coding throughout the analytic process as new evidence emerges from the data.

I concurrently coded interviews and artifacts while still conducting interviews. On many occasions, the emergence of a variable during an interview prompted me to go back over already coded interviews or artifacts looking for associations that I had not initially considered especially notable. The iterative and emergent nature of data collection, data coding, and data analysis became especially pronounced when I began writing the descriptive synopsis of the results emerging from the multiple cases studies and vignettes of the twelve faculty mentoring programs included in this study. The actual process of writing the descriptive results was an analytical tool; it highlighted the gaps in initial data coding, and introduced questions that had not been initially explored, or had not been fully explored across all faculty mentoring programs.

I reviewed the transcripts of each interview and the organizational artifacts and revised codes throughout the process of writing the descriptive synopsis of the data results. This was done to the degree that mutual exclusivity and cross-case exhaustiveness of variables were maximized. Stemler (2001) has found that faulty definitions of categories and non-mutually



exclusive and exhaustive categories are two fatal flaws that negate the utility of a qualitative content analysis. After the sample of faculty mentoring programs was expanded to twelve, and after writing a descriptive synopsis of the data results, I was confident that data saturation had been achieved, i.e., no new evidence emerged from the existing data.

### **3.9 STUDY DESIGN REVEALS NEW EMERGENT FRAMEWORK**

As mentioned earlier, Sandelowski (1995) cautions new qualitative researchers against a premature commitment to a particular treatment of data. The conceptual framework of this study was based upon faculty mentoring program success factors being grouped by organizational perspective, i.e., structural, political, or symbolic, and examining these variables through the lens or perspective to which they were assigned. After doing so, and repeatedly going back over the data until no new evidence emerged, I could not identify any discernible organizational themes.

My initial suspicion was that my inexperience as a qualitative investigator inhibited me from detecting any subtle themes in the data. Being aware of the iterative and emergent nature of data analysis, I decided to begin writing the descriptive synopsis of the results emerging from the multiple case studies and vignettes of the twelve faculty mentoring programs, variable by variable within each organizational perspective. In this way, I began to actually “interact with the data.” The process of writing the descriptive results proved to be an analytical tool. By being especially observant of the exact words that respondents were using to describe their experiences, and using narrative text to describe and expand upon their experiences, I was able to add my “voice” to the “voices” of the respondents.

Organizational themes began to crystallize. However, these themes were not *within* organization perspectives; but, rather, subtle evidence of themes were surfacing *across* organizational perspectives. This “aha” moment resulted in my testing a new approach to the data. That is, reversing the conceptual framework so that each variable was examined from the three different organizational perspectives. This new treatment of the data was highly productive.

### **3.10 CREDIBILITY OF NEW RESEARCH DESIGN**

Although the research design of this study was modified midcourse, the original two strategies were employed to enhance the credibility of the study design: member checks and triangulation. Mertens (2005) cites member checks as the most important criterion in establishing the credibility of qualitative research. Therefore, I provided respondents the opportunity to authenticate or modify the written transcriptions of the audiotaped interviews prior to coding. Several respondents provided minor modifications or additional information. I also provided respondents a first draft of this manuscript to authenticate the context in which I used their quotes. I did not receive any requests for clarification, or challenges to the contexts applied.

I coded data from two sources: the transcripts of the telephone interviews with the respondents, and the printed artifacts collected from the institutional Web sites. Denzin and Lincoln (2008) refer to the use of multiple methods of data collection as triangulation, which provides a more in-depth understanding of the phenomenon being studied. As a strategy, triangulation “adds rigor, breadth, complexity, richness, and depth to any inquiry (p. 7). Denzin and Lincoln propose that triangulation is an alternative to validation, rather than a tool of validation.

Bauer (2000) describes validation as the degree to which a result accurately represents its content. Validation is commonly used in quantitative research to establish credibility; however, the credibility and rigor of qualitative studies are determined differently since there is no “true value of the text” (p. 145), only the value of the coding. Documentation and transparency of the coding frame, which is strengthened by the use of computer-assisted qualitative data analysis software, is more commonly associated with the validity of a qualitative research study. The discrepancies I found between artifacts and interviews are noted in the results.

Since I was the only coder or interpreter for this study, the reliability of the coding was determined by succinct, clear definitions, and the persuasiveness of the evidence supporting the claims. Booth, Colomb, and Williams (2008) describe a rhetorical process in qualitative research in which “you make a claim, back it with reasons, support them with evidence, acknowledge and respond to other views, and sometimes explain your principles of reasoning” (p. 108).

As a substitute for peer debriefing, in which other reviewers would be engaged to contribute to consistency of data interpretation and quality assurance (Burla et al., 2008), I recruited several readers to review the first draft of this manuscript. They contributed to the findings of this study by challenging or affirming conclusions based upon the evidence that was provided in the draft text. With regard to the generalizability of this study, as commonly is the case with qualitative studies, the results are specific to the faculty mentoring programs included in this study, and any generalizing with regard to other contexts, is at the discretion of the reader.

### **3.11 FRAMING THE DATA WITHIN THE LITERATURE**

In qualitative studies, a pre-study literature review commonly serves to establish the significance of the issue being studied, explores current scholarly discourse regarding the issue, and helps to inform the study research design. Creswell (2007) notes that some qualitative investigators consider pre-study literature reviews to bias the process of data collection and analysis; they suggest conducting a literature review post-data collection. In doing so, the investigator approaches the issues being studied with a blank mindset with regard to expectations.

For the purpose of this study, I found both a pre-study and a post-data collection literature review to be beneficial. The pre-study literature review led to the conceptualization of the frameworks for this study, that is, the expectation that organizational behavior theory would be useful in understanding the organizational and contextual nature of faculty mentoring programs within major American research universities. After narrowing the focus of this study to faculty mentoring programs in academic medicine within AAU-member institutions as representative of the academic cultures of major American research universities, I found it necessary to review mentoring literature particular to academic medicine. The literature review conducted in preparation of this study focused more broadly upon higher education and business literature. During data analysis, I reviewed literature particular to mentoring in academic medicine for evidence supporting or challenging emerging organizational themes.

### **3.12 REFLECTIONS AS A PRACTITIONER-SCHOLAR**

Piantanida and Garman (1999) note the importance of an investigator recognizing his or her role as an instrument of inquiry. “Developing oneself as instrument entails an honest understanding of what one brings to an interpretive inquiry” (p. 140). Qualitative studies require reflexivity on the part of the investigators; that is, being self-aware of how his or her biases, values, and experiences contribute to the study (Creswell, 2007). As a long-time practitioner in higher education administration, I brought extensive experience in program development and program administration to this study of faculty mentoring programs. Additionally, in preparation for this study, I conducted an extensive review of the literature and gained confidence in my ability to contribute to this field of study.

Aside from being well-read on the topic of faculty mentoring, I also felt a kinship with those administrators I interviewed. I had significant familiarity with the “front line” roles they serve, and a first-hand understanding of the cultures in which they operate. Interviewing was not a new skill to me, nor was gathering program information from Web sites; therefore, I approached this endeavor with a high degree of confidence in my ability to communicate with the respondents and to collect sufficient data for this study.

My familiarity with the subject matter could alternatively be viewed as posing a bias to data collection, analysis, and interpretation. This study seeks to verify an observation that emerged from an earlier benchmarking study on faculty mentoring programs. Therefore, I took care not to skew findings and contribute to a “self-fulfilling prophecy.”

To date, my experience transcribing audiotapes and coding text had been limited to classroom exercises. Well aware of my inadequacies as a transcriptionist, others were retained to

transcribe the audiotaped interviews conducted during this study, so that my energies could be focused exclusively upon the coding and analysis of these documents.

My confidence waned with regard to data management. Sandelowski (1995) represents data collection, preparation, analysis, and interpretation as processes that overlap temporally and conceptually in qualitative research. My lack of experience with large data samples, as well as my lack of skill utilizing QSR NVivo9 qualitative data analysis software, were major obstacles to overcome. My lack of confidence in my qualitative research skills initially hindered my ability to detect the limitations of the original study design. Once I discovered that the study design was restricting my vision, as opposed to my analytical capabilities, I was able to change course with new confidence.

### **3.13 SUMMARY**

This study defines organizational culture as consisting of structural, political, and symbolic dimensions and seeks to determine how useful these perspectives prove to be in identifying organizational similarities among faculty mentoring programs in major American research universities. In review, the research questions guiding this study are:

1. From a structural perspective, what are the organizational similarities among faculty mentoring programs in major American research universities?
2. From a political perspective, what are the organizational similarities among faculty mentoring programs in major American research universities?
3. From a symbolic perspective, what are the organizational similarities among faculty mentoring programs in major American research universities?

The mentoring program success factors presented on Table 2, which Zellers et al. (2008) compiled from descriptive, evaluative, and research-based literature in both business and higher education, serve as the benchmark variables for this study. By linking these organizational features to an organizational perspective, that is structural, political, or symbolic, faculty mentoring programs are able to be studied from an organizational level.

The research design of this investigation is a descriptive multiple case study, which emerged from an unpublished benchmarking study of faculty mentoring programs (Zellers et al., 2005). Although the original focus of this study was faculty mentoring programs within major American research universities, I narrowed the scope of this study to focus upon junior faculty mentoring programs in schools of medicine within institutions belonging to the AAU. Since I was unable to identify a sufficient number of faculty mentoring programs in schools of medicine within AAU schools of medicine, I expanded the sample to include health sciences-based and department of medicine faculty mentoring programs.

Respondents from twelve faculty mentoring programs agreed to telephone interviews; thus, the final sample for this study included eight school of medicine junior faculty mentoring programs, two health sciences junior faculty mentoring programs, and two large department of medicine junior faculty mentoring programs. All except one faculty mentoring program were from institutions belonging to the AAU.

I used two data collection strategies for this study: 1) a review of the Web site and electronic documents related to each organization's faculty mentoring program, and 2) telephone interviews with administrative representatives of each faculty mentoring program. I also employed two methods of cross-case analysis: content analysis of interviews and compilation of

case study vignettes. I used QSR NVivo9 qualitative data analysis software to facilitate data management. My coding was initially a priori: the three perspectives of organizational culture (structural, political, and symbolic) served as the top-level parent nodes; the sixteen mentoring program success factors compiled by Zellers et al. (2008) were used as child nodes under the corresponding parent nodes. Additional inductive coding emerged from the data.

Following the original conceptual framework, although I considered data saturation to be achieved, I could not identify any discernible organizational themes. Reversing the conceptual framework, so that each variable was examined from the three different organizational perspectives, proved to be more productive.

Although I modified the study design, I used the same two strategies to enhance the credibility of the design: member checks and triangulation. During member checks, several respondents provided valuable feedback with regard to the transcriptions of their interviews. The respondents also reviewed the first draft of this manuscript and authenticated the context of the results. Triangulation was achieved by comparing the two data sources: the transcripts of the telephone interviews, and the printed artifacts collected from the institutional Web sites. Since I was the only coder, as a substitute for peer debriefing, several readers reviewed the first draft of the study results.

I conducted both a pre-study and a post-data collection literature review. The pre-study literature review broadly examined discourse on faculty mentoring programs and contributed to the conceptual framework of this study. The post-data review contributed to framing the study results within current literature in academic medicine.

I approached this study with a high degree of confidence in my knowledge of mentoring literature and my familiarity with faculty professional development. I had less experience with



qualitative research methods and with the management of large data sets; thus, I was less self-assured in these regards. Upon detecting the limitations of the original study design, I modified this study and changed course with newfound confidence in my capabilities as a qualitative researcher.

## **4.0 RESULTS**

### **4.1 INTRODUCTION**

This study seeks to develop an understanding of faculty mentoring programs by examining a sample of junior faculty mentoring programs from three separate perspectives of organizational culture: the structural perspective, the political perspective, and the symbolic perspective. The structural perspective refers to the operational model of the faculty mentoring program; the political perspective refers to how power is distributed, and how it is exercised within the faculty mentoring program; and the symbolic framework refers to the beliefs associated with mentoring, and the institutional value assigned to the faculty mentoring program.

The variables being examined in this study are based upon the sixteen faculty mentoring program success factors that Zellers et al. (2008) compiled from descriptive, evaluative, and research-based literature in both business and higher education. As indicated on Table 5, each variable was framed within an organizational perspective to allow for the comparison of the sample faculty mentoring programs from each organizational perspective.

This section describes the results of the data, including emergent variables, by organizational perspective, as originally proposed. The multi-perspective observations made with regard to individual variables, which resulted in the modification of the study design, are noted. This initial treatment of the data is presented because it represents the discoveries that influenced

me to change course and examine the data from a new organizational paradigm. The identification of emerging or new variables within perspectives, which often proved to be multi-dimensional, was especially significant in exposing the limitations of the original conceptual framework. Thus, the presentation of the original treatment of the data is necessary to document the evolutionary journey that eventually led to the conclusions of this study. Chapter 5 describes the findings that resulted from the original study design. Chapter 6 expands on how I transitioned to the new study design, and describes the multi-dimensional organizational themes that consequently emerged from the new study design.

## **4.2 STRUCTURAL PERSPECTIVE**

### **4.2.1 Introduction**

The twelve faculty mentoring programs included in this study are structurally diverse. All twelve programs are centrally administered: eight are school of medicine faculty mentoring program models, two are health sciences faculty mentoring program models, and two are department of medicine faculty mentoring program models. Three of the faculty mentoring programs are highly structured: they are limited and selective in the number of participants they accept (between 15 and 24 participants a year), they have a fixed timeframe (between seven to nine months), they involve an established curriculum, they require significant commitment from participants and mentors, they have a high degree of administrative oversight, they are well-funded, and they include strategies for evaluation.

On the other end of the spectrum, two faculty mentoring programs are minimally structured: electronic resources are centrally available to support mentoring, but expectations and administrative oversight are minimal. The remaining seven faculty mentoring programs fall in between these two extremes and are moderately structured: these programs have some degree of expectations and/or some degree of administrative oversight. The moderately structured faculty mentoring programs have the widest range of variance. Expectations may be high; but, administrative oversight is moderate or low. Administrative oversight may be high; but, expectations are moderate or low. Both variables may be moderate. Table 9 represents the distribution of faculty mentoring programs included in this study relative to their degrees of structure.

Table 9: Faculty Mentoring Programs by Degrees of Structure

Degree of Structure	Number of Program Models
Highly Structured	3
Moderately Structured	7
Minimally Structured	2

The following section provides cross-case descriptions of the structural dimensions of the twelve faculty mentoring programs. Table 10 indicates the faculty mentoring program success factors identified by Zellers et al. (2008) associated with the structural domain of faculty mentoring programs. These variables, as well as other structural variables emerging from the data, are described in the following subsections.

Table 10: Mentoring Program Success Factors: Structural Perspective

Mentoring Program Success Factors
A. Criteria and process for qualifying mentors
B. Strategies for matching pairs on the basis of professional compatibility
C. Orientation on the dynamics of mentoring (roles)
D. Formative evaluation for continuous improvement
E. Summative evaluation to determine outcomes

#### **4.2.2 Criteria and process for qualifying mentors**

##### **4.2.2.1 Mentor training**

Six of the twelve faculty mentoring programs (50%) provide mentor training for their faculty members who are serving as mentors. Three of these six programs (25% of total programs) require that faculty members complete a mentoring curriculum before qualifying as either a mentor or a departmental mentoring director/liaison; the other three programs only recommend that faculty members take advantage of mentor training.

When asked to identify the best features of her faculty mentoring program, one respondent indicated that the establishment of a mentor training program was one of the top two features of her program. Although mentor training is not required as part of her faculty mentoring program, she found that mentor training is most beneficial when it is made available to departments on demand and that the mentoring curriculum needed to be available “à la carte”, so that mentor training is tailored to the needs and skill level of the prospective mentors. Although she was discussing the structural dimension of her faculty mentoring program, this

respondent's rationale for providing mentor training on demand relates to the symbolic domain of faculty mentoring programs, i.e., identifying and meeting the needs of participants.

When asked what she would change with regard to her faculty mentoring program, another respondent, whose program also provides voluntary mentor training, remarked that,

We still struggle with mentor training because everyone thinks they know how to be a mentor and they don't want to take the time. We have a few very dedicated individuals. So we have workshops and they [mentors] will come when their arms are twisted...or all of the facilitators will come and no one else. So I would like to see some kind of mentor training component built into it.

This respondent, too, alluded to other organizational perspectives. For example, one's attitude towards mentoring is a symbolic variable. Degree of dedication can also be symbolic, grounded in values. But, it also begins to bring into question what cultural incentives, or political variables, foster a mentor's "dedication" or commitment to mentoring.

#### **4.2.3 Strategies for matching pairs on the basis of professional compatibility**

##### **4.2.3.1 Mentoring teams**

Nine of the twelve faculty mentoring programs (75%) emphasize the development of a complementary mentoring team, as opposed to focusing upon a singular compatible mentoring relationship. Three of these faculty mentoring programs (25% of total programs) are highly structured and selective. In these cases, considerable attention is devoted to helping the participants cultivate mentoring and peer networks that meet their professional and personal needs. Only one of these highly structured programs require mentor training.

Four programs (33%) utilize departmental or divisional mentoring directors/liaisons that are responsible for facilitating the initial matching of mentoring pairs within the department or division. In three other cases (25%), the department chairs match mentoring pairs. All four of the programs in which departmental/divisional mentoring liaisons are used, and two of the three programs in which department chairs establish the matched pairs, expect mentees to work with their departmental mentor or local mentoring liaison to develop mentoring teams:

Every new faculty member has a mentor identified in their offer letter. That has been a standard practice. Now protégées need to find more than one mentor, a team that helps them with their various obligations as faculty members and also [provides] a personal/professional relationship to help people think about how to fit their family and personal goals into their professional life.

With regard to team mentoring, the faculty mentoring program representatives frequently differentiated between “career mentors” and “research or scholarly” mentors. Career mentors are more commonly assigned; mentees are typically expected to take responsibility for seeking out compatible research/scholarly mentors. One respondent indicated that,

I think forced matching and matching people up is a bad thing when it comes to research because it is not like a career where I am an OB/GYN and I need an OB/GYN to tell me what to do. But if it is a research topic, you need to find someone who is your lead mentor in the similar area of interest.

One respondent noted that changing times and the changing demands placed upon faculty members necessitate a team approach to faculty mentoring:

Mentoring has changed over the years. If you look at our goals on the mentor/protégée relationship from our mentoring program page, you can see that there are 8 bullets: evaluating teaching—I am not sure that each mentor is prepared to evaluate teaching. I am not sure if each mentor is prepared to look at somebody's professional portfolio and guide them, particularly if it is a mentor who is 20 years senior who was promoted long ago and our way of faculty mentoring has changed. It is not typical for one mentor to meet all the goals of the [mentoring] relationship.

In discussing structural strategies for facilitating mentoring relationships, respondents frequently referenced symbolic variables such as meeting the broader personal needs of faculty members. Also from a symbolic perspective, several respondents addressed the changing cultural dynamics of academic expectations that their new generation of faculty face compared to their senior colleagues.

#### **4.2.3.2 Centralized versus decentralized matching processes**

Five faculty mentoring programs (42%) are both centrally administered and are centrally implemented within the health science system, school, or department. Three of these five faculty mentoring programs (25% of total programs) are the highly structured and selective programs referenced earlier. In these cases, the inter-school and interdepartmental mentoring relationships that are developed as part of these highly structured programs are thought to foster interdisciplinary collaborations and provide confidentiality. One respondent noted that this model was better suited for providing “sensitivity to political conversations.”

This comment made by one respondent relative to “political conversations,” in particular, demonstrated to me the difficulty of isolating a variable within one organizational perspective.



Although a centralized or decentralized faculty mentoring model is particular to the structural dimension of the program, i.e., how it operates, the influence of the two other organizational perspectives became evident with regard to contributing to the choice of a centralized or decentralized model. For example, relative to the programs with centralized administration, fostering collaboration represents a cultural value (symbolic perspective), and providing confidentiality speaks to power structures (political perspective). Nevertheless, I continued to address the variables of this study, from one perspective at a time, beginning to sense that the conceptual design of the study might be contributing to “tunnel vision.”

In one of the highly structured faculty mentoring programs, a consultant serves as the primary mentor to the participants; the cohort of participants serve as peer mentors to each other in this program. In another highly structured faculty mentoring program, the selection committee assigns a group of participants to teams of mentors that were preselected by the selection committee, depending upon the participant’s faculty track. In the third highly structured faculty mentoring program, the selection committee pairs participants with mentors drawn from a pool of mentors who are also predetermined by the selection committee, depending upon the participant’s research interests.

In one moderately structured faculty mentoring program, the director assigns the participants to a mentor who has been preselected by the director, depending upon the participant’s faculty track. In another moderately structured faculty mentoring program, which is the last of the five faculty mentoring programs that are both centrally administered and are centrally implemented, the director assigns the participants to a mentor who has been preselected by the director, depending upon the participant’s research interests.

The remaining seven faculty mentoring programs (58%) are centrally administered; however, responsibility for faculty mentoring faculty is decentralized and comes under the purview of the department or division (a political variable). Several respondents used the expression, “One size does not fit all” in discussing their rationale for their faculty mentoring program models. These respondents noted that the needs (symbolic perspective) of their basic science departments differ from their clinical departments. Respondents also indicated that their diversity with regard to the sizes of departments, and the distribution of senior versus junior faculty, influenced their decisions. A decentralized strategy was also considered more “realistic” for meeting the high demand for mentoring in the larger organizations.

Only one of the seven faculty mentoring programs with decentralized implementation is voluntary. In this case, a departmental/divisional mentoring director matches a mentoring pair based upon his or her opinion of who is a good fit relative to research interests. Sometimes choices are limited by the availability of a mentor; consequently, some matches may be better than others. Mentees are encouraged to work with their mentoring director to identify a mentor for themselves; whereas, most new faculty may not know enough of their more senior colleagues to make such a choice, and thereby rely on the choice of their mentoring director in this regard.

Six of the seven faculty mentoring programs with decentralized implementation (50% of total programs) are operating in cultures that require all junior faculty members be assigned or select a mentor. Since mentoring has been established as a cultural requirement at these institutions (symbolic domain), these policies influenced the choice of their decentralized operations. In three of the six decentralized programs where mentoring for junior faculty is required (25% of total programs), departmental/divisional directors or facilitators/liaisons match mentoring pairs. Similar to the voluntary decentralized faculty mentoring program referenced

earlier, the matching of mentoring pairs is based upon the departmental/divisional directors' or facilitators/liaisons' opinions of who is a good fit relative to research interests, and limited by the availability of mentors (political domain) in the respective departments/divisions. Mentees are encouraged to work with their mentoring director to identify a mentor for themselves. New faculty may not know many senior faculty and rely on the choice of their mentoring director in this regard. One respondent commented on the difficulty of mentoring relationships developing spontaneously:

I read about how arranged marriages are not as successful as the one where there is some magic involved. Mentors and protégées find themselves; we don't have that luxury.

In the other three of the six decentralized faculty mentoring programs where mentoring is required for junior faculty (25% of total programs), the department chair or division chief assigns a mentor in the new faculty member's appointment letter. The respondents are not sure of the criteria that the chairs/chiefs use to match faculty, but assume that the chairs/chiefs know who would be the best match in their departments/divisions for new faculty members. Nor are the respondents certain whether the chair or chief calls upon every faculty member to be a mentor. Figure 2 represents the distribution of the faculty mentoring programs' administrative structures relative to mentoring matching strategies.

ADMINISTRATION	Centralized	Total Programs= 5  • Assigned by director or committee = 5	Total Programs = 7  • Assigned by Liaisons = 4  • Assigned by Chairs/Chiefs = 3
		Centralized	Decentralized
		IMPLEMENTATION	

Figure 2: Administrative Structures Contributing to Matching Strategies

All of the respondents in this study indicated that their faculty mentoring programs were established to meet the unmet mentoring needs of faculty members within their departments and divisions (symbolic domain), thus the need for centralized administration. Although there are mixed thoughts with regard to centralized versus decentralized implementation, there is strong consensus that for uniform institutional accountability, responsibility for the administration of faculty mentoring programs needs to be accepted by an authority above the departmental or divisional levels (political domain):

It really came down to what we wanted to do here, some [departments/divisions] here have wonderful programs, and there are others that have none at all. There had been an effort about seven or eight years ago to decentralize it and let it be the [departments'/divisions'] responsibility. It seemed like a good idea, but it had fallen apart. It became non-existent in some [departments/divisions]. Decentralization [of administration] doesn't work—at least, not here.

#### **4.2.3.3 Peer mentoring**

The three highly structured faculty mentoring programs each utilize a peer mentoring model. In one case, a mentoring program facilitator guides the group (2 groups of 12 participants per year); in another case, participants are provided a curriculum delivered by a team of faculty members and are paired with an individual mentor (1 group of 15 participants per year); and in the last case, a team of two mentors guides a group of mentees (3 groups of 8 participants per year). All programs have relatively prescribed curricula for the participants spanning seven to nine months, and the participants are part of a cohort of peers. The respondents from each of these programs said that the participants benefit from both the experiences of the facilitator/mentor(s), and the experiences of their colleagues (symbolic domain):

It is done within the environment of colleagues so that I might find a challenge that you might help me and vice versa. This is where the variety of participants comes into play – a peer program.

One participant noted that peer faculty mentoring programs present unique challenges compared to traditional one-to-one mentoring programs. Mentoring relationships need to be managed to a small degree to allow equal participation of all the mentees:

We talked about the fact that having peer mentoring has to be balanced in some way. You have to make sure that everyone is getting mentoring in the group, that it is not dominated by one person doing all the mentoring.

#### **4.2.4 Orientation on the dynamics of mentoring**

With the exception of the one faculty mentoring program that did not have a Web site at the time of this study, all of the remaining eleven faculty mentoring programs provide mentors and mentees access to rich electronic resources via their Web sites to support their mentoring relationships. Faculty members, both mentors and mentees, are encouraged to take advantage of these resources, which include descriptions of the roles of mentees/mentors, how to find appropriate mentors, responsible conduct, and strategies for successful mentoring relationships, among others. Only the three highly structured faculty mentoring programs (25%) provide a structured approach to communicating the expectations, the necessary commitment, and the responsibilities of mentoring relationships as part of their faculty mentoring programs.

With regard to the six decentralized faculty mentoring programs within organizations where which junior faculty are required to receive mentoring, the department chairs or departmental/divisional liaisons are held responsible by central administration for providing evidence that faculty mentoring is occurring (political domain). Reporting to central administration most commonly occurs as part of the chair's annual assessment by the dean, or the departmental/divisional liaison's annual assessment by the faculty mentoring program director. With regard to decentralized faculty mentoring program models, for the most part, departments/divisions are provided recommended strategies for meeting the mentoring needs of their junior faculty; however, they have a significant degree of autonomy (political domain) in determining how to meet these needs. One organization's Web site indicated that,

It would be counterproductive to specify a single type of mentoring program that would serve all [school/department] faculty. While general mentoring principles apply across disciplines, it is essential that each [department/division] tailor a mentoring approach that

is best for their discipline and culture. Nevertheless, it will be expected that every [department/division] has a mentoring program that meets minimal criteria. Records of individual faculty member mentoring activities will be maintained by [departments/divisions] to ensure that each junior faculty member is being adequately mentored.

#### **4.2.5 Formative evaluation for continuous improvement**

Five faculty mentoring programs (42%) evaluate their programs annually for the purpose of program enhancement. These five programs include two of the three highly structured faculty mentoring programs. Surveys are the most common instrument used; one program planned to conduct focus groups with participants after they completed the faculty mentoring program.

#### **4.2.6 Summative evaluation to determine outcomes**

Three faculty mentoring programs (25%) conduct summative evaluations to determine program outcomes. These three programs include two of the three highly structured faculty mentoring programs. One highly structured program was able to demonstrate a positive relationship between mentoring and retention among its participants (political/symbolic domain). The other highly structured program has not been operating long enough to conduct a longitudinal assessment, but annual evaluations have shown positive outcomes, using pre- and post-testing measures. Both programs also require tangible end products or program outcomes from their participants upon completing their programs, such as a scholarly project or a career plan.

The third faculty mentoring program that conducts a summative evaluation to determine program outcomes is operationally decentralized, so the program director struggled to develop

standard metrics (symbolic perspective pertaining to institutional goals) upon which to evaluate the outcomes of her program:

We spent a good year trying to figure what the metrics should be. Ultimately promotion is one but we aren't that far into it that most of our junior faculty would not be promoted yet, plus we don't have a good control group. We are surveying those in the program. A historical control is the best we can do which is great. But we have a lot of questions about publication, networking, and educational goals, how the mentoring program has helped people reach those goals.

A respondent from another decentralized faculty mentoring program planned to partner with the recipients of his institution's Clinical and Translational Science Award (CTSA) <sup>5</sup> to develop a summative evaluation, but faced similar challenges when trying to determine criteria upon which to evaluate his program's success:

That is the biggest question. I researched this extensively. There are no really great answers. We need to get the baseline data first. We will be setting milestones in the contract, year 1, year 2, etc. Evaluating these milestones will assist with outcome analysis. We have baseline data with regard to evaluation, rate of promotions, number of papers, number of ROIs, how many teaching awards for teaching faculty. These types of endpoints will be incorporated into the outcome analysis. We don't have it in detail yet, we are in the development phase.

---

<sup>5</sup> The National Institutes of Health funds 60 consortium medical research institutions with the CTSA grant mechanism to increase the efficiency and speed of transforming clinical and translational research into practice.



Some respondents indicated that they did not have the time or adequate resources (political domain) to conduct summative evaluations:

Never got around to the deep evaluation. In the first couple years, compliance was really all we could do.

#### **4.2.7 Emergent variables**

##### **4.2.7.1 Frequency of mentoring interactions**

Only the three highly structured faculty mentoring programs have fixed timeframes. Sessions are scheduled over periods that range from seven months to nine months and attendance is required. When asked to identify the best features of her highly structured faculty mentoring program, one respondent indicated that the fixed timeframe was one of its top two features. Participants in her program are aware of the time commitment in advance.

Most of the moderately structured faculty mentoring programs recommend the number of times mentees should meet with their mentors, and some of these programs indicate the minimum number to meet institutional standards. However, methods of oversight and tracking of compliance varies (political domain). When asked how her program could be improved, one respondent expressed concern regarding the frequency of meetings between mentors and mentees:

We have been at it for [several] years now and personally I would like more interaction between the mentors and protégées. Some of the dyads meet four to five times during a semester, other dyads see each other every day, and the ones that seem to meet more frequently are more successful.

#### **4.2.7.2 Tools for engendering mentoring commitments**

Seven of the twelve faculty mentoring programs (58%) require that mentees complete an individual career development plan, mentoring contract, or both. These seven programs include the three highly structured faculty mentoring programs. Several additional programs also include resources such as mentoring checklists, guidelines, tracking sheets, and strategies for maximizing mentoring relationships, among others.

#### **4.2.7.3 Developing professional skill sets**

Six faculty mentoring programs, including all three highly structured programs, provide a prescribed curriculum, or separate workshops, as part of their faculty mentoring programs. These activities are intended to develop the professional skills of their participants, e.g., leadership, team building, time management, negotiation, grant application writing, work-life balance, etc.

#### **4.2.8 Summary**

This section examined the five faculty mentoring program study variables that pertain to the structural organizational perspective: 1) criteria and process for qualifying mentors, 2) strategies for matching pairs on the basis of professional compatibility, 3) orientation on the dynamics of mentoring, 4) formative evaluation for continuous improvement, and 5) summative evaluation to determine outcomes. Three additional structural variables emerged from the data: 1) frequency of mentoring interactions, 2) tools for engendering mentoring relationships, and 3) developing professional skill sets. Although these variables are classified as belonging to the structural domain of faculty mentoring programs, the influences of the other two organizational

perspectives, the political and symbolic domains, emerged relative to the respondents' rationales for the structures of their programs.

In summary, the structural dimensions of the twelve faculty mentoring programs vary: three are highly structured (25%), seven are moderately structured (58%), and two are minimally structured (17%). Five faculty mentoring programs are both centrally administered and implemented within the health science system, school, or department (42%), and include the three highly structured faculty mentoring programs. Seven faculty mentoring programs are centrally administered; however, implementation is decentralized and under the jurisdiction of the department or division (58%).

In the five faculty mentoring programs that are both centrally administered and implemented, each program has a unique matching strategy. In the seven faculty mentoring programs that are centrally administered and implementation is decentralized, four programs use departmental or divisional mentoring directors/liaisons to facilitate the initial matching of mentoring pairs. In the three other decentralized programs, the department chairs or division chiefs match mentoring pairs.

All of the five faculty mentoring programs that are both centrally administered and implemented are voluntary. Six of the seven faculty mentoring programs with decentralized implementation are operating in institutions that require junior faculty mentoring.

Only the three highly structured faculty mentoring programs provide a structured approach to orienting participants to the dynamics of mentoring and the expectations of mentoring relationships as part of their faculty mentoring programs. The six decentralized faculty mentoring program models, under the purview of a department or division, are allotted significant latitude and autonomy in operating their mentoring programs and orienting their

faculty to departmental or divisional mentoring processes. Five faculty mentoring programs evaluate their programs annually for the purpose of program enhancement; only three programs conduct summative evaluations to determine program outcomes.

With regard to the new variables emerging from the data, only the three highly structured programs dictate the frequency of meetings between mentors and mentees. Seven faculty mentoring programs require that mentees complete an individual career development plan, mentoring contract, or both, which also includes all three of the highly structured faculty mentoring programs. Six of the faculty mentoring programs provide the opportunity for mentees to develop professional skills as part of their mentoring programs.

Only one structural dimension of a faculty mentoring program was shared by a clear majority: nine of the twelve faculty mentoring programs (75%) use mentoring teams. There were two structural circumstances shared by a small majority: seven faculty mentoring programs (58%) are centrally administered with decentralized implementation, and seven programs (58%) require that mentees complete a career development plan or mentoring contract. Given the small sample size of this study, these variables are not as substantially evident among the twelve faculty mentoring programs, as is the use of mentoring teams.

## **4.3 POLITICAL PERSPECTIVE**

### **4.3.1 Introduction**

The twelve faculty mentoring programs included in this study operate with varying degrees of organizational political support. Eight of the faculty mentoring programs operate under the

authority of a school, two programs operate under the authority of a health sciences system, and two programs operate under the authority of a department. Each of the twelve programs have at least one individual who is administratively responsible for the directorship of the faculty mentoring program, albeit with varying degrees of status and authority. Seven faculty mentoring programs are operationally decentralized, and therefore are under the purview of a department chair or division chief. Financially, respondents describe their faculty mentoring programs as ranging from “well-funded” to “unfunded.”

This section provides cross-case descriptions of the political dimensions of the twelve faculty mentoring programs. Table 11 presents the faculty mentoring program success factors identified by Zellers et al. (2008) associated with the political domain of faculty mentoring programs. These variables, as well as other political variables emerging from the data, are described in the following subsections.

Table 11: Mentoring Program Success Factors: Political Perspective

Mentoring Program Success Factors
A. Visible support of senior administration
B. Linked to other personnel practices such as appraisals, promotions, and systems of rewards and recognition
C. Allocated sufficient resources
D. Input from mentors and mentees in the development of the format of the program
E. Voluntary participation of mentors
F. Coordination team responsible for oversight and support

### **4.3.2 Visible support of senior administration**

#### **4.3.2.1 Internal support**

Two faculty mentoring programs preceded the establishment of a unit responsible for faculty development within their respective organizations. The faculty mentoring program directors of these two programs were appointed leadership roles in newly established faculty affairs units as a result of the visibility of the faculty mentoring programs. The faculty mentoring programs had an impact upon the administrative structures of their organizations. In these cases, the mentoring programs developed through grassroots efforts, i.e., as a result of the energies of several motivated faculty members (behaviors associated with the symbolic perspective) rather than being championed by senior administration.

The ten other programs were developed at the request of senior administration under the auspices of offices responsible for faculty affairs. Some offices of faculty affairs and the faculty mentoring programs were established concurrently; faculty members were appointed as associate/assistant deans of faculty affairs and they facilitated the development of their faculty mentoring program in the context of their larger responsibilities for faculty affairs/development. The structural perspective is again evident relative to the organizational structures of the units overseeing the faculty mentoring programs; the existence of a faculty affairs office, either prior to the program or established concurrently, contributed to the development of the faculty mentoring program.

When the organizational representatives of these ten faculty mentoring programs were asked why their senior administration was originally interested in developing a faculty mentoring program, the most common response was “the recruitment and retention of faculty.” Although respondents commonly referenced “faculty recruitment and retention” together, since this study

is using separate lenses to isolate variables, and this section focuses upon the political perspective, only the data relevant to “recruitment” is described here.

The recruitment of faculty members involves the acquisition and the use of organizational resources; thus, recruitment is associated with the political domain. The retention of faculty members could also be considered in the context of organizational resources; however, the prevalence of symbolic undertones that respondents associate with retention compelled me to examine this variable later in this study from the symbolic perspective.

The recruitment of new “high-performing” faculty is frequently referenced as fundamental for academic organizations to achieve their missions. The term “high-performing” is used to describe a faculty member’s track record with regard to publications and research grants. Several respondents think that a faculty mentoring program provides an organization a competitive advantage with regard to attracting top faculty recruits. One respondent remarked that, “We got information from the dean that a lot of the job applicants, new faculty and particularly chair applicants, asked about the mentoring program here.”

Others frame a faculty mentoring program as a competitive necessity to recruit faculty who can contribute to the status and reputation of the organization. Those organizations that do not have a faculty mentoring program are at risk of falling farther behind the standards that are being set by organizations with more research funding:

I did an internet survey of the top AAMC<sup>6</sup> schools. 18 out of the 20 list some form of faculty development program. Our argument is that if you want to be a top 20, you need a mentorship program.

---

<sup>6</sup> Association of American Medical Colleges

Only one respondent specifically mentioned that a goal of her faculty mentoring program was to “increase faculty diversity through improved mentoring of under-represented faculty members.” This goal, among others, is also articulated on the faculty mentoring program’s Web site. Concern for diversity relates to an organization’s values; thus, this respondent attributes her leadership’s interest in a faculty mentoring program to a dimension associated with the symbolic perspective.

#### **4.3.2.2 External support**

In addition to responding to a competitive faculty market, senior level support for faculty mentoring programs is also attributed to expectations from external forces. One respondent pointed out that, “Mandates of external agencies are actually very helpful to acquiring internal support. The LCME<sup>7</sup> visit asks what resources are available to faculty.” Three respondents referenced program development collaborations made possible through their institutions’ CTSA:

I am pretty sure that the interest from the dean’s point of view was accelerated by the renewal of the [CTSA] and they had to have evidence that they had a strong mentoring program. So we developed one for the institution and the [CTSA].

#### **4.3.2.3 Changes in senior leadership**

One respondent, whose faculty mentoring program operations are decentralized, indicated that his organization has gone through several changes in senior leadership since his faculty mentoring program had been established, and as a result, support for his faculty mentoring

---

<sup>7</sup> The Liaison Committee on Medical Education (LCME) is the nationally recognized accrediting authority for medical education programs leading to the MD degree in the United States and Canada.



program has declined. The respondent considered the new leadership's focus to be on recruiting established "superstars" rather than developing current faculty:

I don't know if he is someone who thinks you can mentor someone into greatness. He isn't a believer in professional development. Now, the enforcement to oversee those [mentoring] reports being completed has sort of fallen by the wayside. Some of the departments are doing them haphazardly. It's like if someone isn't standing over them, then it's just one more thing that the department doesn't have to do.

Two other respondents reported that their organizations are just undergoing changes in senior leadership, and they are hopeful that new leadership presents an opportunity for increased support. One respondent said,

It will be interesting if you ask me six months from now. We are finishing our strategic plan and we will be developing a budget. Our new dean is very enthusiastic about this program, but we really want to see if the enthusiasm is matched by dollars. There is a lot of enthusiasm about moving our institution to newer and better rankings, and of course we do that heavily by faculty development. So we will just have to wait and see if the resources are there to match.

The values, attitudes, and beliefs of senior leadership are considered to have a significant impact on resources and support, or lack thereof, available to a faculty mentoring program. Values, attitudes, and beliefs are characteristic of the symbolic perspective.

#### **4.3.2.4 Generating internal support for programs**

Respondents, whose faculty mentoring program operations are decentralized frequently reference the importance of department chairs/division chiefs “buying into” the faculty mentoring programs. Some chairs/chiefs need to be “sold on the idea”, whereas others are already “believers”. All of these revelations on the part of the respondents refer to the symbolic organizational perspective. They work with chairs/chiefs that are interested and “worked around” those chairs/chiefs who are not initially interested:

I stay on them and for the most part it works because most really want to get it done.

Every school is going to have chairs that don’t want to get involved. So with them, I work with their faculty members directly. Or work quietly outside the department.

### **4.3.3 Linked to other personnel practices**

#### **4.3.3.1 Annual appraisals of leadership**

Seven of the twelve faculty mentoring programs are operationally decentralized and under the purview of a department chair or division chief. All seven respondents reported that the department chair or division chief is ultimately responsible for the implementation of the departmental or divisional faculty mentoring program. Figure 3 represents the distribution of the faculty mentoring programs’ administrative structures relative to decentralized authority.

ADMINISTRATION	Centralized	Total Programs= 5	Total Programs = 7 • Liaisons = 4 • Chairs/Chiefs = 3
		Centralized	Decentralized
		IMPLEMENTATION	

Figure 3: Administrative Structures Contributing to Decentralized Authority

In four of these decentralized cases, a departmental or divisional faculty mentoring director or facilitator/liaison is appointed. Three of these four programs are operating in cultures in which senior administration has mandated the mentoring of junior faculty members. The departmental or divisional faculty mentoring liaisons for all four programs are faculty members either selected by the faculty mentoring program director responsible for the centralized administration of the program, and approved by the chair/chief, or selected solely by the chair/chief. These more senior faculty members are accountable to the faculty mentoring program director who is responsible for the centralized administration of the program:

We had selected a senior level individual who was interested in mentoring who fundamentally reported to me. Although they were members of their [departments/divisions], they implemented the programs we put in place and assured that they were happening at the [departmental/divisional] level. That is why my answer is sort of long-winded because yes, the implementation was at the [department/divisional] level, but with absolute central oversight and with a person in the [department/division] who reported the structure back to the central [dean's/chair's] office.

If the departmental or divisional faculty mentoring liaison is compensated in any way, the faculty mentoring program director, who is responsible for the centralized administration of the program, can influence the replacement of those liaisons not meeting central administration's expectations. However, if the departmental or divisional faculty mentoring liaison is selected by the chair/chief and not compensated, uniform accountability is more difficult:

The mentor facilitator is supposed to be doing that [provide oversight] as part of their job description—to check in with people over the years. From the [central administration] perspective, we can only do that once a year.

For the most part, the respondents from the programs that use departmental or divisional faculty mentoring liaisons are pleased with this organizational structure:

They [chairs/chiefs] were very supportive. There was an occasional [chair/chief] who didn't think they needed oversight, and in some circumstances they were correct, because they really know what they are talking about when they mentor people. And the liaison was just there to set things up. They didn't do all the mentoring.

In the three other cases in which faculty mentoring programs are operationally decentralized and under the purview of a department chair or divisional chief, the chair/chief is directly accountable to the dean or department chair for oversight of the faculty mentoring program—there are no departmental/divisional mentoring program liaisons. The three respondents from these programs provide feedback on the status of the departmental or divisional faculty mentoring programs to the dean/chair to be included in the dean's/chair's annual appraisal of the chair/chief.

Even though all three of these mentoring programs are operating in cultures in which senior administration has mandated the mentoring of junior faculty members, these three respondents said that accountability was not under their domain; but, rather the responsibility of the dean or department chair. One respondent noted that, “The [chairs/chiefs] have an annual review with the [dean/chair]; that would be discussed then. In terms of any rigorous determination, that is not in place.”

#### **4.3.3.2 Financial incentives for departments or divisions**

Respondents from three faculty mentoring programs indicated that financial incentives are provided to departments or divisions. In one highly structured program, departments receive the equivalent of 5% of a mentee’s faculty effort from the central administration. A respondent from a moderately structured faculty mentoring program reported that some of the “more forward thinking or progressive departments” have calculated mentoring into the financial formula that is used to calculate the chair’s or chief’s incentives:

If the mentoring is going well and the faculty are happy with the mentoring they are getting, then that’s an added weight that is put in the algorithm [that determines the chair’s/chief’s financial incentive].

Another respondent indicated that in the first year, mentoring goals were included in the chair’s/chief’s incentive plans. Moving forward, they decided they were rewarding the wrong person:

We needed to reward the division so all of the faculty benefit. Now the division gets the money. That is a huge incentive for the division because if they met all of the criteria they

get a little bit of money like \$3000 to invite someone in to do some sort of faculty development program with their faculty.

#### **4.3.3.3 Financial incentives for mentors**

In one of the highly structured faculty mentoring programs, mentors receive \$2000 in supplemental compensation per year, for a three-year commitment (total of \$6000). Mentors in one moderately structured faculty mentoring program receive a one-time \$1000 stipend after serving for one year. These mentors also get a medallion with the college logo on it and a ribbon that they wear on their academic garb that identifies them as they march first behind the dean and associate deans at graduation, a highly symbolic honor.

In the four cases in which the faculty mentoring programs are operationally decentralized, and a departmental or divisional faculty mentoring liaison is appointed, central administration does not provide any financial incentives for these liaisons. These appointments are considered to meet the faculty member's service contribution to the school. An institution's expectation for service is an organizational value; hence, it is associated with the symbolic perspective.

If the departmental or divisional faculty mentoring liaison is selected by the central administrator of the faculty mentoring program, they are selected based upon his or her reputation as an exemplary mentor. Respondents frequently referred to themselves or to the faculty mentoring program director as "being around here a long time" and knowing who would best fit these roles.

Several respondents referred to themselves as "passionate;" they indicate that they derive a great deal of satisfaction from the activities they conduct as part of their roles as faculty

mentoring program directors. Serving these roles meets the needs of their personal value systems, which is representative of the symbolic perspective:

That is one of the enjoyable parts of a leadership position like this. It is trying to think of the people that may be good for these positions and identifying them in the position.

If the departmental or divisional faculty mentoring liaison is selected by a chair/chief, the respondents are not sure of the criteria that the chairs/chiefs use, but assume that the chairs/chiefs also know who would be the best match in their departments/divisions for these positions. The respondents have no influence on any financial arrangements that chairs/chiefs may have with their departmental or divisional faculty mentoring liaisons. One respondent, from a very large organization, said that she did know of several cases in which the chairs/chiefs recognize the importance of these roles, and attribute 20% effort into the formula that is used to determine the departmental or divisional faculty mentoring liaison's overall faculty effort.<sup>8</sup>

In the one case in which mentors receive \$2000 in supplemental compensation, the respondent expressed concern that her model cannot be financially sustained if they want to make it available to a larger number of mentees. As a financial incentive, she referenced the use of faculty effort as being a more viable financial model for a larger mentoring program:

I don't see us being able to expand unless [senior administrator] is willing later to give a % effort. If you participate in this you will not have to cover x% of your salary on grants. The institution will cover that. That is the model I expect would be appropriate [on a larger scale].

---

<sup>8</sup> Faculty members in academic medicine are typically under pressure to cover a significant percentage of their salary, or faculty effort, with external funds or clinical duties. Thus, receiving a percentage of effort for an administrative role is an attractive incentive.

The remaining five faculty mentoring programs (48%) depend upon senior faculty as volunteers under the rubric of a faculty member's service obligation (symbolic perspective). Several of the respondents from the nine programs in which a financial incentive is not provided, especially those with decentralized models, considered the lack of a financial incentive for senior faculty members to be a shortcoming of their programs:

We talked a lot on how to reward mentors because I feel we don't do that very well. You know the idea of mentoring is reward itself is true to a great deal but I think if we had some sort of incentive we would have better participation from mentors.

However, some respondents do not afford as much weight to the need for faculty to be provided a financial incentive:

It's not mandated and it's up to the chair how they want to run it. We don't buy out time or pay mentors. Mentoring is a service. They get value out of it. In our annual promotional reviews, mentoring is a service.

#### **4.3.3.4 Promotion criteria**

Respondents from four faculty mentoring programs indicated that mentoring is written into their formal promotions and tenure policies as being a requirement for promotion to full professor. From the symbolic perspective, mentoring is framed as an organizational value:

There was no incentive, but what helped was one of the requirements for promotion to become a full professor was mentoring junior faculty. It was built into the promotion criteria. Some of the things that were expected were leadership roles, international visibility and mentoring junior faculty. They had to show that they had mentored junior



faculty. Sometimes [mentors] were very good associate faculty members who knew this would help them get to be a full faculty member.

Several respondents from other faculty mentoring programs remarked that mentoring has not yet been raised to a significant level of recognition, or value, within their institutions; mentoring is just recently gaining acknowledgement as being comparable to teaching:

Mentoring is now considered a service and is now included as a requirement similar to teaching. The central committee at our campus is much more accepting of including mentoring as an evaluation piece to be used as a piece of their promotion material. If you have actual evaluations that attest to the quality of your mentoring, it can be included in the category called teaching, which can substitute for teaching a class. Taking it to the next step, it has to be part of the equation in promotion.

#### **4.3.3.5 Awards**

Respondents from four institutions reported that their organizations sponsor mentoring awards. One respondent indicated that previously, her organization only had an annual teaching award. So, while creating a series of awards to recognize research and service as well, she took advantage of the opportunity to add a fourth category of mentoring, to raise the level of awareness and the (symbolic) value associated with mentoring. Two faculty members receive the mentoring award each year: one mentor in basic research and one mentor in clinical research or medical education.

Another respondent said that her organization has a series of awards recognizing mentoring: a lifetime achievement award, a professor-level award, and an associate-level award. The third respondent noted that her organization has two \$1500 awards recognizing faculty

mentoring: the Lifetime Achievement for faculty members who have been with the organization for more than 20 years, and the Achievement in Mentoring for faculty who have been with the organization for more than five years but less than twenty. At the fourth organization that has formally designated mentors who receive \$1000 one-time stipends, and are afforded positions of honor at graduation, are also honored at the organization's annual awards banquet—again very symbolic.

Although only two organizations' award mechanisms include a financial incentive, all respondents indicated that the awarding of these recognitions are purposely very public and ceremonial, thus associating significant organizational status to receiving one of these awards. Factors associated with the symbolic organizational perspective, that is, a means by which the organization can assign value and status to mentoring, influenced the establishment of the award mechanisms. Three of these four faculty mentoring programs are among the four faculty mentoring programs identified earlier where mentoring is written into their formal promotions and tenure policies as being a requirement for promotion to full professor, thus reinforcing the symbolic value attributed to mentoring.

#### **4.3.4 Allocated sufficient resources**

##### **4.3.4.1 External support**

Four faculty mentoring programs have benefited from external funding. One highly structured program was originally established with an external matching grant and is now sustained with internal support. Three moderately structured faculty mentoring programs are currently collaborating and sharing resources with colleagues funded through a CTSA.

#### **4.3.4.2 Internal support**

The two other highly structured faculty mentoring programs have committed internal support from their senior administration. The remaining six programs are sustained with general funds from overall faculty affairs budgets. When asked what they might do differently in hindsight, respondents from three of these programs wished they had requested a dedicated budget before implementing their programs:

One of our workshops [I attended] was about how to set up a center like this and one of the first things everyone talks about is how you fund it. One of the organizers who developed the program came by and said you can't think about it that way or you will never have enough money to get started. You need to find people who are passionate about this. There is a lot of wisdom in that. But to grow our programs and to be effective, we need resources. You run the risk that starting this and failing due to non-support, you put yourself in jeopardy of ever doing it effectively again. But we decided we needed to help our faculty so we started before the funding. But we realize that we now need to go through the funding negotiations.

#### **4.3.5 Input in the development of the format of the program**

One of the highly structured faculty mentoring programs was designed and is facilitated by an external academic consultant. In this case, a faculty advisory group provided input with regard to program goals and objectives; however, the consultant primarily designed the faculty mentoring program format. Annual formative evaluations, instruments associated with the structural perspective, do provide opportunity for participants completing the program to contribute to the

design of future programs. The formats of the other eleven faculty mentoring programs were internally designed for their respective organizations.

Respondents from nine faculty mentoring programs (75%) reported that they received input from an internal advisory committee or task force regarding the specific format of their programs, sought out benchmarking information from peer institutions, or gleaned ideas from the literature. The respondents from the three remaining faculty mentoring programs (25%) said that the formats of their programs were primarily designed by a small group or one decision maker, which in all cases, included the faculty mentoring program founding director. Table 12 represents the distribution of resources that contributed to the design of the formats of the twelve faculty mentoring programs included in this study.

Table 12: Contributors to Faculty Mentoring Program Designs

Resources Contributing to the Design of Programs	1	2	3	4	5	6	7	8	9	10	11	12
External Consultant	•											
Advisory Committee/Task Force	•	•	•	•	•	•						
Benchmarking Data		•	•	•			•	•				
Literature Review		•			•				•			
Small Group/One Decision Maker										•	•	•

Regardless of the resources that were consulted, the eventual designs of the majority of the faculty mentoring programs were significantly influenced by the leadership of founding directors:

How did I design it? I did a lot of reading, and one of the books that I read was by [author's name], which really formed the foundation of some of the basic concepts of our program. I took some of his work, and some of the stuff that is in the medical education literature, and threw together what I thought was a design that was appropriate for our college.

#### **4.3.6 Voluntary participation of mentors**

##### **4.3.6.1 Lack of interest**

Most respondents thought that mentorship should be voluntary, rather than be obligatory for a mentor. In three of the faculty mentoring programs, the department chair or division chief assigns a mentor to new faculty members; in these cases, the respondents are not certain whether the chair or chief calls upon every faculty member to be a mentor. Nevertheless, uncommitted mentors are considered by respondents to be detrimental to faculty mentoring programs:

It was a big school and we felt that we needed a lot of individuals [mentors]. And that was the weakness of the program—that some mentors were not interested in being mentors. I only want mentors who are interested in being mentors so we will pick them more carefully [next time].

#### **4.3.6.2 Power differentials**

Several respondents noted that mentors need to have a “non-evaluative” mentoring relationship with their mentees, which was a challenge for those faculty mentoring programs with decentralized operations. When mentors are assigned from the mentees’ same departments, respondents agree that department chairs or divisional chiefs are not appropriate in the role of primary mentor:

The chairman of the department should not be the director of the [departmental mentoring] program, because of the power differential. They can be a mentor but they shouldn’t be a career mentor, mentoring people for promotions. They will give guidance but we try to distinguish between mentors. A junior faculty member should feel comfortable bringing up problems that they don’t want their boss to know of. They need a mentor who can be a confidante, not a direct boss. And what we found is that due to large departments’ needs, the chairs just don’t have time. Especially because if you have a team that isn’t working, you don’t want them to have to go to their boss and say, “This isn’t working.”

#### **4.3.6.3 Conflict management**

No respondents expressed concern about conflicts between mentoring pairs. Several indicate that when they become aware of a situation in which a mentee is not happy with their mentor, they discreetly help the mentee connect with a different mentor. Mentee dissatisfaction with a mentor is more frequently attributed to a lack of availability rather than to interpersonal conflicts.

Most respondents indicated that they have good relationships with their chairs/chiefs, and that they are comfortable intervening in mentoring relationships if it becomes necessary. One respondent acknowledged, “Yes, politically it is a delicate issue”, and noted that it is

advantageous if the individuals involved in the leadership of a faculty mentoring programs are, “either former department chairs or [are at] high position levels in the college, so that at their level, they can talk to department chairmen on an equal plane.”

#### **4.3.7 Coordination team responsible for program oversight and support**

##### **4.3.7.1 Program directors**

Each of the twelve faculty mentoring programs have at least one individual administratively responsible for the directorship of the program; however, only five individuals have official designations as mentoring program “directors.” Rather, mentoring program administrators have been appointed directorship responsibilities as part of their other institutional roles based upon their units’ organizational structures. In no case was anyone exclusively dedicated to a mentoring program’s administration. In every case, administrative oversight of the program is only one facet of the faculty or staff members’ portfolio of institutional responsibilities. Clerical support was minimal; one respondent referred to herself as a “one-person shop,” and another respondent indicated that she had access to 0.5 FTE<sup>9</sup> effort from a staff member working in another area.

Ten programs are directed by faculty members. Seven of the ten hold other academic appointments in faculty affairs or faculty development, such as assistant vice chancellor, associate vice provost, associate dean, assistant dean, or vice chair, affording significant status to their roles. Two faculty mentoring programs are directed by staff members in their capacities as director or associate director of faculty affairs.

---

<sup>9</sup> Full-time equivalency employment status

In the five cases in which the operations of the faculty mentoring programs are administratively and operationally centralized, the faculty mentoring program directors have significant authority with regard to the quality of their programs. However, these five programs either limit the number of mentees accepted, or mentee participation is voluntary, so the impact of these programs is limited. A respondent from one of these programs is, nevertheless, determined to influence his organization's departments/divisions to adopt "mentoring best practices," based upon documents that his program makes available to departments/divisions throughout his organization.

#### **4.3.7.2 Departmental/divisional liaisons**

Four of the seven decentralized programs appoint mentoring directors or facilitators/liaisons in the departments/divisions to provide operational oversight, an organizational structural determinant. Several respondents indicated that their decentralized systems of oversight are dependent upon the personal commitment, or values (symbolic) of the departmental/divisional liaison:

Some [departments/divisions] are better than others depending on the quality of the mentor facilitator in follow up and intervening early when things aren't going well, but some are kind of doing the minimal. It's like everything else, it depends on the person.

As mentioned earlier, the departmental/divisional liaisons are provided varying degrees of incentives for performing their responsibilities; some are receiving none at all. In these decentralized programs, most of the faculty members and staff responsible for the central administration of the faculty mentoring programs are well-poised and well-placed to provide oversight. However, the extent of their authority is limited by the organizational structure of their



institutions, and their mentoring program models. Within decentralized faculty mentoring program models, responsibility for compliance with organizational mentoring policies ultimately rests with department chairs or division chiefs; the faculty mentoring program director's authority is limited to the "power of persuasion".

#### **4.3.8 Emergent variables**

##### **4.3.8.1 Academic policies: requirements versus guidelines**

The idiosyncratic nature of academic policies became evident during the course of this study. Academic policies or practices can be classified as either a requirement or a guideline. Requirements in academic cultures require accountability; lack of compliance poses negative consequences, e.g., disciplinary action, sanctions, loss of funding, expulsion, or legal implications. Requirements are frequently imposed by entities external to the institution, such as an accreditation board, a funding agency, or local or federal governments. Requirements can also be imposed internally. On the other hand, guidelines in academic cultures are recommended policies or practices, and allow for a significant degree of latitude and leadership discretion.

All respondents were specifically asked, "Is mentoring required for all new faculty members?" Six respondents provided an affirmative answer. In one case, a respondent qualified her answer, indicating that this practice only applied to certain faculty sub-classifications particular to her organization.

In two cases, the respondents' replies specifically included the word "required". In a third case, the respondent said, "It was not voluntary". In a fourth case, the respondent did not repeat the word "required", but did respond "yes". The remaining two respondents indicated that it is

standard organizational procedure for chairs/chiefs to assign mentors to new faculty members in their appointment letters.

As mentioned earlier, this study includes two methods of data collection: 1) a review of Web sites and artifacts describing the faculty mentoring programs, and 2) interviews with organizational representatives of the faculty mentoring programs. Denzin and Lincoln (2008) refer to the use of multiple methods of data collection as triangulation, which provides a more in-depth understanding of the phenomenon being studied. Upon reviewing the Web sites of the six faculty mentoring programs in which respondents reported that mentoring is required for new faculty members, only one Web site uses language that affirms this requirement: “All assistant and newly appointed associate professors [reference to particular faculty classifications] must have a Mentoring Team.”

In one of the cases in which the respondent indicated that chairs/chiefs assign mentors to new faculty members in their appointment letters, the faculty mentoring program Web site references faculty mentoring as being recommended rather than required. The reference to being “tracked by the [dean’s/chairs] office,” alludes to some degree of oversight:

All junior faculty (at the level of Assistant Professor) are encouraged to select a mentor from among the many Associate and Full Professors within the [school/department].

These relationships will be tracked by the [dean’s/chair’s] office.

In the cases of the four remaining faculty mentoring programs in which respondents reported that mentoring is required for new faculty members, their Web sites refer to their organizational policies or practices with regard to faculty mentoring as “guidelines.” In no case is the word

“required” used on a program Web site. Some Web sites are more explicit than others, and specifically reference that new faculty “are assigned mentors” upon their appointments.

But, even in those cases in which mentoring practices are described more fully, the Web site text describing organizational faculty mentoring practices includes words such as “should”, “are recommended”, and “are expected”. Only in the one case cited above was I able to find Web site language that requires, or specifically commits, an organization to provide mentoring for new faculty members.

#### **4.3.8.2 Dynamics of clinical departments**

Although the dynamics of clinical departments are particular to academic health centers, most respondents referenced the differences between his or her organization’s basic science and clinical faculty, thus making this variable very relevant to faculty mentoring programs in academic health centers. Respondents from two of the highly structured faculty mentoring programs indicated that their programs foster interaction and collaboration between basic science and clinical investigators and educators, which is important in the context of scientific advancements in clinical and translational research. Fostering interaction and collaboration are organizational symbolic values.

The respondent from the third highly structured faculty mentoring program reported that basic science and clinical investigators are grouped separately, because their pathways to promotion are so different. A respondent from a moderately structured faculty mentoring program also said that his program recognizes that different faculty members have different pathways to advancement, and for that reason, he assigns dedicated mentors to three separate faculty tracks: the clinical sciences, the behavioral sciences, and the basic sciences. As

mentioned earlier, a different respondent indicated that her organization recognizes basic science faculty mentors and clinical faculty members separately in determining mentoring awards.

One of the most common references made by respondents in regard to the specific dynamics of clinical departments concerned the faculty members' clinical responsibilities. Compared to basic science faculty members, these are extra departmental/divisional demands placed upon clinical investigators. Clinical departments have budgetary structures that include revenue generated from clinical service meaning that clinical responsibilities are central to a clinical department's financial stability. One respondent noted that financial incentives to clinical departments need to be "creative" and account for any lost clinical time in order for faculty mentoring programs to be appealing to clinical departments.

Two respondents remarked that within their organizations, the basic sciences have more of a "tradition" of faculty mentoring compared to clinical departments, because of the basic sciences' emphasis on research. They considered the lack of mentoring to be more extreme in their clinical departments compared to their basic science departments: "The culture of basic science departments was much more established for mentoring...in our clinical departments—much less so."

#### **4.3.8.3 Organizational reputation and status**

Several respondents indicated that their mentoring programs contribute to an overall strategy for elevating their organization's reputation and status, which is very symbolic. Mentoring programs are framed in the context of a marketing tool to attract high-performing faculty members in an increasingly competitive biomedical faculty marketplace. A Web site for one of the faculty mentoring programs indicates that its vision is "to become the national center of excellence for mentoring in the academic health sciences."

To lobby senior administration for resources for his organization's faculty mentoring program, one respondent used the argument that, "To be a top 20, you need a mentorship program." Another respondent noted that, "There is a lot of enthusiasm about moving our institution to newer and better rankings". Other respondents, who are from institutions already in the upper tier of major universities with regard to research funding, remarked that faculty mentoring programs are necessary to meet the renewal requirements of their institution's highly prestigious and lucrative CTSA's.

#### **4.3.8.4 Founding directors**

All of the directors of the twelve faculty mentoring programs included in this study are the founding directors. One respondent said that it had been a long standing organizational "tradition" established before she was associated with her organization, for the chairs/chiefs to identify a mentor in a new faculty member's appointment letter. However, she was the founding director of the current centralized system that was established to provide support and oversight to faculty mentoring practices across her organization.

As mentioned earlier, one of the respondents participating in this study, who was the founding director of her program, changed institutions during the course of this study. While attempting to acquire additional information about this program from the new leadership, it was discovered that the program was no longer active. All that could be determined was that the faculty mentoring program was not sustained after the founding director left.

An organizational representative indicated that the new leadership was "reassessing faculty needs" and a report was underway in this regard. She did offer to share this document upon its completion, but unfortunately it was not available within the timeframe of completing

this study. Thus, this study includes data relating to twelve faculty mentoring programs; however, only eleven faculty mentoring programs were active upon the completion of the study.

This situation is similar to the faculty mentoring program that during the course of identifying sample faculty mentoring programs to include in this study, was found to no longer exist. Although the Web site was still active, it was discovered that the program had been discontinued upon the retirement of the founding director five years earlier. Contact was made with the founding director; however, attempts to communicate with the current leadership of that organization were unsuccessful. This occurrence is now noteworthy because this is the third instance since 2008 that I have become aware of a faculty mentoring program being discontinued under similar circumstances. In all three cases, the program was not sustained after the founding director left the organization.

All of the faculty mentoring programs in this study were under the leadership of founding directors, at least at the start of the study. This study does not include any example of a program where leadership was successfully transferred from a founding director to another individual. With regard to the one faculty mentoring program included in this study that is no longer active, there was no indication that this program lacked institutional support and/or was vulnerable to being discontinued. In fact, two other respondents referenced this program as a respected and admired faculty mentoring program model. The only unique variable that I could associate with this program is that the founding director had left the organization.

#### **4.3.8.5 Sustainability**

As mentioned earlier, one respondent indicated that her financial model cannot be sustained if she wants to make it available to a larger number of mentees. Several respondents referenced the need for financial resources to grow; whereas, one respondent expressed his concern about the

sustainability of a program that lacks resources and is dependent upon the generosity of a small group of “passionate” supporters:

It also became an accountability issue. How much can I ask them to do if they are not getting some true compensation? In a leadership position, I think it may weaken my own position if I don't have the salary lines for these people.

#### **4.3.9 Summary**

This section examined the six faculty mentoring program study variables that pertain to the political organizational perspective: 1) visible support of senior administration, 2) linked to other personnel practices, 3) allocated sufficient resources, 4) input in the development of the format of the program, 5) voluntary participation of mentors, and 6) coordination team responsible for program oversight and support. Five additional political variables emerged from the data: 1) academic policies: requirements versus guidelines, 2) dynamics of clinical departments, 3) organizational reputation and status, 4) founding directors, and 5) sustainability. Although these variables are classified as belonging to the political domain of faculty mentoring programs, the influences of the other two organizational perspectives, the structural and symbolic domains, emerged relative to the respondents' descriptions of their organizations' political environments.

In summary, two programs preceded the establishment of a unit responsible for faculty development and ten other faculty mentoring programs were developed at the request of senior administration under the leadership of offices responsible for faculty affairs. The recruitment and retention of faculty is considered to be the primary motivation for establishing a faculty mentoring program. Expectations from external entities, as well as opportunities to collaborate

with institutional colleagues as part of a CTSA are also referenced as contributing to senior leadership interest in faculty mentoring programs.

A change in senior leadership is considered to be a variable that can change the fortune of a faculty mentoring program, either for the better or worse. Respondents whose faculty mentoring program operations are decentralized note the importance of working through departmental chairs or divisional chiefs to generate internal support for their programs.

Faculty mentoring programs are linked to other personnel practices in varying degrees. Personnel practices that are referenced by respondents include annual appraisals of leadership, financial incentives for departments or divisions, financial incentives for mentors, promotion criteria, and mentoring awards. Circumstances, and fortunes, also vary between faculty mentoring programs regarding the allocation of sufficient resources: four programs had or have access to external funding, three programs have dedicated budgets, and six are sustained with varying degrees of general funds from overall faculty affairs budgets (the program that had access to external funding now has a dedicated budget).

One faculty mentoring program was designed and is facilitated by an external consultant. Respondents from eight faculty mentoring programs indicate that they received input from an internal advisory committee or task force, sought out benchmarking information from peer institutions, or gleaned ideas from the literature regarding the design of their programs. Three respondents indicate that the formats of their programs were primarily designed by a small group or one decision maker. Most respondents agree that mentors should be voluntary: lack of mentor interest, power differentials, and conflict management are cited as detrimental to mentoring relationships.



All twelve faculty mentoring programs are under the directorship of one individual who may or may not have the official title of “director.” With regard to the seven decentralized faculty mentoring programs, responsibility for compliance with organizational mentoring policies ultimately rests with department chairs or divisional chiefs; however, four of the seven decentralized programs appoint mentoring directors or facilitators/liaisons in the departments/divisions to help provide operational oversight.

Five new variables emerged from the data. Discrepancies exist with regard to academic requirements versus academic guidelines. Although six respondents reported that junior faculty mentoring is required within their organizations, all but one Web site indicated that mentoring policies are guidelines rather than requirements.

Clinical departments are identified as having unique challenges and different faculty mentoring needs compared to basic science departments. Basic science departments are considered to be more oriented towards mentoring because of their emphasis on research.

Faculty mentoring programs are considered to contribute to organizational reputation and status with regard to faculty recruiting. In this regard, faculty mentoring programs are framed as either competitive advantages or competitive necessities.

All of the directors of the twelve faculty mentoring programs included in this study are the founding directors. I am aware of three cases in which the faculty mentoring program was not sustained after the founding director left the organization. This phenomenon underscores the concept of sustainability for faculty mentoring programs. Two respondents specifically expressed concern about being able to sustain their faculty mentoring programs under their organizations’ present financial arrangements.

## **4.4 SYMBOLIC PERSPECTIVE**

### **4.4.1 Introduction**

The symbolic organizational perspective refers to the social milieu in which the faculty mentoring programs operate. Some similarities are seen between the twelve faculty mentoring programs with regard to overall organizational goals and objectives, but the faculty mentoring programs vary widely relative to the other symbolic variables.

Mentee participation in the faculty mentoring programs varies and multiple means are used to determine the developmental needs of the junior faculty participants. Clarity is evident with regard to program goals, but the expectations of individual mentoring relationships among the twelve faculty mentoring programs are less explicit.

This section provides cross-case descriptions of the symbolic dimensions of the twelve faculty mentoring programs. Table 13 presents the faculty mentoring program success factors identified by Zellers et al. (2008) associated with the symbolic domain of faculty mentoring programs. These variables, as well as other symbolic variables emerging from the data, are described in the following subsections.

Table 13: Mentoring Program Success Factors: Symbolic Perspective

Mentoring Program Success Factors
A. Aligned with organizational goals and objectives
B. Inclusive design that instills mentoring as a cultural value and core institutional responsibility
C. Strategies for identifying the developmental needs of participants
D. Clarity for both mentors and mentees with regard to goals and expectation

#### **4.4.2 Aligned with organizational goals and objectives**

##### **4.4.2.1 Contributing to retention**

As mentioned in Section 4.3.3, which focused on personnel practices within the political perspective of faculty mentoring programs, when the organizational representatives of ten of the faculty mentoring programs were asked why their senior administration was originally interested in developing a faculty mentoring program, “the recruitment and retention of faculty” was the most common response. Although respondents commonly referenced “faculty recruitment and retention” together, since this study is using separate lenses to isolate variables, I opted to separate these variables. When asked why their senior administration was interested in developing a faculty mentoring program, respondents afforded equal weight to “recruitment” and “retention” in their responses. When discussing his or her own motivations for supporting faculty mentoring, retention is referenced more frequently.

Five respondents made references to either being aware of studies, or in one case, of having published a study herself, that indicated that mentoring improved retention rates in academic medicine. Several respondents noted that faculty attrition was a major concern at their institution, especially for clinicians who could pursue more profitable careers in private practice. One respondent indicated that her faculty mentoring program helps to “engender respect and loyalty to the institution,” so that faculty members want to stay.

Another respondent remarked that “having people to support you...means it’s harder to leave.” Two respondents indicate that they had internal reports on the number of junior faculty who either left their organization, or who did not get their merit increase, or who were not promoted, which provided cause for alarm within their senior leadership. These circumstances garnered organizational support for their faculty mentoring programs.

Retention also relates to sustaining or increasing the status or reputation of an organization. One respondent noted that interest in faculty retention extends beyond the parameters of his organization, “At the whole university level, there is a huge movement to retain high performance faculty.”

#### **4.4.2.2 Facilitating career success and satisfaction**

Following retention, respondents most frequently cited career success as the next most important goal of their faculty mentoring programs. In half of the cases, respondents indicated “career success and satisfaction” together, thus half of the respondents afforded equal weight to faculty not only being successful, but also to being satisfied. In two of the cases in which “career success and satisfaction” are contained in the same response, the respondents also referenced “faculty happiness” as a program goal. There was no incidence of career satisfaction being referenced

apart from career success. Only in one case, did career satisfaction precede career success in the same response:

I think to improve faculty career satisfaction. I think we want our faculty to be satisfied and happy while they are being successful and so when we hear from our survey that they feel they need mentoring and feel they aren't being recognized, those are the things we need to address.

#### **4.4.2.3 Achieving promotion and tenure**

Related to career success, the next most frequent goal that respondents associated with their faculty mentoring programs is promotion. Professional advancement is related to the political milieu in academia. In half of these cases, the respondents indicated "promotion and tenure," grouping these two related activities together. In two cases, the respondents reported that their mentoring programs are designed specifically to meet the needs of their tenure-track faculty:

We were having difficulty getting our tenure system faculty tenured at the university level, and that meant that they would get a favorable review at the department level and another favorable review at the college's promotion and tenure. When they got to the big house, our provost and associate vice president for research would have concerns about our tenure system faculty not being sufficiently scholarly enough.

One respondent expanded upon the "obscure roles" involved in promotion, and her program's goal "to demystify and help [mentees] understand the rules of the game. How do you play if you don't know the rules of the game?" Language on another faculty mentoring program's Web site advises mentees to, "Be sure that you have accurate, up to date information on advancement and promotion policies."

#### **4.4.2.4 Fostering collaboration**

The respondents from two of the three highly structured faculty mentoring programs emphasized that their programs are designed “to foster interdisciplinary collaboration” among participants. Although not a multidisciplinary model, the respondent from the third highly structured faculty mentoring program noted that her peer mentoring model fosters “collegiality” among both the cohort of mentees and with the mentoring teams.

Another respondent from a moderately structured faculty mentoring program expressed the importance of her program helping junior faculty “expand their network of colleagues within the university.” Several respondents indicated that “networking” is essential for junior faculty success and their programs provide encouragement and opportunities to do so.

A respondent from a moderately structured faculty mentoring program referenced structural obstacles to collaborating within her organization, and provided evidence that fostering interdisciplinary relationships leads to tangible results:

Collaboration—it will result in better patient care, better research. In one of the programs, one of our public health faculty members did not know of an initiative in hematology and oncology that triggered an idea for him to collaborate in hematology and oncology on a community based program. In any big institution, you are breaking down the silos. We tend to hang with our own.

#### **4.4.2.5 Building a sense of community**

Several respondents differentiated the goal of building a sense of community as independent from the goal of fostering collaboration. Whereas building connections within a community can lead to collaboration, it is not the primary aim of building a sense of community among junior faculty. Collaboration is expressed in terms of the faculty member’s professional relationships;

the benefits that a junior faculty member acquires from a supportive environment are framed as meeting his or her personal or emotional needs.

It also improves satisfaction by creating a network around yourself that you have people who are your friends, well, though “friends” probably isn’t the right word, but having people to support you.

One respondent indicated how pleased she is when she sees “relationships and connections develop,” demonstrating the personal satisfaction she derives from her position. Another respondent said that her program, “Created a community for junior faculty to connect.” Another respondent noted that, “It was important to increase the sense of community for both junior and senior faculty.” Fostering an environment in which junior faculty have opportunity to interact with each other, as well as with more senior colleagues, is valued.

#### **4.4.3 Inclusive design that instills mentoring as a cultural value**

Junior faculty participation in the twelve faculty mentoring programs included in this study varies. Mentee participation in the faculty mentoring programs is selective, limited, voluntary, or required. The selective faculty mentoring programs are discriminating primarily because of the designs of the programs (structural domain). Participation in the voluntary and involuntary faculty mentoring programs is primarily dictated by organizational policies (political domain).

Only one respondent specifically mentioned that a goal of her faculty mentoring program was to “increase faculty diversity through improved mentoring of under-represented faculty members.” Figure 4 presents the administrative structures of the twelve faculty mentoring programs relative to mentee participation.

ADMINISTRATION	Centralized	Total Programs= 5 Voluntary = 5 Required = 0  • Selective = 2 Limited = 2 Open = 1	Total Programs = 7 Voluntary = 1 Required = 6  • Open = 7
		Centralized	Decentralized
	IMPLEMENTATION		

Figure 4: Administrative Structures Contributing to Mentee Participation

#### 4.4.3.1 Selective or limited mentee participation

The three highly structured faculty mentoring programs accept a very limited number of participants: each program accepts between 15 and 24 junior faculty members a year. All three programs are centrally implemented and involve an application process. However, two of these programs are selective, whereas the third program accepts participants on a “first-come first-served” basis. One respondent indicated that her program meets the needs of approximately one-third of her organization’s new faculty members, one respondent recognizes that her faculty mentoring program model could not accommodate the 1000+ early-career faculty members who could benefit from the program, and the third respondent is not certain what percentage her participants represent relative to her organization’s junior faculty. These are all relatively large organizations, so the faculty mentoring programs are, in effect, exclusive rather than inclusive, relative to their overall population of junior faculty.



Only one moderately structured faculty mentoring program is limited to tenure-track junior faculty members. The overall goal of this voluntary program is, “to supplement existing [departmental/divisional] mentoring activities and to assist junior faculty in achieving the award of tenure.”

#### **4.4.3.2 Voluntary mentee participation**

Aside from the four selective or limited faculty mentoring programs, two other moderately structured faculty mentoring programs are voluntary. One of these two faculty mentoring programs is centrally implemented; the implementation of the other is decentralized. Both of these two voluntary faculty mentoring programs accept junior faculty members regardless of their faculty track. One of these voluntary faculty mentoring programs also accepts associate professors in addition to assistant professors. The respondent from this program noted that although they are heavily targeting assistant professors, associate professors also struggle in regard to the demands of their academic careers and they need mentoring, too:

Although developing the assistant professor is critical for advancement in their career, there is more of a gap with the associates. We help them get that first promotion then everyone kind of forgets about them. There is a deficit in programs targeting associate professors and they can stall out and get into mid-career doldrums.

#### **4.4.3.3 Required mentee participation**

Six of the seven decentralized programs require that all junior faculty members be assigned or select a mentor. These six programs include four moderately structured programs and two minimally structured programs. They are the most inclusive among the twelve faculty mentoring programs included in this study. Several respondents remarked that prior to establishing their

faculty mentoring programs, mentoring practices within their organizations were erratic; that is, some departments/divisions were very committed to mentoring their junior faculty, whereas other departments/divisions were less so:

Previously, faculty members said it was very difficult to find a mentor around here. It was true. So once we implemented it [school/division] wide, now everyone had to do it. So in the [departments/divisions] that were already doing a good job, we kind of said “if it’s not broke don’t fix it.” But without picking on the bad [departments/divisions], it forced them to start something, because their [chairs/chiefs] would be evaluated on whether they tried to do something. So the overall concept was effective.

One respondent, whose faculty mentoring program was required for junior faculty members, felt that some mentees are resistant to participate in her organization’s mentoring program, not because they do not value mentoring; but rather, because the mentees think they are too busy:

Some people just don’t participate and we can’t make them participate. Yeah, they have a mentor and you drag them kicking and screaming to a meeting once a year. Some of them think they are too busy, some don’t think they need it, but most of them, if they don’t participate, it’s because they feel overwhelmed or too busy. It’s usually not because they don’t think they need it.

#### **4.4.4 Strategies for identifying the developmental needs of participants**

##### **4.4.4.1 Faculty surveys**

Respondents from eight of the twelve faculty mentoring programs said that an organizational faculty survey contributed, in part, to identifying the developmental needs of their mentees.

Several respondents referred to their faculty survey as a needs assessment:

Basically, it is a survey that was a needs assessment among the faculty and it was broadly looking at the culture of the institution, what was the perception [of faculty] in terms of programs or initiatives to help them with their professional development.

Only one respondent referred to an annual faculty survey. In this case, the organization performed a sub-group analysis to focus upon their new faculty who are within the first three years of their appointment:

One of the questions that we ask them is: have you met with your mentor and how is that relationship going? What we found is that within the first six months, only half have met with their mentor, and only half of those have a long-standing productive relationship with their mentor.

Another respondent mentioned a “faculty life survey” that indicated, “four themes about what faculty really needed, but they weren’t getting, and one of those was mentoring.” Another respondent indicated that her organization initiated a junior faculty survey specifically to determine interest in a mentoring program:

This is all broken down: Does the [school/division] need a formal mentoring program?

77% said yes. Is the current structure of mentoring in the [school/division] adequate?

70% said no. If a formal mentoring program existed would you participate? 83% said yes.

#### **4.4.4.2 Focus groups**

One respondent reported that, with the help of their human resources department, her organization conducted faculty focus groups and compiled internal data supporting the need for faculty mentoring:

We have done several focus groups and it is amazing that as soon as we announce these, they fill up immediately, and the faculty repeatedly say they need mentorship. The two things that they need most are mentorship and time for career development.

#### **4.4.4.3 Organizational indicators of attrition and low morale**

Two respondents said that organizational indicators were used to identify the developmental needs of faculty, and that they were precursors to the development of their faculty mentoring programs. Within one organization, a “painful restructuring” resulted in high faculty attrition and low faculty morale (structural domain). In another organization, the lack of retention with regard to new faculty members was contributing to repetitive, and increasingly expensive, faculty searches (political domain).

#### **4.4.4.4 Modeling other peer organizations**

Three respondents remarked that the mentoring practices of peer institutions influenced their organization to develop a faculty mentoring program to meet the developmental needs of their own faculty. One of these respondents also noted that her organization subsequently conducted a

faculty mentoring survey, which has been described earlier. In these three cases, the organizations “were keeping up with the competition” (political domain). A faculty mentoring program symbolizes attentiveness to a junior faculty member’s professional development needs; the lack of a program is perceived as an organizational weakness.

#### **4.4.5 Clarity with regard to goals and expectations**

##### **4.4.5.1 Goals**

The Web sites of the eleven faculty mentoring programs that had Web sites at the time of this study are very explicit with regard to the organizational goals of the faculty mentoring programs. These goals correspond very closely with the comments respondents made during their interviews as described in Section 4.4.2.

##### **4.4.5.2 Expectations**

There was more variance in clarity with regard to the expectations of individual mentoring relationships among the twelve faculty mentoring programs. The three highly structured faculty mentoring programs provide a structured approach to communicating the expectations, the necessary commitment, and the responsibilities of mentoring relationships as part of their faculty mentoring programs. On the other extreme, the two minimally structured faculty mentoring programs delegate a large degree of discretion to departments/divisions with regard to establishing expectations of mentoring relationships, and determining the responsibilities of mentors and mentees: “Recognizing that faculty needs are so variable, we have deliberately not prescribed an agenda for faculty mentor-protégé activities.”

Among the seven moderately structured faculty mentoring programs, some expectations are more explicit than others. Four of the seven moderately structured faculty mentoring programs require that mentees complete an individual career development plan, mentoring contract, or both. Several more programs besides these four also provide resources, such as mentoring checklists, guidelines, tracking sheets, and strategies for maximizing mentoring relationships, among others, to facilitate mentoring interactions.

The faculty mentoring program's degree of clarity with regard to expectations does not necessarily correlate with whether the faculty mentoring program was required or not. Both required and voluntary faculty mentoring programs are found to have a wide range of clarity with regard to the expectations of mentoring relationships.

#### **4.4.6 Emergent variables**

##### **4.4.6.1 Passion of program leadership and mentors**

When asked how they recruited mentors for their faculty mentoring programs, one respondent said, "Mostly, word of mouth. Part of the issue is identifying the people who have the passion." Another respondent indicated that, "We started with people who were on our committee and who were passionate. I had a really good group the first year when we were working on this initiative."

In the absence of resources or tangible rewards (political domain), these respondents remarked that they seek out colleagues who share their values, beliefs, and commitment to mentoring junior faculty: "There is a lot to be done with the faculty who are really passionate and feel that this is important. We are basically an unfunded program with a lot of very engaged faculty who believe this is important."

#### **4.4.6.2 Academic culture expectations**

Several respondents recognized the conundrum that junior faculty face as a result of the changing economic environment in academic medicine. One respondent commented that, “Yes, because everything in medicine is getting more complicated. Money is tight. Everyone is fighting for NIH dollars. Very intense time for young faculty. The landscape has changed.”

However, as one respondent candidly remarked, the academic status quo still applies: “Let’s face it. Some things don’t change. Grants and papers are the basic currency in academia.” A career in academic medicine can reap great rewards, but such a career is also intensely competitive and pressure-filled. For those reasons, several respondents are “passionate” in their quest to infuse faculty mentoring and career development into the cultures of their organizations. One respondent specifically noted the differences in attitudes towards mentoring between corporate and academic cultures:

The business world has very defined and developed structures for mentorship, and to me, it’s odd that we, in academia, are very loose and it doesn’t make a lot of sense to me. We run the whole faculty promotion and tenure process, as well as other aspects of faculty life and expectations, and sort of the irony is that we put expectations on our faculty, but that as a [school/department], weren’t doing anything to help them develop as faculty.

#### **4.4.6.3 Generational differences regarding mentoring expectations**

Several respondents referred to “generational” differences between junior and senior faculty members when discussing faculty expectations regarding mentoring. One respondent indicates that, “Some [senior faculty] say, ‘I was never mentored. Just do the job’.” Another respondent attributed some senior faculty members’ lack of interest in mentoring as, “It is basically benign neglect. The older faculty do not feel an obligation to help the junior faculty.”

Many respondents indicated that junior faculty members' expectations contributed to their organization's interest in developing a faculty mentoring program. One respondent considered junior faculty members to be much more direct in expressing their expectations, "This is a generation of 'tell me what I need to do to get promoted, I want someone to talk to'." One respondent, who frames her organization's efforts to meet junior faculty expectations for mentoring in the context of a competitive advantage, explained that,

I think you have a more savvy young generation of clinicians and researchers who are being exposed [to mentoring] earlier in their career, and expecting it to continue, so I think it will be a powerful recruitment tool.

Rather than being a competitive advantage, another respondent considered organizational efforts to meet junior faculty expectations for mentoring to be a competitive necessity: "I think this generation expects it. I think other places that don't have these programs will be forced into it."

#### **4.4.6.4 Culture change**

As mentioned earlier, all of the respondents in this study reported that their faculty mentoring programs were established to meet the unmet mentoring needs of faculty members within their departments and divisions, thus the need for centralized administration. As described by the respondents participating in this study, their faculty mentoring programs are organizational change agents; programs designed to bring about change in mentoring practices.

Although there are mixed opinions with regard to centralized versus decentralized implementation, there is a strong consensus that for uniform institutional accountability, and to effect organizational culture change, responsibility for the administration of faculty mentoring programs needs to be accepted by an authority above the departmental or divisional levels:



We had to change the environment and the culture. It is a hard thing to do and takes a long time. The best way to do it was to actually continually keep the message that mentoring was important, and that we were going to help.

A respondent from another faculty mentoring program recognized that his organization has a long way to go to effect culture change: “It [mentoring] is written into the promotion and tenure guidelines as a single line as one example of what is important. It will require a culture change at this point.”

Another respondent expressed that, “I’ve been able to match junior faculty members, who have since become associate faculty members, and it’s sort of like paying it forward.” She is witnessing positive changes in attitudes towards junior faculty mentoring as a result of junior faculty members participating in her organization’s faculty mentoring program.

#### **4.4.6.5 Sustainability**

One respondent succinctly addressed the issue of the sustainability of her faculty mentoring program. She does so, not from the perspective of her program’s structure, or its political standing and organizational resources, but from the symbolic value junior faculty members derive from their mentoring experiences:

In order for this to sustain long-term, the people who participate have to feel the value of what they got out of it. It may not be very tangible up front. It may not be very direct what they get out of it, and they may not tangibly be able to put their hands on it. It’s more a feeling that they got something out of it that they can use long-term.

#### **4.4.7 Summary**

This section examined the four faculty mentoring program study variables that have been assigned to the symbolic organizational perspective: 1) aligned with organizational goals and objectives, 2) inclusive design that instills mentoring as a cultural value, 3) strategies for identifying the developmental needs of participants, and 4) clarity with regard to goals and expectations. Five new variables emerged from the data: 1) passion of program leadership and mentors, 2) academic culture expectations, 3) generational differences regarding mentoring expectations, 4) culture change, and 5) sustainability. Although these variables are classified as belonging to the symbolic domain of faculty mentoring programs, the influences of the other two organizational perspectives, the structural and political domains, emerged relative to the respondents' descriptions of their organizations' social milieus.

The respondents indicated that their faculty mentoring programs are relatively well aligned with organizational goals and objectives. These goals include: contributing to retention, facilitating career success and satisfaction, achieving promotion and tenure, fostering collaboration, and building a sense of community. Half of the faculty mentoring programs are voluntary for junior faculty members, and half are required. Four faculty mentoring programs, which include the three highly structured faculty mentoring programs, are limited or selective with regard to junior faculty participation. Thus, these programs are the least inclusive among the twelve faculty mentoring programs.

The respondents reported a range of strategies being used for identifying the developmental needs of participants: faculty surveys, faculty focus groups, organizational indicators of attrition and low morale, and modeling other peer institutions. The Web sites of the eleven faculty mentoring programs that had Web sites at the time of this study, are explicit with

regard to the organizational goals of the faculty mentoring programs, which are consistent with the respondents' comments. The three highly structured faculty mentoring programs have very structured approaches to communicating the expectations of mentoring relationships; the other nine programs, less so.

Five new variables emerged from the data. The "passion" of mentoring program leadership and mentors is referenced as important to generating support for faculty mentoring programs and recruiting mentors. One respondent is concerned that depending on passionate senior faculty colleagues as mentors, in lieu of financial incentives, is not a sustainable model within his organization.

Several respondents recognized that the changing economic landscape of research funding presents challenges to new faculty members, since academic culture expectations are still based upon publishing papers and acquiring external funding. Generational differences between junior and senior faculty members contribute to different expectations regarding mentoring. Some respondents considered junior faculty members to expect mentoring; however, the respondents also indicated that not all senior faculty members consider mentoring to be a collegial responsibility.

Most of the respondents participating in this study framed their faculty mentoring programs as organizational change agents; their programs are designed to facilitate change in mentoring practices within their organizations. Most respondents indicated that for uniform institutional accountability, and to effect organizational culture change, responsibility for faculty mentoring programs needs to be accepted by an authority above the departmental or divisional levels.

Lastly, one respondent noted that the sustainability of her faculty mentoring program ultimately depends upon the value that the junior faculty members attribute to their mentoring experiences. The value may not be immediately tangible, but “it’s more a feeling that they got something out of it that they can use long-term.”

## **4.5 SUMMARY**

This section described the results of the data, as originally proposed, from three separate perspectives of organizational culture: the structural perspective, the political perspective, and the symbolic perspective. The a priori variables that are examined are based upon the sixteen faculty mentoring program success factors that Zellers et al. (2008) compiled from descriptive, evaluative, and research-based literature in both business and higher education. Twelve new variables emerge from the data. One emergent variable, sustainability, was evident under two of the organizational perspectives: political and symbolic.

This initial treatment of the data is presented because it represents the discoveries that influenced me to change course and examine the data from a new organizational paradigm. That is, although study variables were isolated within individual organizational perspectives, the influences of the other two organizational perspectives could not be ignored. Additionally, the diverse structural, political, and symbolic circumstances of the twelve faculty mentoring programs clouded and limited my ability to detect any significant organizational themes from the viewpoint of the original conceptual framework.

Thus, the presentation of the original treatment of the data is necessary to share the evolutionary journey that eventually led me to reverse the conceptual framework of this study, so

that each variable was examined from the three different organizational perspectives. Chapter 5 describes the findings that resulted from the original study design. Chapter 6 expands on how I transitioned to the new study design, and describes the multi-dimensional organizational themes that consequently emerged from the new study design; and thus, represent the final conclusions of this study.

## **5.0 DISCUSSION OF RESULTS**

### **5.1 INTRODUCTION**

The following are the responses to the original research questions:

1. From a structural perspective, what are the organizational similarities among faculty mentoring programs in major American research universities?

*Very few organizational similarities were found among the twelve sample faculty mentoring programs when viewed from a structural perspective.*

2. From a political perspective, what are the organizational similarities among faculty mentoring programs in major American research universities?

*Very few organizational similarities were found among the twelve sample faculty mentoring programs when viewed from a political perspective.*

3. From a symbolic perspective, what are the organizational similarities among faculty mentoring programs in major American research universities?

*Very few organizational similarities were found among the twelve sample faculty mentoring programs when viewed from a symbolic perspective.*

## 5.2 NEW EMERGENT VARIABLES

This study did not speculate upon the discovery of any new mentoring program success factors. Although not necessarily “success factors,” Table 14 presents the twelve new emergent variables, by organizational perspectives, which were found during this study. With the exception of “dynamics of clinical departments,” each new variable was found to be significant in supporting this study’s final results.

Table 14: Emergent Variables by Organizational Perspectives

Perspective	Emergent Variables
Structural	Frequency of mentoring interactions
	Tools for engendering mentoring relationships
	Developing professional skill sets
Political	Academic policies: requirements versus guidelines
	Dynamics of clinical departments
	Organizational reputation and status
	Founding directors
	Sustainability (appears in two perspectives)
Symbolic	Passion of program leadership and mentors
	Academic culture expectations
	Generational differences regarding mentoring expectations
	Culture change
	Sustainability (appears in two perspectives)

Predicated upon a benchmarking study of faculty mentoring programs (Zellers et al., 2005), this study expected to provide new evidence that, due to the idiosyncratic nature of academic cultures, political factors exert the most influence on faculty mentoring programs in major research universities, and structural factors have the least impact across institutions. I did not find

evidence to support this expectation. In isolation, no single organizational perspective was found to be more influential than another; rather, one or more of the organizational perspectives frequently works in concert to influence the faculty mentoring programs.

This study also expected to develop an understanding of faculty mentoring programs, within their unique academic cultures, which would serve as a mentoring framework for other universities that are seeking to foster academic cultures responsive to the diverse professional development needs of their faculty. When results were examined using the original conceptual framework, no substantial evidence emerged which would serve to inform the mentoring practices of other major research institutions. Although the mentoring literature and popular press include a plethora of “how to” manuals and advice regarding mentoring “best practices,” data examined during this study, using the original conceptual framework, neither substantiated nor disproved such claims.

### **5.2.1 Structural observations**

Other than the use of mentoring teams, no preponderance for a particular mentoring program structure was identified. All of the models are centrally administrated because that was a condition to be included in the study. The organizational implementation of the faculty mentoring programs was nearly equally divided between being centralized (five) and being decentralized (seven). Exactly half of the programs provide mentoring training (six), and half of those programs (three) require that mentors participate in mentoring training. Mentoring matching practices include traditional one-to-one models, group models, team models, and peer models. Some program models comingle participants from different faculty tracks; other models separate them.



The eleven faculty mentoring programs that had Web sites at the time of this study provide mentors and mentees access to rich electronic resources to support their mentoring relationships. However, only three faculty mentoring programs have structured means for orienting participants on the dynamics of mentoring. Seven programs use tools such as career development plans, and half of the faculty mentoring programs (six) provide opportunities for participants to develop professional skill sets. In summary, the twelve faculty mentoring programs exhibit multiple variations of different combinations of structural traits; very few structural commonalities are found.

### **5.2.2 Political observations**

All of the twelve faculty mentoring programs are under the leadership of one individual, but that was once again a condition of being included in the study. The one political variable where I most expected to find similarities—visible support of senior leadership—proved to be not necessarily essential. Two faculty mentoring programs started as grassroots efforts; the support of senior leadership came later. Several respondents expressed concern over a lack of sufficient resources, but they are sustaining their faculty mentoring programs with what few resources they have at their disposal.

A variety of associations are found between the faculty mentoring programs and other organizational personnel practices, but none are especially prevalent. Respondents aspire to have mentoring more ingrained in the political landscape of their institutions, but the lack thereof does not inhibit participation in their faculty mentoring programs. Mechanisms for providing oversight include centralized program directors, departmental and divisional liaisons, and department chairs and division chiefs. Each model has its pros and cons. The one point of

consensus with regard to oversight of faculty mentoring programs is that for uniform accountability, responsibility needs to be accepted above the departmental or divisional levels.

A somewhat troubling common phenomenon is that at the time of this study, all twelve programs were under the leadership of founding directors. The prevalence of founding directors may actually represent a political vulnerability to sustaining a faculty mentoring program past the departure of the founding director, which needs to be further explored. In summary, the twelve faculty mentoring programs exhibit multiple variations of different combinations of political traits; very few political commonalities are found.

### **5.2.3 Symbolic observations**

Relative to the other two organizational perspectives, the symbolic lens displays the most similarities between the twelve faculty mentoring programs, albeit these commonalities are still very limited. Similarities cluster with regard to the programs being aligned with their organizations' primary goals, i.e., the recruitment, advancement, and retention of faculty members who meet organizational standards for excellence. The similarities between the twelve faculty mentoring programs diverge from that point.

Some faculty mentoring programs prioritize recruitment; other programs are more concerned with retention. The programs that lean in the direction of retention emphasize faculty satisfaction, as well as success, as prerequisites for faculty advancement and retention. Respondents from half of the programs (six) indicate that their faculty mentoring programs are designed to foster collaboration. Some respondents specify collaboration among peers; others have broader organizational views and aspire to foster collaborations among all levels of faculty

members. Half of the respondents from programs that emphasize collaboration also seek to build a sense of community among faculty members.

The faculty mentoring programs differ especially in their inclusive designs and instilling mentoring as a cultural value: four programs are selective or limited, two are voluntary, and six are required. Earlier descriptions of the degree of structure of each of the twelve faculty mentoring programs—highly structured, moderately structured, or minimally structured—loosely link the number of “mentoring program success factors” (Zellers et al., 2008) with the program’s degree of structure. With regard to junior faculty participation in the twelve faculty mentoring programs in this study, the reverse is evident. The more structured programs are the least accessible and inclusive; the least structured programs are the most inclusive.<sup>10</sup>

The twelve faculty mentoring programs have a variety of means for identifying the developmental needs of their participants. Some are more structured and more direct, such as surveys or focus groups; whereas, other strategies are more indirect, such as being derived from internal personnel patterns or from benchmarking peer institutions. Other than the three highly structured faculty mentoring programs, there was a general lack of transparency with regard to organizational expectations of individual mentoring relationships. Especially in the cases of the decentralized faculty mentoring program models, much latitude and discretion is afforded to departmental and divisional leadership with regard to expectations of individual mentoring relationships. In summary, the twelve faculty mentoring programs exhibit multiple variations of different combinations of symbolic traits; very few symbolic commonalities are found.

---

<sup>10</sup> I am not making any assumptions with regard to the effectiveness of faculty mentoring programs relative to their degree of structure. Rather, the degree of program structure is referenced only in regard to its relationship with the degree of participant access and inclusiveness.

## **6.0 NEW CONCEPTUAL FRAMEWORK**

### **6.1 INTRODUCTION**

The original conceptual framework of this study was based upon faculty mentoring program success factors being grouped by organizational perspective, i.e., structural, political, or symbolic, and examining these variables through the respective lens or perspective to which they were assigned. After I considered data saturation to have been achieved, that is, after no new evidence emerged, I could not identify any discernible themes within the individual organizational perspectives. The original conceptual framework isolated the variables within their assigned organizational perspectives, and in effect, contributed to “tunnel vision.”

Although a cliché, I could not “see the forest for the trees.” Focusing upon the minutiae of faculty mentoring program data relative to each variable, and mining these data sets from within the isolated context of the assigned organizational perspectives, restricted me from seeing the bigger picture. The nature of the data, i.e., factual descriptions of faculty mentoring program models, resulted in the need for very detailed distinctions and precise tallying of study variables that also contributed to my over-emphasis on detail. My expectations further hindered my vision; I anticipated that the frequency of the actual variables, either a priori or newly emerging, would form the basis of the study results.

Only after I began writing the descriptive results, variable by variable, within the respective organizational perspectives, did I become suspicious that I was looking for organizational themes in “all the wrong places.” The multi-perspective observations that I was making with regard to individual variables within perspectives began to illuminate the possibility that faculty mentoring program organizational themes were not *within* organizational perspectives, but rather, could be found by looking *across* organizational perspectives.

Stepping back from the data, I tested this new approach; and voilà, subtle evidence of emerging themes were surfacing across organizational perspectives. Ironically, the frequency of the word *expectations* prompted my paradigm shift.<sup>11</sup> I was purposely glossing over words that were constructs of mentoring relationships, e.g., expectations, commitment, responsibility. This study focused on the dimensions of faculty mentoring programs, not on the dimensions of mentoring relationships, so I was consciously, and mistakenly, dismissing the emerging themes.

Creswell (2007) uses the term *epiphany* to describe an investigator’s awareness of a dramatic turning point in a qualitative study. My epiphany regarding the unanticipated emerging themes set off the chain of events that resulted in the new study design. Thus, the new treatment of the data involved reversing the conceptual framework so that each variable was examined from the three different organizational perspectives. This modification redirected this study in an unforeseen direction. I do not think this pathway would have presented itself had I not taken my initial approach to the data; reaching a “dead end” with regard to initial data saturation prompted me to look for an alternate route to this study’s final destination.

Execution of the new conceptual framework required “reworking” all of the data previously presented in Chapter 4. This chapter uses much of the data already presented, but

---

<sup>11</sup> My expectations contributed to not being able to recognize the emerging themes.

filtered differently. Some data were subsequently disregarded within this new conceptual framework. Consequently, this chapter is purposefully, and necessarily, redundant with regard to the data cited to support this study's conclusions. Admittedly, this method of qualitative transparency is unorthodox; however, it was done in the spirit of Sandelowski's (1995) advice to new investigators:

Developing expertise in qualitative research means experimenting with approaches that both meet our aesthetic needs as inquirers and fit the purposes of our study and, then, refining them in ways that do not violate any of the rules or spirit of qualitative work.

(p. 371)

## **6.2 MULTI-DIMENSIONAL ORGANIZATIONAL THEMES**

### **6.2.1 Introduction**

The final results of this study are from the viewpoint of the new conceptual framework; that is, derived by examining each variable from the three different organizational perspectives. Whereas I was originally looking for organizational themes surrounding the particular variables, grouped by organizational perspectives, the organizational themes that eventually emerged transcend the program variables, and are organizationally, multi-dimensional.

Six multi-dimensional organizational themes emerged from the data: 1) commitment, 2) expectations, 3) responsibility, 4) accountability, 5) community, and 6) transformation. Three of these organizational themes are evident across all organizational perspectives: commitment, expectations, and responsibility. One organizational theme is evident from a dual

structural/political perspective: accountability. One organizational theme is evident from a dual structural/symbolic perspective: community. And, one organizational theme is evident from a dual political/symbolic perspective: transformation.

Table 15 presents the emerging faculty mentoring program themes by organizational perspectives. A series of intersecting figures are presented in the following subsections to illustrate how the final model of multi-dimensional faculty mentoring program organizational themes came to fruition.

Table 15: Emerging Themes by Organizational Perspectives

Structural Perspective	Political Perspective	Symbolic Perspective
Commitment	Commitment	Commitment
Expectations	Expectations	Expectations
Responsibility	Responsibility	Responsibility
Accountability	Accountability	
Community		Community
	Transformation	Transformation

### 6.2.2 Structural/Political/Symbolic organizational themes

Three organizational themes emerged across all organizational perspectives: commitment, expectations, and responsibility. Figure 5 presents the initial intersection of the overarching structural/political/symbolic organizational themes.

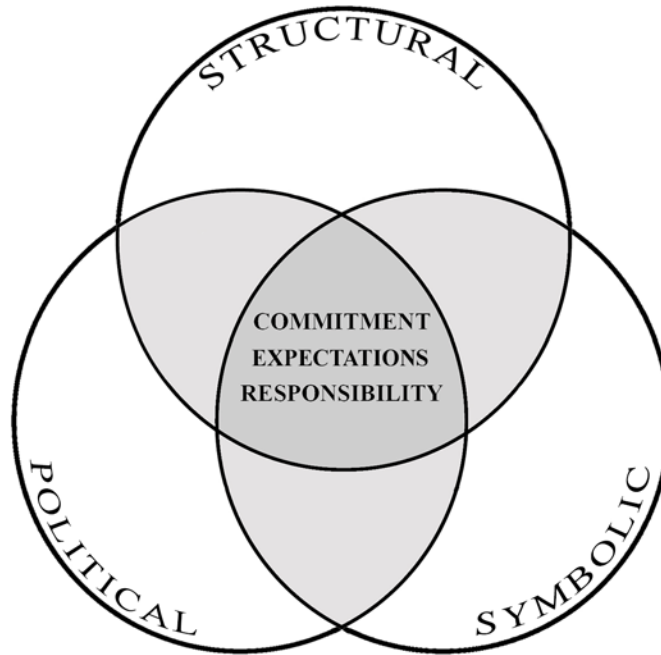


Figure 5: Intersection of Structural/Political/Symbolic Organizational Themes

#### **6.2.2.1 Commitment**

Commitment is the state of being obligated or emotionally compelled. It represents a promise to do something, or to be loyal to someone or to something. Commitment also represents the attitude of someone who works very hard to do or support something (Merriam-Webster, 2013). Respondents frequently referenced “commitment” when describing the structural, political, and symbolic dimensions of their faculty mentoring programs.

##### ***Structural***

When describing the structures of their faculty mentoring programs, the respondents of the three highly structured programs noted that participation in their faculty mentoring programs requires a significant commitment from both the participants and the mentors. Each program has a structured mechanism for communicating the degree of commitment necessary to meet the



standards of the program. Demonstrating a commitment to mentoring is a criterion for participants being admitted to these selective and limited enrollment programs, and is a condition under which mentors are qualified to participate. One respondent indicated that her program's fixed timeframe is one of its top two features because it makes participants aware of the time commitment in advance; and thus, participants and mentors can plan accordingly.

Most of the seven moderately structured faculty mentoring programs recommend the number of times mentees should meet with their mentors; some of these programs specifically indicate the minimal number of meetings that are to occur. In both cases, establishing criteria for mentor/mentee interactions communicates the degree of commitment necessary to meet organizational standards. When asked how her program could be improved, one respondent expressed concern regarding the frequency of meetings between mentors and mentees:

We have been at it for [several] years now and personally I would like more interaction between the mentors and protégées. Some of the dyads meet four to five times during a semester, other dyads see each other every day, and the ones that seem to meet more frequently are more successful.

All three of the highly structured faculty mentoring programs and four of the seven moderately structured programs (58% of total programs) require that mentees use tools to engender mentoring commitments, i.e., complete an individual career development plan, mentoring contract, or both. One respondent referenced the adage, "What gets written down, gets done!" when discussing the importance of these mentoring resources. Several more programs besides these seven also provide resources such as mentoring checklists, guidelines, tracking sheets, and

strategies for maximizing mentoring relationships, among others, to further delineate and engender mentoring commitments.

Organizational commitment to the mentees' overall professional development is also evident. Six faculty mentoring programs provide a prescribed curriculum, or separate workshops, as part of their faculty mentoring programs, to develop the professional skills of their participants, e.g., leadership, team building, time management, negotiation, grant application writing, work-life balance, etc. Skill development was such a significant component of all three of the highly structured faculty mentoring programs that these programs could be referred to more broadly as "faculty development programs" rather than "faculty mentoring programs."

Organizational commitment was also evident with regard to the mentors' professional development. Six of the twelve faculty mentoring programs provide mentor training for their faculty members who are serving as mentors. Three of these six programs require that faculty members complete a mentoring curriculum before qualifying as either a mentor or a departmental mentoring director/liaison; whereas, the other three programs only recommend that faculty members take advantage of mentor training.

### ***Political***

Respondents frequently referenced the need for incentives to foster organizational "dedication" or commitment to mentoring, both for departments/divisions and for individual mentors. Financial enticements for departments/divisions also include compensation for mentees' lost faculty effort, enhancements to chair/chief incentive plans, and funding for departmental/divisional professional development activities.

Only two faculty mentoring programs compensate mentors for participating in their programs. In one of the highly structured faculty mentoring programs, mentors receive \$2,000 in

supplemental compensation per year, for a three-year commitment (total of \$6,000). Mentors in one moderately structured faculty mentoring program receive a one-time \$1,000 stipend after serving for one year. In all other ten cases, central administration does not provide financial compensation for mentors; mentoring is considered to meet the faculty member's service contribution to the school/department.

Seven of the twelve faculty mentoring programs are operationally decentralized; four of these seven programs appoint mentoring directors or facilitators/liaisons in the departments/divisions to provide operational oversight. In these four cases, although central funding for these liaisons is not provided, several respondents reported that some of their chairs/chiefs allocate a percentage of faculty effort as incentives for their departmental/divisional liaisons. In other cases, these decentralized systems of oversight are dependent upon the personal, and sometimes unpredictable, commitment of the departmental/divisional liaison:

The mentor facilitator is supposed to be doing that [provide oversight] as part of their job description...to check in with people over the years. From the [central administration] perspective, we can only do that once a year. Some [departments/divisions] are better than others depending on the quality of the mentor facilitator in follow up and intervening early when things aren't going well, but some are kind of doing the minimal. It's like everything else, it depends on the person.

Ten of the twelve faculty mentoring programs depend upon senior faculty members as volunteer mentors, under the rubric of a faculty member's service obligation. Several of the respondents from these programs in which a financial incentive is not provided, especially those with

decentralized models, considered the lack of a financial incentive for senior faculty members to be a shortcoming of their programs:

We talked a lot on how to reward mentors because I feel we don't do that very well. You know the idea of mentoring is reward itself is true to a great deal but I think if we had some sort of incentive we would have better participation [commitment] from mentors.

Another respondent noted that centralized financial incentives are difficult to determine because budgets are decentralized:

The [deans/chairs] were hesitant but they are coming around and may provide incentives. They want to reward those that do it well. They want to wait and see how it goes for a year. The budgets are very complex. The [chairs/chiefs] are responsible for their own budgets.

Nevertheless, nonfinancial incentives also foster a mentor's commitment to mentoring. Respondents from four programs indicated that mentoring is written into their formal promotions and tenure policies as being a requirement for promotion to full professor:

There was no incentive, but what helped was one of the requirements for promotion to become a full professor was mentoring junior faculty. It was built into the promotion criteria. Some of the things that were expected were leadership roles, international visibility and mentoring junior faculty. They had to show that they had mentored junior faculty. Sometimes [mentors] were very good associate faculty members who knew this would help them get to be a full faculty member.

Respondents from four faculty mentoring programs reported that their organizations sponsor prestigious mentoring awards to recognize the commitment of exceptional mentors. One of these awards also includes \$1500, which adds tangibly to the recognition.

Most respondents remarked that mentors should be volunteers, rather than be compelled to serve as a mentor. Uncommitted mentors are considered by respondents to be detrimental to faculty mentoring programs:

It was a big school and we felt that we needed a lot of individuals [mentors]. And that was the weakness of the program, that some mentors were not interested in being mentors. I only want mentors who are interested in being mentors, so we will pick them more carefully [next time].

One respondent commented that she has little patience with senior faculty members who need an incentive to mentor their junior colleagues:

The complaint from the faculty was, “What is in it for me?” My response was that we are all academics, so there shouldn’t have to be “what’s in it for me?” And if you ask that as a full professor, you’re not the mentor I want!

There were no instances in which respondents expressed any significant concern about conflicts between mentoring pairs; mentee dissatisfaction with a mentor was more frequently attributed to a lack of mentor availability rather than to interpersonal conflicts. Although many reasons can contribute to a mentor’s lack of availability, e.g., proximity, scheduling conflicts, a mentor’s low or lack of commitment would further inhibit availability.

### *Symbolic*

Three respondents used the term “passion” to describe their own, and their colleagues’ commitment to mentoring. Several respondents, as demonstrated by their own commitment to mentoring, are “passionate” in their quest to infuse faculty mentoring and career development into the cultures of their organizations.

When asked how they recruited mentors for their faculty mentoring programs, one respondent said, “Mostly, word of mouth. Part of the issue is identifying the people who have the passion.” Another respondent reported that, “We started with people who were on our committee and who were passionate. I had a really good group the first year when we were working on this initiative.”

In the absence of organizational resources or tangible rewards for mentoring, another respondent remarked that he seeks out colleagues who share his values, beliefs, and commitment to mentoring junior faculty:

There is a lot to be done with the faculty who are really passionate and feel that this is important. We are basically an unfunded program with a lot of very engaged faculty who believe this is important.

Respondents from four institutions noted that their organizations sponsor mentoring awards. Although only two of these organizations’ mentor award mechanisms include a financial incentive, all four respondents indicated that the bestowing of these awards is purposely very public and ceremonial. Mentors recognized for their extraordinary commitment to mentoring are thus also assigned significant organizational status by receiving one of these awards. Mentors who receive a one-time \$1,000 stipend after serving for one year, also get a medallion with the

college logo on it, and a ribbon that they wear on their academic garb that identifies them as they march first behind the dean and associate deans at graduation.

### ***Summary***

Although Kram (1985) did not examine formal mentoring programs as part of her study of mentoring in the workplace, she did express concern about the lack of commitment between mentoring pairs because the relationships were not self-initiated. Allen et al. (2006) have suggested moving beyond simulating informal relationships and designing formal mentoring programs that engender commitment on the part of the mentors. The findings of this current study indicate that it is preferential to instill commitment on the part of both mentors and mentees within faculty mentoring programs.

Structurally, respondents from the twelve faculty mentoring programs referred to two types of commitments: individual and organizational. Individual commitments are relative to the degree of time both mentors and mentees are required or are recommended to devote to mentoring relationships. A variety of tools and resources are made available to engender mentoring commitments and support these mentoring relationships.

Organizational commitment to faculty mentoring is demonstrated foremost by the existence of the faculty mentoring program. Organizational commitment to mentors is evident by the provision of mentoring training; commitment to mentees is further evident by the provision of additional activities to develop professional skill sets.

Politically, some organizations provide mentors with financial incentives in recognition of their commitment to mentoring. In other cases, mentors are committed under the expectation of faculty service. Nonfinancial incentives are also evident; faculty members are expected to demonstrate a commitment to mentoring as criteria for promotion to full professor.

Symbolically, “passion” is a term that is frequently used to describe both the respondents’ and their mentors’ personal commitments to faculty mentoring. Organizationally, mentoring awards, recognitions, and honors are bestowed upon mentors to recognize their extraordinary commitment to faculty mentoring.

Commitment is fundamental to faculty mentoring relationships in academic medicine (Keyser et al., 2008; O’Meara & Terosky, 2010; Straus, Chatur, & Taylor, 2009). Consequently, “commitment” is a distinguishable theme featured throughout many of the twelve faculty programs examined in this study. In discussing their conceptual framework for advancing institutional efforts to support research mentorship, Keyser et al. (2008) found that no two mentors [nor two mentoring programs] will behave in the same way, “but all good mentors will act from both a sense of responsibility and a commitment to the future of the mentee” (p. 218). They further recommend that institutions assess factors that demonstrate organizational commitment to the professional development of both mentors and mentees. This was evident in this study; six of the twelve faculty programs incorporated professional development activities within their programs.

In their holistic framework for faculty development, O’Meara and Terosky (2010) identify “commitment” as one of the four key aspects of faculty professional growth. Commitments are personal and professional investments that faculty make in people, programs, places, and social concerns that further the goals of higher education. From this perspective, O’Meara and Terosky identify two features of commitment: reciprocity and professionalism. “People sustain commitment, but in turn, commitment sustains the people who commit” (p. 47). They consider the capacity and responsibility for commitment to public purposes to be the hallmark of professionalism in academia, and that academic commitments are embedded in the



formation of communities of professional purpose. Accordingly, the theme of “commitment” within faculty mentoring programs supports O’Meara and Terosky’s premise that reciprocal commitments underlie the development of professional communities within academia.

#### **6.2.2.2 Expectations**

Expectation is the act or state of expecting or anticipating something. An expectation is a belief that something will happen or is likely to happen (Merriam-Webster, 2013). Respondents frequently referenced “expectations” when describing the structural, political, and symbolic dimensions of their faculty mentoring programs.

##### ***Structural***

When assessing the degree of structure of the twelve faculty mentoring programs, the following criteria was used to identify the three highly structured programs: having limited enrollment, fixed timeframes, and established curriculum; requiring significant commitment; having a high degree of administrative oversight; being well-funded; and including strategies for evaluation. The remaining nine faculty mentoring programs were categorized as either moderately or minimally structured, depending upon a combination of their degree of expectations, and degree of administrative oversight: seven programs were considered to be moderately structured and two programs were minimally structured. Among the seven moderately structured programs, the majority had some degree of expectations. Therefore, a slight majority of all twelve faculty mentoring programs had established expectations.

The eleven faculty mentoring programs with Web sites at the time of this study provide mentors and mentees with access to rich electronic resources to support their mentoring relationships, which include guidelines on mentor and mentee expectations. However, only the

three highly structured faculty mentoring programs provide a structured approach to communicating expectations as part of their faculty mentoring programs.

All twelve of the faculty mentoring programs are centrally administrated; therefore, program goals and expectations are centrally established. With regard to the five programs that are also centrally implemented, expectations are relatively transparent. The six decentralized faculty mentoring programs within organizations in which junior faculty are required to receive mentoring, generally provide departments/divisions recommended strategies for meeting the mentoring needs of their junior faculty. However, these departments/divisions are provided a significant degree of autonomy in determining mentoring expectations:

The [school/department] is very sensitive to not trying to mandate programs to the individual [departments/divisions], but at the same time we have the expectation that each [department/division] will have a formal mentorship program.

One organization is very explicit in the autonomy that departments/divisions are provided with regard to mentoring expectations. The Web site indicates that,

It would be counterproductive to specify a single type of mentoring program that would serve all [school/department] faculty. While general mentoring principles apply across disciplines, it is essential that each [department/division] tailor a mentoring approach that is best for their discipline and culture. Nevertheless, it will be expected that every [department/division] has a mentoring program that meets minimal criteria. Records of individual faculty member mentoring activities will be maintained by [departments/divisions] to ensure that each junior faculty member is being adequately mentored.

Seven programs require that mentees complete an individual career development plan, mentoring contract, or both. Individualized career development plans provide steps, milestones, and timelines to guide a mentee's career trajectory. Mentoring contracts, in particular, clearly delineate mentoring commitments, expectations, and responsibilities between the mentee and mentor(s).

### ***Political***

Ten faculty mentoring programs were developed at the request of senior administration under the auspices of offices responsible for faculty affairs. Three respondents referenced program development collaborations made possible as a result of expectations that had been established as part of their institutions' CTSA:

I am pretty sure that the interest from the dean's point of view was accelerated by the renewal of the [CTSA] and they had to have evidence that they had a strong mentoring program. So we developed one for the institution and the [CTSA].

One respondent noted that senior level support for faculty mentoring programs is also attributed to expectations from external forces. She found that, "Mandates of external agencies are actually very helpful to acquiring internal support. The LCME visit asks what resources are available to faculty."

Ten of the twelve faculty mentoring programs depend upon senior faculty members as volunteer mentors, as an expectation for service. Although some respondents considered mentors to need an additional enticement, some respondents did not afford as much weight to the need for faculty to be provided a financial incentive. They held firm to the expectation that faculty should mentor other faculty as a service to their school/department:

It's not mandated and it's up to the chair how they want to run it. We don't buy out time or pay mentors. Mentoring is a service. They get value out of it. In our annual promotional reviews, mentoring is a service.

### *Symbolic*

Several respondents noted the additional demands placed upon junior faculty as a result of academic culture expectations being "out of sync" with the changing economic environment in academic medicine:

Yes, because everything in medicine is getting more complicated. Money is tight. Everyone is fighting for NIH dollars. Very intense time for young faculty. The landscape has changed.

One respondent candidly remarked that the status quo with regard to academic expectations still applies, "Let's face it. Some things don't change. Grants and papers are the basic currency in academia." One respondent specifically noted the differences between corporate and academic cultures with regard to attitudes towards mentoring and performance expectations:

The business world has very defined and developed structures for mentorship, and to me, it's odd that we, in academia, are very loose and it doesn't make a lot of sense to me. We run the whole faculty promotion and tenure process, as well as other aspects of faculty life and expectations, and sort of the irony is that we put expectations on our faculty, but that as a [school/department], wasn't doing anything to help them develop as faculty.

Several respondents referred to generational differences regarding mentoring expectations. They indicated that junior faculty members' expectations contributed to their organizations' interest in developing a faculty mentoring program. One respondent considered junior faculty members to be much more direct in expressing their expectations. She stated that, "This is a generation of, 'Tell me what I need to do to get promoted. I want someone to talk to.'"

One respondent, who framed her organization's efforts to meet junior faculty expectations for mentoring in the context of a competitive advantage, explained that:

I think you have a more savvy young generation of clinicians and researchers who are being exposed [to mentoring] earlier in their career, and expecting it to continue, so I think it will be a powerful recruitment tool.

Rather than being a competitive advantage, another respondent considered organizational efforts to meet junior faculty expectations for mentoring to be a competitive necessity. She noted that, "I think this generation expects it. I think other places that don't have these programs will be forced into it."

### ***Summary***

Faculty mentoring program expectations were used, in part, to distinguish the degree of structure of the program: highly structured, moderately structured, or minimally structured. A slight majority of all twelve faculty mentoring programs have established expectations for mentoring relationships. Most programs include resources on their Web sites that include guidelines regarding mentor and mentee expectations.

In all cases, central administration establishes program expectations; however, significant autonomy and discretion is afforded to departments/divisions in those programs in which

implementation is decentralized. Seven of the twelve programs require that mentees complete individual development plans, mentoring contracts, or both. Individual development plans help mentees establish expectations for themselves; mentoring contracts establish expectations between mentors and mentees. In a survey of CTSA KL2<sup>12</sup> program directors, and focus groups with scholars and mentors, Huskins et al. (2011) explored the value of mentoring contracts, agreements, or signed letters:

Scholars expressed general support for these tools, indicating that they helped start the conversation about expectations; were useful for suggesting specific topics that should be discussed; enabled them to communicate explicitly about the obligations of the mentor, including the financial support they could expect; and provided a timeline and a guidepost for their periodic evaluations conducted by the program. (p. 443)

Politically, the expectations of external entities can contribute to an organization's interest in developing a faculty mentoring program. Internally, the academy's expectations for faculty service provide faculty mentoring programs a pool of volunteer mentors from which to recruit.

Symbolically, several respondents referred to the pressure new faculty face as a result of traditional academic expectations. Grigsby (2004) considers junior faculty members in academic health centers to be especially at risk with regard to acclimating to academic expectations and advancing within an academic culture. One respondent acknowledged that academic institutions have expectations of faculty, but unlike business, do little to help faculty meet these expectations.

---

<sup>12</sup> KL2 is an NIH institutional mentored career development mechanism that provides junior faculty support.

In her critique of generational differences in today's academic culture, Cook (2008) has found that although demands on junior faculty have increased, "Young people's expectations have shifted in the opposite direction; they fully expect a career *and* a life, with flexibility for both parents to spend time with the kids" (p.1).

Several respondents remarked that new faculty members enter the profession with different expectations towards mentoring relative to their more senior colleagues. Bickel and Brown (2005) consider the generational gap in expectations about mentoring to be perhaps the greatest mentoring challenge in academic health centers. "Seasoned faculties are expressing frustration that Generation X'ers appear to view mentoring as a right rather than a privilege" (p. 206).

Expectations are inherent in mentoring relationships (Keyser et al., 2008); however, Cook (2008) considers generational differences in expectations, in general, to be "a perfect storm" (p.1) in today's academic culture:

Three generational cultures collide on campus. Particularly at large research universities, the system still in place was built by *traditionalists* born 1942 or earlier. They value loyalty, expect a chain of command, and work to build a legacy...Tenured faculty is made up largely of *baby boomers*, born 1943-1960. They're optimists who work long hours to build stellar careers and rake in money. Two-career marriages are common and stressful. Many are divorced. Untenured assistant professors today come from *Generation X*, born 1961-1981. They're skeptical and expect to be in charge of themselves. If they don't like it, they'll leave. While the baby boomers want more money, Gen X'ers want more time. (p. 1)

Thus, the theme of “expectations,” in the context of a faculty mentoring program, takes into consideration the generational gaps in expectations between junior and senior faculty. Evidence provided by this study verifies this generational phenomenon. By acknowledging these differences, and educating mentors and mentees in this regard, faculty mentoring programs can help “calm any rough waters” between the various generations of faculty members within their organization.

### **6.2.2.3 Responsibility**

Responsibility is the quality or state of being responsible. Responsibility is a duty or task that you are required, expected, or accept to do (Merriam-Webster, 2013). Respondents frequently referenced “responsibility” when describing the structural, political, and symbolic dimensions of their faculty mentoring programs.

#### ***Structural***

The faculty mentoring program representatives frequently differentiated between “career mentors” and “research or scholarly” mentors when discussing team mentoring. Career mentors are more commonly assigned. Whereas, mentees are typically expected to be more proactive with regard to their research and to take responsibility for seeking out compatible research or scholarly mentors:

I think forced matching and matching people up is a bad thing when it comes to research because it is not like a career where I am an OB/GYN and I need an OB/GYN to tell me what to do. But if it is a research topic, you need to find someone who is your lead mentor in the similar area of interest.



The use of evaluations demonstrates responsibility on the part of faculty mentoring program leadership. Five programs conduct evaluations annually for the purpose of program enhancement. Surveys are the most common method used; one program planned to conduct focus groups with participants after they completed the faculty mentoring program. The purposes of these evaluations are primarily to determine “how the program is working” from both the mentors’ and mentees’ perspective, e.g., how often did pairs/teams meet, the results of interactions, how satisfied were they with their mentor/mentee, participants’ perceptions of the benefits of the program, etc.

Three faculty mentoring programs conduct summative evaluations to determine program outcomes; two are highly structured programs and one is moderately structured. One highly structured program was able to demonstrate a positive relationship between mentoring and retention among its participants. The other highly structured program has not been operating long enough to conduct a longitudinal assessment, but annual evaluations have shown positive outcomes using pre- and post-testing measures. Both of these programs also require tangible end products or program outcomes from their participants upon completing their programs, such as a scholarly project or a career plan; thus, mentees are responsible for demonstrating a prescribed outcome.

The third faculty mentoring program that conducts a summative evaluation to determine program outcomes is operationally decentralized, so the program director struggled to develop standard metrics upon which to evaluate the outcomes of her program. Several other respondents, who did not conduct summative evaluations, also indicated that determining evaluative metrics is a challenge:

We spent a good year trying to figure what the metrics should be. Ultimately promotion is one but we aren't that far into it that most of our junior faculty would not be promoted yet, plus we don't have a good control group. We are surveying those in the program. A historical control is the best we can do, which is great. But we have a lot of questions about publication, networking, and educational goals, how the mentoring program has helped people reach those goals.

### ***Political***

Seven faculty mentoring programs are centrally administered, but responsibility for mentoring faculty is decentralized and comes under the purview of the department or division. Several respondents used the expression, "One size does not fit all" in discussing their rationale for their faculty mentoring program models. Only one of the seven decentralized programs is voluntary. In these seven cases, all of the respondents reported that the department chair or division chief is ultimately responsible for the implementation of the departmental or divisional faculty mentoring program.

Four of the seven decentralized programs appoint mentoring directors or facilitators/liaisons in the departments/divisions to provide operational oversight. The departmental/divisional liaisons are provided varying degrees of incentives for performing their responsibilities. Some are receiving none at all. In these cases where operations are decentralized, most of the faculty members and staff responsible for the central administration of the faculty mentoring programs are well-positioned to provide oversight. However, the extent of their authority is limited by the organizational structure of their institutions, and their mentoring program models. Within decentralized faculty mentoring program models, responsibility for

compliance with organizational mentoring policies ultimately rests with department chairs or division chiefs.

All the faculty mentoring programs were established to meet the unmet mentoring needs of faculty members within their departments and divisions, thus the need for centralized administration. Although respondents have mixed opinions about centralized versus decentralized implementation, there is strong consensus that for uniform institutional accountability, responsibility for the administration of faculty mentoring programs needs to be accepted by an authority above the departmental or divisional levels:

It really came down to what we wanted to do here, some [departments/divisions] here have wonderful programs, and there are others that have none at all. There had been an effort about seven or eight years ago to decentralize it and let it be the [departments'/divisions'] responsibility. It seemed like a good idea, but it had fallen apart. It became non-existent in some [departments/divisions]. Decentralization [of administration] doesn't work—at least, not here.

Most respondents indicated that they are comfortable intervening in mentoring relationships if it becomes necessary. One respondent acknowledged, “Yes, politically it is a delicate issue.” Intervention could potentially infringe on a chair's/chief's area of responsibility therefore it is advantageous if the individuals involved in the leadership of a faculty mentoring programs are, “either former department chairs or [are at] high position levels in the college, so that at their level, they can talk to department chairmen on an equal plane.”

### *Symbolic*

Some respondents of decentralized faculty mentoring programs expressed concern when responsibility for faculty mentoring rests with department chairs and divisional chiefs. Those respondents frequently referenced the importance of department chairs/division chiefs “buying into” the faculty mentoring programs. Not in a budgetary sense, but in a philosophical sense. Some chairs/chiefs needed to be “sold on the idea”, whereas others are already “believers”. When support is not evident, several respondents commented that they take a “build it and they will come” approach. They work with chairs/chiefs that are interested and “work around” those chairs/chiefs who are not initially interested:

I stay on them and for the most part it works because most really want to get it done.

Every school is going to have chairs that don't want to get involved. So with them, I work with their faculty members directly. Or work quietly outside the department.

Some respondents considered junior faculty members to expect mentoring when not all senior faculty members consider mentoring a collegial responsibility. One respondent said that, “Some [senior faculty] say, ‘I was never mentored. Just do the job’.” Another respondent attributed some senior faculty members’ lack of interest in mentoring as, “It is basically benign neglect. The older faculty do not feel an obligation to help the junior faculty.”

Ten of the twelve programs depend upon senior faculty members as volunteer mentors, under the expectation of a faculty member’s service obligation, or responsibility. When discussing incentives for mentors, some respondents did not afford much weight to the need for faculty to be provided a financial incentive for mentoring:

It's not mandated and it's up to the chair how they want to run it. We don't buy out time or pay mentors. Mentoring is a service. They get value out of it. In our annual promotional reviews, mentoring is a service.

Respondents from four faculty mentoring programs reported that mentoring is organizationally mandated as the responsibility of senior faculty. Mentoring is written into their formal promotions and tenure policies as being a requirement for promotion to full professor:

There was no incentive, but what helped was one of the requirements for promotion to become a full professor was mentoring junior faculty. It was built into the promotion criteria. Some of the things that were expected were leadership roles, international visibility and mentoring junior faculty. They had to show that they had mentored junior faculty. Sometimes [mentors] were very good associate faculty members who knew this would help them get to be a full faculty member.

### ***Summary***

Although career mentors are frequently assigned, mentees are responsible for being proactive and seeking out the mentors most helpful in their field of study. Managing the trajectory of their career is ultimately the mentee's own responsibility.

The leadership of faculty mentoring programs takes responsibility for evaluating their efforts formatively and summatively. Formative evaluations provide program directors with data to improve their programs; summative evaluations provide evidence of outcomes or effectiveness.

Politically, central administration is responsible for faculty mentoring program oversight. Nevertheless, in decentralized programs, department chairs and division chiefs are ultimately responsible for how faculty mentoring is carried out in their units. Some respondents considered these circumstances to be a concern; responsibility for faculty mentoring is considered to be more organizationally uniform when responsibility for faculty mentoring is placed higher in the academic organizational structure.

Symbolically, faculty mentoring is considered to fall under the category of faculty service; thus, faculty mentoring is a collegial responsibility. Generational differences contribute to a difference of opinion whether mentoring is a right or a privilege. Nonetheless, service is a faculty responsibility and many faculty mentoring programs use the rubric of faculty service to recruit mentors. Within several organizations, mentoring is further demonstrated as a faculty responsibility by being a condition under which one is promoted to full professor.

Keyser et al. (2008) found that responsibility for faculty mentoring should be reciprocal; both mentor and mentees need to accept responsibility for the relationship. In a study of the characteristics of successful and failed mentoring relationships across two academic health centers, Straus, Johnson, Marquez and Feldman (2013) found that commonly reported characteristics of effective mentees included, “being responsible, paying attention to timelines, and taking responsibility for driving the relationship” (p. 4).

While examining junior faculty experiences with informal mentoring, Leslie, Lingard, and Whyte (2005) found that mentees prefer “the explicit [formal] identification of a relationship as being mentorship,” (p. 697) as opposed to an informal relationship, because there is some degree of “responsibility or accountability on both parties” (p. 697). Participation in a formal faculty program makes the responsibilities of those involved more transparent.

Thus, the theme of “responsibility” is evident in this study in multiple layers: the responsibilities of mentees, mentors, and program leadership. Some respondents of decentralized faculty mentoring programs expressed concern when responsibility for faculty mentoring rests with department chairs and division chiefs. However, they work with chairs/chiefs that are interested and “worked around” those chairs/chiefs who are not initially interested in assuming this responsibility. As mentioned earlier, O’Meara and Terosky (2010) consider the capacity and “responsibility” for commitment to public purposes to be the hallmark of professionalism in academia. Some of the faculty mentoring programs included in this study are operating in academic cultures where chairs/chiefs have significant liberty whether they accept responsibility for faculty mentoring. Nevertheless, based upon the data reviewed, the theme of “responsibility” is evident as a necessary component of faculty mentoring programs.

### **6.2.3 Structural/Political organizational theme**

One organizational theme is evident from a dual structural/political perspective: accountability. Figure 6 represents the intersection of the structural/political organizational theme.

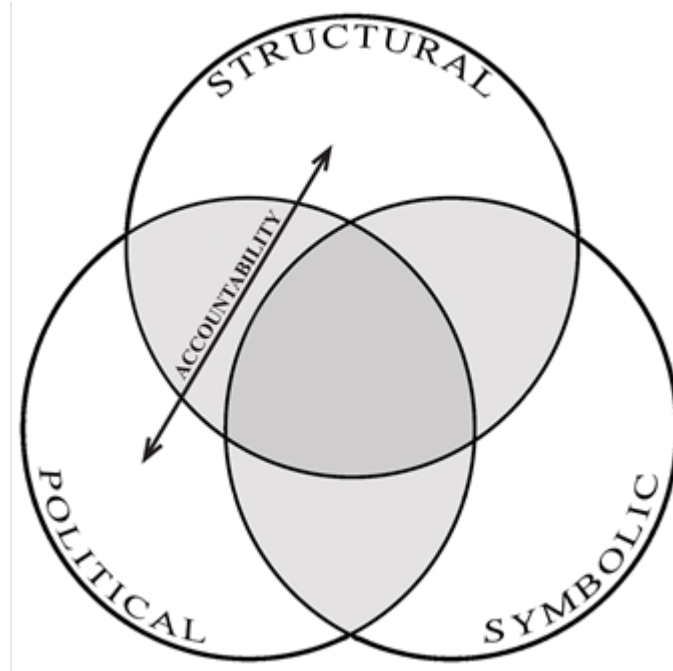


Figure 6: Intersection of Structural/Political Organizational Theme

### 6.2.3.1 Accountability

Accountability is the quality or state of being accountable; an obligation or willingness to accept responsibility or to account for one's actions. Accountability also represents being held liable or answerable for one's actions (Merriam-Webster, 2013). Respondents frequently referenced “accountability” when describing the structural and political dimensions of their faculty mentoring programs. Evidence to support accountability was not found within the symbolic domain.

#### *Structural*

All the faculty mentoring programs included in this study are centrally administrated. All the respondents in this study reported that their faculty mentoring programs were established to meet the unmet mentoring needs of faculty members within their departments and divisions.



Thus, centralized administration is considered to provide uniform organizational accountability with regard to faculty mentoring.

### ***Political***

In four of the seven decentralized faculty mentoring programs, a departmental or divisional faculty mentoring director or facilitator/liaison is appointed. Three of these four programs are operating in institutions where senior administration has mandated the mentoring of junior faculty members. The departmental or divisional faculty mentoring liaisons for all four programs are either selected by the faculty mentoring program director responsible for the centralized administration of the program and approved by the chair/chief, or selected solely by the chair/chief. These individuals are accountable to the faculty mentoring program director who is responsible for the centralized administration of the program:

We had selected a senior level individual who was interested in mentoring who fundamentally reported to me. Although they were members of their [departments/divisions], they implemented the programs we put in place and assured that they were happening at the [departmental/divisional] level. That is why my answer is sort of long winded because yes the implementation was at the [departmental/divisional] level but with absolute central oversight and with a person in the [department/division] who reported the structure back to the central [dean's/chair's] office.

The faculty mentoring program director, who is responsible for the centralized administration of the program, can influence the replacement of those liaisons not meeting central administration's expectations if the departmental or divisional liaison is compensated in any way. However, if the

departmental or divisional liaison is selected by the chair/chief and not compensated, uniform accountability is more difficult:

The mentor facilitator is supposed to be doing that [provide oversight] as part of their job description. To check in with people over the years. From the [central administration] perspective, we can only do that once a year. Some [departments/divisions] are better than others depending on the quality of the mentor facilitator in follow up and intervening early when things aren't going well, but some are kind of doing the minimal. It's like everything else, it depends on the person.

In the three other decentralized programs, there are no departmental/divisional mentoring program liaisons; the chair/chief is directly accountable to the dean or the department chair for oversight of the faculty mentoring program. The three respondents from these programs reported that they provide feedback on the status of the departmental or divisional faculty mentoring programs to the dean/chair, to be included in the dean's/chair's annual appraisal of the chair/chief. Even though all three of these mentoring programs are operating in cultures in which senior administration has mandated the mentoring of junior faculty members, these three respondents pointed out that accountability is not under their domain, but rather the responsibility of the dean or department chair. One respondent commented that, "The [chairs/chiefs] have an annual review with the [dean/chair]; that would be discussed then. In terms of any rigorous determination, that is not in place." Another respondent stated that, "With the institutional pieces that we have, we offer continuing education credits and there are a lot of ways to help people but the one-on-one [mentoring] does not have a lot of oversight."

One respondent referenced accountability in regard to the mentors participating in his program. He expressed his concern about the sustainability of a program that lacks resources and is dependent upon the generosity of a small group of “passionate” supporters:

It also became an accountability issue. How much can I ask them to do if they are not getting some true compensation? In a leadership position, I think it may weaken my own position if I don't have the salary lines for these people.

The idiosyncratic nature of academic policies became evident during the course of this study. Academic policies or practices can be classified in two manners: either as a requirement or as a guideline. Requirements in academic cultures require accountability; lack of compliance poses negative consequences, e.g., disciplinary action, sanctions, loss of funding, expulsion, or legal implications. Requirements are frequently imposed by entities external to the institution, such as an accreditation board, a funding agency, or local or federal governments. Requirements can be imposed internally, too. On the other hand, guidelines in academic cultures are recommended policies or practices, and allow for a significant degree of latitude and leadership discretion.

Respondents from six faculty mentoring programs reported that mentoring is required for new faculty members. In academic cultures, one is held accountable for requirements. Upon reviewing the Web sites of these six faculty mentoring programs, only one Web site uses language that affirms that faculty mentoring is required within the organization:

All assistant and newly appointed associate professors ([reference to faculty classifications]) must have a Mentoring Team.

In one of the cases in which the respondent indicated that chairs/chiefs assign mentors to new faculty members in their appointment letters, the faculty mentoring program Web site references faculty mentoring as being recommended rather than required. The Web site indicates that mentoring activity is “tracked by the [dean’s/chairs] office.” This language implies oversight but is vague with regard to mentoring being required:

All junior faculty (at the level of Assistant Professor) are encouraged to select a mentor from among the many Associate and Full Professors within the [school/department]. These relationships will be tracked by the [dean’s/chair’s] Office.

### ***Summary***

Respondents from all twelve faculty mentoring programs stated that their primary rationale for centralized administration is because it is considered to provide uniform organizational accountability. In decentralized programs, departmental/divisional liaisons are accountable to the central administration. In some programs in which liaisons are used, the faculty mentoring program director’s authority is limited; ultimate authority, or accountability, is in the domain of the departmental chairs or division chiefs.

In those decentralized faculty mentoring programs that do not use departmental/divisional liaisons, the chair or chief is accountable to the dean or departmental chair. In these cases, faculty mentoring program directors are not aware of the extent to which the chairs/chiefs are held accountable by the deans/chairs. Accountability also refers to the relationships between faculty mentoring program directors and dedicated mentors; one respondent expressed concern about mentor accountability when he is relying purely on their generosity.

Academic semantics complicate accountability with regard to faculty mentoring. Although six respondents stated that junior faculty mentoring is required within their organization, framing faculty mentoring policies as guidelines allows a significant degree of discretion within departments and divisions with regard to accountability for faculty mentoring. As mentioned earlier, Leslie et al. (2005) found that mentees involved in informal mentoring relationships prefer formal mentoring arrangements because there is a degree of “responsibility or accountability” (p. 697) for both mentors and mentees in formal mentoring relationships.

In their study of the characteristics of success in mentoring and research productivity among fellowship mentoring programs in academic medical centers, Cohen et al. (2012) found that, “Programs can enhance research productivity with the incorporation of accountability features including formalized reports of progress and mentorship feedback in fellowship training” (p.12).

In focus groups with KL2 scholars, Huskins et al. (2011) reported that although scholars considered mentoring contracts helpful in establishing expectations, they expressed reservations with respect to their limited use in holding mentors accountable. Organizational accountability for mentoring is misplaced if left up to the mentees to enforce; a substantial power differential exists between mentors and mentees in academic settings (Pololi & Knight, 2005). A higher authority is needed to insure that faculty mentors are accountable for honoring the agreed upon expectations and responsibilities of mentoring relationships.

Along with a conceptual framework to advance institutional efforts to support research mentorship, Keyser et al. (2008) also created a self-assessment tool for academic institutions to document and monitor their organizational policies, programs, and structures supporting mentorship. They define structures as, “the individuals or organizational units within the

institution with responsibility and accountability for implementing the mentoring policies and programs” (p. 220). Keyser et al. consider institutional accountability for mentorship to be an instrumental construct of their conceptual framework to advance institutional support for research mentoring.

The theme of “accountability” is admittedly a slippery slope in academia. Nevertheless, evidence from this study indicates that it is an important concept for the uniform implementation of faculty mentoring practices within an academic organization.

#### 6.2.4 Structural/Symbolic organization theme

One organizational theme is evident from a dual structural/symbolic perspective: community.

Figure 7 represents the intersection of the structural/symbolic organizational theme.

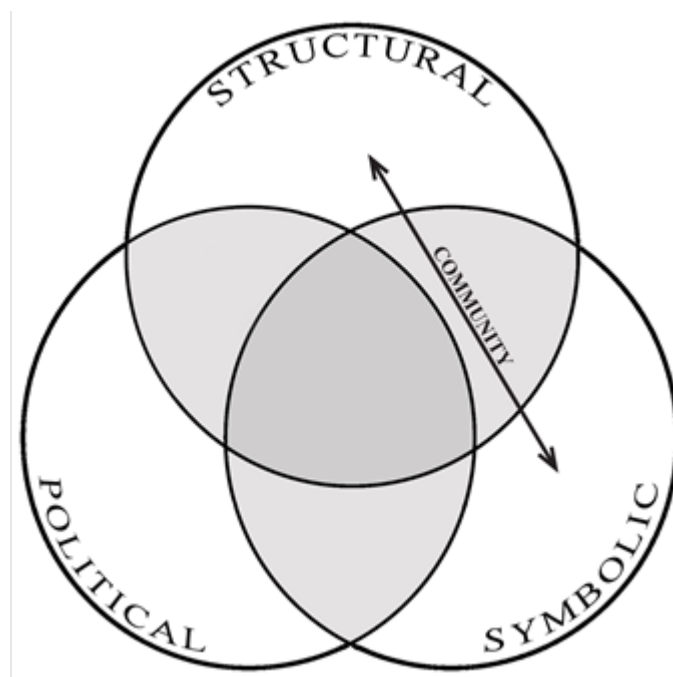


Figure 7: Intersection of Structural/Symbolic Organizational Theme

#### **6.2.4.1 Community**

Community is a unified body of individuals; an interacting population of various kinds of individuals in a common location. Community also represents a feeling of wanting to be with other people or of caring about other people (Merriam-Webster, 2013). Respondents frequently referenced the concept of “community” when describing the structural and symbolic dimensions of their faculty mentoring programs. Evidence to support community was not found within the political domain.

##### ***Structural***

Nine of the twelve faculty mentoring programs emphasize the development of a complementary mentoring team, as opposed to focusing upon a singular compatible mentoring relationship. In these cases, considerable attention is devoted to helping the participants cultivate mentoring and peer networks that meet their professional and personal needs. The respondents from two of the three highly structured faculty mentoring programs noted that their programs are designed “to foster interdisciplinary collaboration” among participants. Although not a multidisciplinary model, the respondent from the third highly structured faculty mentoring program remarked that her peer mentoring model fostered “collegiality” among both the cohort of mentees and with the mentoring teams.

The three highly structured faculty mentoring programs each utilize a peer mentoring model. In one case, a mentoring program facilitator guides the group; in another case, participants are provided a curriculum delivered by a team of faculty members and are paired with an individual mentor; and in the last case, a team of two mentors guides a group of mentees. All programs have relatively prescribed curricula for the participants, spanning seven to nine months, and the participants are part of a cohort of peers. The respondents from each of these

programs indicated that the participants benefit from both the experiences of the facilitator/mentor(s), and the experiences of their colleagues:

It is done within the environment of colleagues so that I might find a challenge that you might help me and vice versa. This is where the variety of participants comes into play– a peer program.

Another respondent from a moderately structured faculty mentoring program expressed the importance of her program helping junior faculty “expand their network of colleagues within the university.” Several respondents noted that “networking” is essential for junior faculty success and their programs provide encouragement and opportunities to do so.

One respondent referenced structural obstacles to collaborating within her organization and provided evidence that fostering interdisciplinary relationships leads to tangible results:

Collaboration. It will result in better patient care, better research. In one of the programs, one of our public health faculty members did not know of an initiative in hematology and oncology. That triggered an idea for him to collaborate in hematology and oncology on a community based program. In any big institution, you are breaking down the silos. We tend to hang with our own.

### ***Symbolic***

Several respondents differentiated the goal of building a sense of community from the goal of fostering collaboration. Building connections within a community can lead to collaboration but it was not considered the primary goal of building a sense of community



among junior faculty. Collaboration is expressed in terms of the faculty member's professional relationships; a supportive environment meets a faculty member's personal or emotional needs.

It also improves satisfaction by creating a network around yourself that you have people who are your friends; well, though, "friends" probably isn't the right word, but having people to support you.

One respondent stated how pleased she is when she sees "relationships and connections develop." Another respondent indicated that her program "created a community for junior faculty to connect." Another respondent noted that "it was important to increase the sense of community for both junior and senior faculty." Fostering an environment in which junior faculty have opportunity to interact with each other, as well as having opportunity to interact with more senior colleagues, is valued among many of the faculty mentoring programs.

### ***Summary***

The majority of faculty mentoring programs emphasized the development of mentoring teams. Considerable attention is devoted to helping the participants cultivate mentoring and peer networks that meet their professional and personal needs. Respondents stated that their programs are designed "to foster interdisciplinary collaboration." In their review of faculty mentoring programs, Zellers et al. (2008) found team mentoring to be well accepted in academic cultures as a contemporary necessity. The diverse professional and personal developmental needs of mentees can seldom be met by one individual, especially in the context of the interdisciplinary nature of modern scientific discoveries and the prevalence of team science.

Three faculty mentoring programs use a peer mentoring model. The respondents from these programs indicated that the participants benefit from both the experiences of the facilitator/

mentor(s), and the experiences of their colleagues. These programs also foster “collegiality” among the cohort of mentees and the mentoring teams.

Several respondents remarked that “networking” is essential for junior faculty success and their programs provide opportunities to do so. One respondent referenced structural obstacles to collaborating within her organization, and provides evidence that fostering interdisciplinary relationships leads to positive results. Collaboration is expressed in terms of the faculty member’s professional relationships; whereas, several respondents differentiated the goal of building a sense of community from the goal of fostering collaboration. The benefits that a junior faculty member acquires from a supportive community of colleagues are framed as meeting his or her personal or emotional needs.

In their study on gender and advancement in academic medicine, Carr, Pololi, Knight, and Conrad (2009) indicate that, “Creating a supportive, collegial, and collaborative atmosphere in medical academe needs to be a high priority” (p. 1453). The *Nature* awards for creative mentoring in science were established to recognize what the editors considered to be the least recognized of all the activities that take place in a lab. Lee, Dennis and Campbell (2007) reviewed the hundreds of nominations submitted by mentees and “building communities” was among the themes that emerged from their review:

A constant theme from the groups supporting their mentor was the sense of community. The successful mentors realized the need to create an environment where all under their care could flourish. They all had deliberate and varied strategies to build these communities. How often have you experienced the negative impact of silo-building within departments? Positive and sustaining communities do not just happen, they have to be nurtured. (pp. 794-795)

In her critique of generational differences in today's academic culture, Cook (2008) found that Generation X'ers have different workplace expectations from other generations. "They care about community and collegiality, making connections across campus for interdisciplinary ventures. Instead they find closed doors and departmental silos" (p. 2).

August and Waltman (2004) have found the sense of community to be especially important to women faculty. Using data from a census survey of faculty at a Research I university located in the Midwest, they found that a large number of female faculty consider a sense of community to be important to career satisfaction. However, collegial peer relations were only significant for untenured women. The authors surmise that by the time faculty members achieve tenure, they have found their niche and are better able than their junior counterparts to adapt to their organizational cultures.

Westring et al. (2012) have found that the work environment of an academic culture inhibits women faculty members' success in academic medicine. They defined a construct of a culture conducive to women faculty members' academic success, and developed a measure that institutions "can use to assess the supportiveness of the culture for women" (p. 1). In view of this finding, the theme of "community" within junior faculty mentoring programs addresses an important preference, and expectation, of early career faculty, especially women faculty.

### **6.2.5 Political/Symbolic organizational theme**

One organizational theme is evident from a dual political/symbolic perspective: transformation. Figure 8 represents the intersection of the political/symbolic organizational theme.

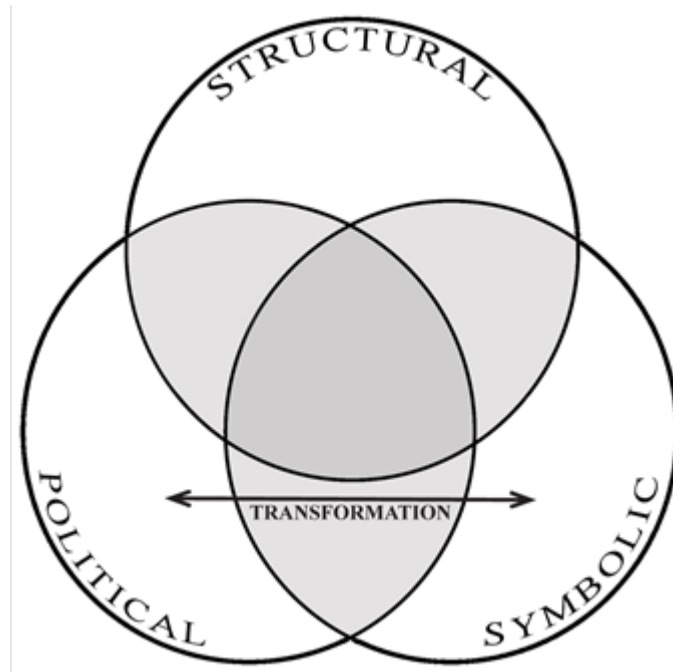


Figure 8: Intersection of Political/Symbolic Organizational Theme

#### 6.2.5.1 Transformation

Transformation is the act or process of change in composition, structure, or condition. Transformation also represents a complete or major change in appearance or character (Merriam-Webster, 2013). Respondents frequently referenced the concept of “culture change” when describing the political and symbolic dimensions of their faculty mentoring programs. Evidence to support transformation was not found within the structural domain.

##### *Political*

A change in senior leadership is considered a variable that can change the level of support for a faculty mentoring program. One respondent, whose faculty mentoring program operations are decentralized, remarked that his organization has gone through several changes in senior leadership since his faculty mentoring program has been established, and as a result,

support for his faculty mentoring program has declined. He considered the new leadership's focus to be on recruiting established "superstars" rather than developing current faculty:

I don't know if he is someone who thinks you can mentor someone into greatness. He isn't a believer in professional development. Now, the enforcement to oversee those [mentoring] reports being completed has sort of fallen by the wayside. Some of the departments are doing them haphazardly. It's like if someone isn't standing over them, then it's just one more thing that the department doesn't have to do.

Two other respondents commented that their organizations are just undergoing changes in senior leadership. One is cautiously optimistic that new leadership presents an opportunity for increased support:

It will be interesting if you ask me six months from now. We are finishing our strategic plan and we will be developing a budget. Our new dean is very enthusiastic about this program, but we really want to see if the enthusiasm is matched by dollars. There is a lot of enthusiasm about moving our institution to newer and better rankings, and of course we do that heavily by faculty development. So we will just have to wait and see if the resources are there to match.

Another respondent is more confident that a change in leadership will result in more support for her program:

Our [senior leader] just left last week. So the leadership at the top is going to change. Hopefully this office will get a few more people to handle all this stuff [faculty affairs in general]. Frankly, I think it's going to be a good thing because the acting [senior leader]

is [one of our chairs] and buys into it more than any other chair on campus because of all the junior faculty that need it and he knows that we have had very little support over the years by our [senior leader] so he is eager to help us out.

Several respondents stated that their mentoring programs contribute to an overall strategy for elevating their organization's reputation and status, that is, to facilitate organizational change. Mentoring programs are framed in the context of a marketing tool to attract high-performing faculty members in an increasingly competitive biomedical faculty marketplace. A Web site for one of the faculty mentoring programs indicates that its vision is "to become the national center of excellence for mentoring in the academic health sciences."

To lobby senior administration for resources for his organization's faculty mentoring program, one respondent used the argument that, "to be a top 20, you need a mentorship program." Another respondent noted that "there is a lot of enthusiasm about moving our institution to newer and better rankings." Other respondents remarked that faculty mentoring programs are necessary to meet the renewal requirements of their institution's highly prestigious and coveted CTSA's.

### *Symbolic*

One respondent noted that changing times and the changing demands placed upon faculty members necessitate a different approach to faculty mentoring:

Mentoring has changed over the years. If you look at our goals on the mentor/protégée relationship from our mentoring program page, you can see that there are 8 bullets: evaluating teaching—I am not sure that each mentor is prepared to evaluate teaching. I am not sure if each mentor is prepared to look at somebody's professional portfolio and

guide them, particularly if it is a mentor who is 20 years senior who was promoted long ago and our way of faculty mentoring has changed. It is not typical for one mentor to meet all the goals of the [mentoring] relationship.

One respondent candidly remarks that the academic status quo still applies, “Let’s face it. Some things don’t change. Grants and papers are the basic currency in academia.” Respondents emphasized that a career in academic medicine is intensely competitive and pressure-filled, yet can reap great rewards. For those reasons, several respondents are “passionate” in their quest to infuse faculty mentoring and career development into the cultures of their organizations.

All the respondents in this study reported that their faculty mentoring programs were established to meet the unmet mentoring needs of faculty members within their departments and divisions, thus the need for centralized administration. As described by the respondents, their faculty mentoring programs are organizational change agents; programs designed to bring about change in mentoring practices.

Although there are mixed schools of thought with regard to centralized versus decentralized implementation, there is strong consensus that for uniform institutional accountability, responsibility for the administration of faculty mentoring programs needs to be accepted by an authority above the departmental or divisional levels. That is, responsibility for the administration of faculty mentoring programs needs to be accepted above the departmental or divisional levels to effect organizational culture change:

We had to change the environment and the culture. It is a hard thing to do and takes a long time. The best way to do it was to actually continually keep the message that mentoring was important, and that we were going to help.

One faculty mentoring program, according to its goals published on its Web site, is explicit in its objective to effect organizational culture change regarding mentoring:

- Reorient the culture of the institution to support, reward, and enhance quality mentoring in the [school/department].
- Create an environment that values and supports the essential role of mentoring in research and in career progression.

A respondent from another faculty mentoring program recognized that his organization has a long way to go to effect culture change. However, he believes that his organization is moving in the right direction. He said that, “It [mentoring] is written into the promotion and tenure guidelines as a single line as one example of what is important. It will require a culture change at this point.”

Another respondent noted that she is witnessing positive changes in attitudes towards junior faculty mentoring as a result of junior faculty members participating in her organization’s faculty mentoring program. She expressed that, “I’ve been able to match junior faculty members, who have since become associate faculty members, and it’s sort of like paying it forward.”

### ***Summary***

The concept of change emerged in this study in several contexts. A change in senior leadership is considered to be a variable that can change the level of organizational support for a faculty mentoring program. The changing economics of research funding contributes stressors to early career faculty members that their senior colleagues did not face while attempting to establish their academic careers. Several respondents indicated that their mentoring programs



contribute to an overall strategy for changing their institutions' comparable standing or rankings with peer institutions.

However, the theme of “transformation” is derived from the respondents' efforts to change the attitudes towards, and the practice of faculty mentoring, within their organizations. Cook (2008) attributes the generational “perfect storm” (p. 1) analogy to David D. Perlmutter. “The university is the site of the perfect storm of 21<sup>st</sup> century expectations and medieval bureaucracy” (Perlmutter, 2008).

Cook sarcastically asks, “Is academic transformation an oxymoron?” Academic cultures, like any organizational culture, include physical artifacts and practices, stated values, and underlying assumptions (Bergquist, 1991). According to Cook, academic practices, stated values, and underlying assumptions in academic cultures frequently do not align:

*We say we value teaching* but promotion depends upon research.

*We say we value diversity* but diversity or minority research is considered soft.

*We say we like community engagement* but it doesn't help toward tenure.

*We say we like collaboration* but we dwell in silos and promote competition. (p. 3)

In relation to translational research, Feldman (2008) indicates that academic medical centers must modify their cultures to facilitate the development of seamless collaboration and cooperation among diverse groups of investigators. Faculty in academic medicine often face impediments that inhibit “collaborative interactions across the silos of academia” (p. 87).

In their commentary on a call for culture change in academic medicine, Powell et al. (2010) note the “mismatch between the prevailing organizational approach and culture in academic medicine and its vital [faculty] workforce” (p. 586). In a study of faculty perceptions

of the lack of alignment between individual and institutional values, Pololi et al. (2009) found that, “Faculty values were well aligned with stated institutional missions; however, many perceived that institutional behaviors were not always aligned with individual faculty values” (p. 1289).

With regard to women faculty, the need for culture change in academic medicine has garnered national attention. The National Initiative on Gender, Culture and Leadership in Medicine: C-Change (Culture Change), is a coalition of five U.S. medical schools that are exploring organizational approaches to address the imperative of developing women and under-represented minority faculty members to their fullest potential within academic medicine. This initiative focuses on the aspects of institutional culture that could be inhibiting the advancement and retention of women faculty members in academic medicine (Carr, Pololi, Knight, & Conrad, 2009; Pololi, Conrad, Knight, & Carr, 2009; Pololi et al., 2009).

Consequently, evidence from this study indicates that the leadership of the twelve sample faculty mentoring programs in academic medicine are taking a proactive approach to effect change within their organizational cultures. In relation to the theme “transformation,” faculty mentoring programs represent academic cultural artifacts designed to bring about institutional change with regard to the organizational values and assumptions associated with faculty mentoring.

### 6.3 SUMMARY

Six multi-dimensional organizational themes emerged from the data regarding the twelve faculty mentoring programs examined in this study: 1) commitment, 2) expectations, 3) responsibility, 4) accountability, 5) community, and 6) transformation. These themes are manifested differently across the three organizational perspectives, structural, political, and symbolic. Three of these organizational themes are evident across all organizational perspectives: commitment, expectations, and responsibility. Accountability is evident from a dual structural/political perspective. Community is evident from a dual structural/symbolic perspective. And, transformation is evident from a dual political/symbolic perspective. Figure 9 represents the complete model of multi-dimensional faculty mentoring program organizational themes.

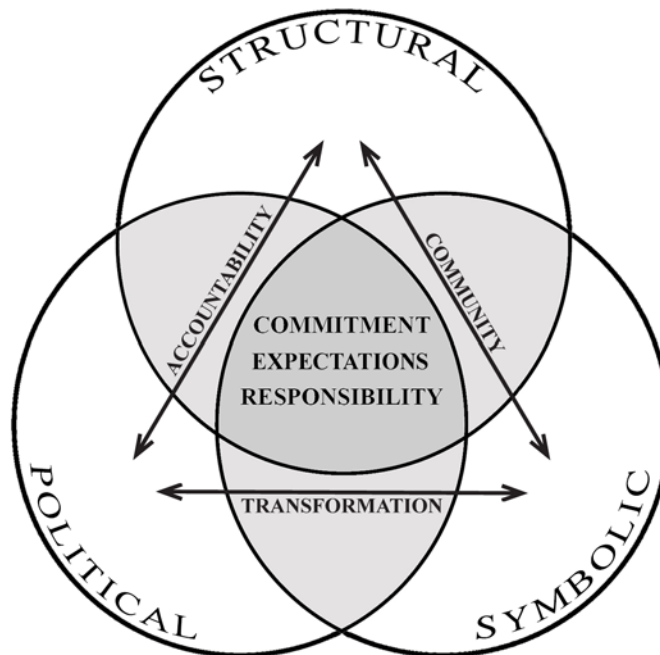


Figure 9: Multi-Dimensional Faculty Mentoring Program Organizational Themes

The first theme, commitment, was evident from both an individual and organizational perspective in the three organizational domains. Structural evidence includes the degree of commitment required from mentees and mentors to participate in programs, the frequency of mentoring interactions, tools to engender mentoring commitments, opportunities to develop professional skill sets, and mentor training.

Political evidence of commitment includes financial incentives for departments, divisions and mentors; the appointment of mentoring directors or facilitators/liaisons in the departments/divisions with or without financial incentives; the use of a faculty member's service obligation as an incentive for mentoring; and requiring mentoring as a criteria for promotion to full professor. Among all of the respondents, there was a consensus that mentors should be volunteers.

Symbolic evidence of commitment includes the passion of program directors and mentors with regard to faculty mentoring, the identification of colleagues who share values and beliefs regarding the mentoring of junior faculty, and the bestowing of prestigious mentoring awards and recognitions.

The second theme, expectations, was evident from both an individual and organizational perspective in the three organizational domains. Structural evidence includes the incidences in which the degree of expectations was used, in part, to determine the degree of structure of a program; the access to rich electronic resources to support mentoring relationships, which include guidelines on mentor and mentee expectations; centrally established program expectations; transparency of program expectations; the use of individual development plans for mentees to establish personal expectations; and the use of mentoring contracts to establish expectations between mentees and mentors.

Political evidence of expectations includes the incidence of faculty mentoring programs being developed at the request of senior administration under the auspices of offices responsible for faculty affairs, expectations associated with institutional CTSA's, expectations of external agencies, and the expectation for faculty to provide mentoring as a service to their school/department—without financial incentives.

Symbolic evidence of expectations includes academic culture expectations, the generational differences in expectations between junior and senior faculty members relative to mentoring, and market expectations in the context of an organization being competitive in recruiting highly desirable new faculty members.

The third theme, responsibility, was evident from both an individual and organizational perspective in the three organizational domains. Structural evidence includes a mentee's responsibility for seeking out compatible research or scholarly mentors, and the administrative responsibility demonstrated by faculty mentoring program leadership by conducting formative and summative evaluations.

Political evidence of responsibility includes how responsibility is situated in a centrally implemented faculty mentoring program versus a decentralized model of program implementation, the responsibilities of faculty mentoring program directors, the responsibilities of departmental/divisional mentoring directors or facilitators/liaisons, and the discretionary responsibility for faculty mentoring that is situated with department chairs and division chiefs.

Symbolic evidence of responsibility includes the importance associated with a department chair or division chief “buying into” the value of mentoring so that he or she accepts responsibility for faculty mentoring, the incidences in which senior faculty do not feel responsible for mentoring junior faculty, the cases in which a faculty member's responsibility for

mentoring is framed within the context of a service obligation, and the cases in which mentoring is organizationally mandated as the responsibility of senior faculty by virtue of being a requirement for promotion to full professor.

The fourth theme, accountability, was evident from both an individual and organizational perspective. Indications of accountability were present in two organizational perspectives: the structural and political domains. The primary structural evidence is that each organization established a centralized administration to provide oversight with regard to their faculty mentoring program. There was consensus among the twelve faculty mentoring program respondents that centralized administration provides uniform organizational accountability with regard to faculty mentoring.

Political evidence of accountability includes the accountability of the departmental/divisional liaisons to the faculty mentoring program director responsible for the centralized administration of the program, the incidences in which the department chair or divisional chief has authority over the liaisons rather than the faculty mentoring program director, and the cases in which the chairs/chiefs are directly accountable to their deans/chairs and the faculty mentoring program directors have no authority.

No evidence of accountability was found within the symbolic domain. Accountability was associated with the incidences of structures being in place to situate accountability, and having the power to compel compliance with organizational mentoring policies.

The fifth theme, community, was evident from both an individual and organizational perspective. Indications of community were present in two organizational perspectives: the structural and political domains. Structural evidence includes the establishment of

complementary mentoring teams, the incidences of peer faculty mentoring program models, and the prevalence of strategies to encourage networking and collaboration.

Symbolic evidence of community includes the references to building a sense of community as independent from fostering collaboration, the value associated with faculty members making connections with each other, and the incidences of opportunities provided to junior faculty members to interact with both their peers and with more senior colleagues on both personal and professional levels.

No evidence of community was found within the political domain. Community was associated with the structures in place to facilitate interactions among faculty members, and for instilling in new faculty members a sense of belongingness within the organization.

The sixth theme, transformation, was evident from both an individual and organizational perspective. Indications of transformation were present in two organizational perspectives: the political and symbolic domains. Political evidence includes changes in organizational leadership, efforts to elevate institutional status for purposes of rankings relative to peer institutions, and for enhancing organizational reputation in order to recruit high-performing new faculty members.

Symbolic evidence of transformation includes the recognition on the part of the respondents that changing times, and the changing demands placed upon faculty members, calls for academic culture change; the framing of faculty mentoring programs as mechanisms designed to bring about change in organizational mentoring practices; the references to the need for an authority above departmental or divisional levels to accept responsibility for the administration of faculty mentoring programs to effect organizational culture change; and examples where program Web sites are explicit in their objectives to effect organizational culture change regarding mentoring.

No evidence of transformation was found within the structural domain. Transformation was associated with leadership, institutional status and reputation, and organizational culture change towards mentoring.

This multi-dimensional model presents a novel approach to understanding the organizational contexts in which faculty mentoring programs operate. This study was undertaken with the expectation of qualifying the degree of influence attributed to success factors across institutions. The twelve programs in this study had few common factors from a structural, political, or symbolic perspective. What did emerge from this study are six organizational themes that transcend these program variables. These findings advance our understanding of the organizational and contextual factors particular to academic cultures within major American research universities that contribute to successful formal faculty mentoring programs.



## **7.0 CONCLUSION**

### **7.1 VARIANCES WITH FINDINGS IN BUSINESS LITERATURE**

As mentioned earlier, Hegstad and Wentling (2005) conducted one of the few studies that examined mentoring programs from an organizational perspective. They examined organizational antecedents and moderators that had an impact on the effectiveness of exemplary formal mentoring programs in *Fortune* 500 companies headquartered in the United States. Hegstad and Wentling found the following antecedents to hasten the success of formal corporate mentoring programs: senior-level management support; a team-focused environment; an open work area with opportunity for interaction; and a work ethic based on cross-functional operation, collaboration, and networking. They further identified open communication processes, and effective selection and matching processes, as the most instrumental moderators of exemplary formal mentoring programs.

Upon reading Hegstad and Wentling's (2005) findings, I was perplexed. Based upon Hegstad and Wentling's observations, traditional academic cultures would appear to be incompatible to hosting high-quality formal faculty mentoring programs. Independent, disciplinary-based scholarship and research are valued and rewarded within the collegial cultures of large research universities (Bergquist, 1991).

This study examined a range of junior faculty mentoring programs in academic medicine, from multiple perspectives. Whereas Hegstad and Wentling (2005) found a team-focused environment, an open work area with opportunity for interaction, and a work ethic based on cross-functional operation, collaboration, and networking to be antecedents to the success of formal corporate mentoring programs, this study provides evidence that their findings do not apply to academic cultures, at least not directly.

In contrast, this study provides evidence that in academia, faculty mentoring programs are professional development mechanisms designed to transform academic cultures so that they more closely resemble the environments that Hegstad and Wentling (2005) consider to be necessary antecedents to corporate mentoring programs: team-oriented and collaborative, and providing opportunity for interaction and networking with colleagues. Rather than being antecedents, these conditions are the projected outcomes of the faculty mentoring programs that were examined during this study.

Hegstad and Wentling (2005) found that senior-level management support is a necessary antecedent of the organizational environment for mentoring programs to thrive; this study provides evidence that this is not necessarily the case in academic cultures. Two faculty mentoring programs started as grassroots efforts; the support of senior leadership came after the fact. Several respondents expressed concern over leadership not providing sufficient resources. Nevertheless, they are sustaining their faculty mentoring programs with what little resources they have at their disposal.

These situations, which are peculiar to academic cultures compared to corporate cultures, can be associated with the academic traditions of faculty governance, intellectual autonomy, and external funding. Tenured faculty members are afforded a great deal of liberty to choose the

course of their scholarly pursuits, and to determine how they fulfill their service obligations, especially if they are substantially supported by external funding. Employees in business settings do not have such leeway in deciding how they spend their time, hence, the necessity for senior level support for mentoring programs in corporate settings.

Consequently, the emergence of this multi-dimensional model of faculty mentoring program themes differentiates the organizational and contextual factors associated with academic cultures within major American research universities, from those organizational variables that influence corporate mentoring programs. This new organizational understanding of faculty mentoring programs explains why Zellers et al. (2008) found that, “Formal faculty mentoring programs are flourishing within a number of major American research universities” (p. 582) under environmental conditions that are in contrast to the milieu in which Hegstad and Wentling found formal corporate mentoring programs to flourish.

## **7.2 IMPLICATIONS FOR FACULTY MENTORING PRACTICES**

As noted earlier, universities that are seeking to foster academic cultures responsive to the diverse professional development needs of their faculty have few studies upon which to inform their formal mentoring practices. This study was intended to develop an organizational understanding of thriving faculty mentoring programs in major research institutions to provide a practical faculty mentoring program framework for faculty development practitioners to apply within their academic cultures, as differentiated from those practical frameworks found to be prominent in the business sector.

What does an ideal faculty mentoring program in a major research university look like? This study provides the answer of, “It depends.” That is, it depends upon the complex interplay of an academic institution’s structural, political, and symbolic influences. With regard to the design of a faculty mentoring program, these organizational influences can provide rich opportunities and enviable advantages; conversely, they can pose challenging obstacles and confining limitations.

Ever since Kram (1985) first presented her pioneering findings on mentoring relationships in the workplace, it has been well accepted that mentoring is contextual. This knowledge compelled me to examine formal faculty mentoring practices in academia to better understand the contextual effect of an academic culture upon formal faculty mentoring practices. The goal of this study was to provide useful information for faculty development professionals to apply within their organizations.

Although specific “how to” advice is limited, this study provides support for a multi-dimensional theoretical framework for academic organizations to optimize formal faculty mentoring relationships. This conceptual framework has six dimensions: commitment, expectations, responsibility, accountability, community, and transformation. This study demonstrates that maximizing these dimensions within a faculty mentoring program, to the fullest potential within organizational constraints, provides the ideal faculty mentoring program format for that particular academic culture. This model also situates these six dimensions in the specific “overlapping organizational spheres” within an academic culture that allows faculty development professionals to identify the organizational domains that exert the most influence over these dimensions within their faculty mentoring programs.

### 7.3 LIMITATIONS OF STUDY DESIGN

The intended target population for this study was faculty mentoring programs within major American research universities. Based upon a pilot benchmarking study of faculty mentoring programs, Zellers et al. (2005) found that faculty mentoring program organizational models ranged from institutional, institutional for women, discipline-based, and discipline-based for women. To minimize the impact of discipline-specific differences among institutions, and the differences in faculty members' professional development needs across career stages, the scope of this study was narrowed to focus upon junior faculty mentoring programs in schools of medicine within institutions belonging to the AAU.

Since the twelve faculty mentoring programs examined during this study were primarily in academic medicine, and the programs were designed for junior faculty, this study might more aptly be described as developing an organizational understanding of junior faculty mentoring programs in academic medicine within major research universities. Although assumptions can be made with regard to the relevance of this study to other research-intensive academic disciplines, particularly with regard to STEM<sup>13</sup> disciplines, it is unknown whether the peculiarities of the culture of academic medicine, or the career stage of the mentees, influenced data.

Although the unique dynamics of clinical departments are cited within this study, which are particular to academic medicine and other clinically-based disciplines, these data were not a focus of the study nor considered in the formation of the study results. The exclusion of cross-institutional and institutional faculty mentoring program models from this study further limits interpretation of data to faculty mentoring programs in other settings.

---

<sup>13</sup> Science, Technology, Engineering, and Mathematics

The effect of gender differences within this study is unknown. In academic cultures, the experiences and perceptions of female faculty members differ from their male counterparts (Carr, Pololi, Knight, & Conrad, 2009; Pololi, Conrad, Knight, & Carr, 2009; Pololi et al., 2009). Whereas, eight of the twelve faculty mentoring programs were directed by women and four of the programs were directed by men, ten of the organizational respondents in this study were women and two of the respondents were men. The over-representation of women respondents could skew results.

Since the method of identifying study participants was limited to that which could be ascertained from institutional Web sites, the sample only included faculty mentoring programs with a public presence on the internet. Some faculty mentoring programs might have been only accessible through password-protected intranets and therefore were excluded from this study. Although the sample was not limited by the availability or willingness of a faculty mentoring program representative to participate, happenstance did affect a consistent method of data collection. Eleven interviews were conducted by telephone; one interview was in person. Eleven interviews were audiotaped; one respondent declined to have her conversation audiotaped, so I resorted to taking notes rather than having access to a verbatim audiotaped account of the interview. The effect of these variances in data collection is unknown.

The original conceptual framework of this study, based upon the correlation of mentoring program success factors identified in the literature (Zellers et al., 2008) to a corresponding organizational perspective, i.e., structural, political, or symbolic, proved to be a major limitation. Although study variables were isolated within individual organizational perspectives, the influences of the other two organizational perspectives could not be ignored. My inability to detect any significant organizational themes from the viewpoint of the original conceptual

framework compelled me to reverse the conceptual framework of this study, so that each variable was examined from the three different organizational perspectives.

The use of multiple cases strengthens the validity of this study's results (Mertens, 2005). But, as with any qualitative study, causation is not able to be inferred, and the degree of transferability to other contexts is subject to the reader's judgment.

#### **7.4 FUTURE DIRECTIONS FOR INVESTIGATION**

As mentioned earlier, one of the respondents in this study, who was the founding director of her program, changed institutions during the course of this study. While attempting to acquire additional information about this program from the new leadership, it was discovered that the program was no longer active. All that was able to be determined was that the faculty mentoring program was not sustained after the founding director left. There was no indication that this program lacked institutional support and/or was vulnerable to being discontinued. The only unique variable that I could associate with this program was that the founding director had left the organization.

This phenomenon is noteworthy because this is the third instance since 2008 that I have become aware of a faculty mentoring program being discontinued under similar circumstances. In all three cases, the programs were not sustained after the founding directors left the organizations. In lieu of all twelve faculty mentoring programs being under the leadership of founding directors at the time of this study, this occurrence raises serious concern about the relationship between founding directors and the sustainability of faculty mentoring programs. Further investigation in this regard is warranted.

Replicating this study by examining faculty mentoring programs within other research-intensive academic disciplines, or across disciplines, would provide evidence whether these results are particular to academic medicine. The ability to generalize these results outside of academic medicine is unknown.

Faculty mentoring programs are also designed for junior, mid-career, or senior faculty members, as well as being open to faculty members across the spectrum of their career stages. Examining faculty mentoring programs designed for faculty at varying career stages would serve to determine if differences exist between junior faculty mentoring programs and other types of faculty mentoring programs.

Further exploration of gender differences with regard to the six organizational themes is also warranted. As mentioned earlier, the National Initiative on Gender, Culture and Leadership in Medicine: C-Change (Culture Change), is a coalition of five U.S. medical schools exploring the effects of an academic culture upon women faculty members' careers. This initiative focuses on the aspects of institutional culture that could be inhibiting the advancement and retention of women faculty members in academic medicine (Carr, Pololi, Knight, & Conrad, 2009; Pololi, Conrad, Knight, & Carr, 2009; Pololi et al., 2009). Evidence from this study indicates that faculty mentoring programs are being used as vehicles to facilitate institutional change. Thus, further investigation in this regard could potentially contribute to our understanding of the cultural issues affecting the advancement and retention of women faculty members in academic medicine.

This study was initially undertaken to determine the usefulness of organizational behavior theory in developing a more informed understanding of faculty mentoring programs in major US research universities, as differentiated from mentoring programs found to be



successful in corporate cultures. The initial study design of this investigation did not fulfill original expectations. However, the redesign of how organizational behavior theory was applied within this study revealed a new organizational understanding of faculty mentoring programs within academic cultures. Thus, this discovery provides a promising new direction for further study.

## APPENDIX A: AMERICAN MEMBERSHIP OF AAU

Public	Private
Georgia Institute of Technology	Boston University
Indiana University	Brandeis University
Iowa State University	Brown University
Michigan State University	California Institute of Technology
The Ohio State University	Carnegie Mellon University
The Pennsylvania State University	Case Western Reserve University
Purdue University	Columbia University
Rutgers, The State University of New Jersey	Cornell University
Stony Brook University-	Duke University
State University of New York	Emory University
Texas A&M University	Harvard University
University at Buffalo,	The Johns Hopkins University
The State University of New York	Massachusetts Institute of Technology
The University of Arizona	New York University
University of California, Davis	University of California, Berkeley
University of California, Irvine	Northwestern University
University of California, Los Angeles	Princeton University
University of California, San Diego	Rice University
University of California, Santa Barbara	Stanford University
University of Colorado Boulder	Tulane University
University of Florida	The University of Chicago
University of Illinois at Urbana Champaign	University of Pennsylvania
The University of Iowa	University of Rochester
The University of Kansas	University of Southern California
University of Maryland at College Park	Vanderbilt University
University of Michigan	Washington University in St. Louis
University of Minnesota, Twin Cities	Yale University
University of Missouri-Columbia	
The University of North Carolina at Chapel Hill	
University of Oregon	
University of Pittsburgh	
The University of Texas at Austin	
University of Virginia	
University of Washington	
The University of Wisconsin-Madison	

## APPENDIX B: SAMPLE INFORMED CONSENT LETTER

Dear Dr. (Name),

I am conducting a research study of the organizational similarities and differences between model faculty mentoring programs in schools of medicine within major American research universities to determine the usefulness of organizational behavior theory in understanding these relationships. For that reason, I am contacting representatives of faculty mentoring programs in schools of medicine from institutions belonging to the Association of American Universities (AAU).

Would you be willing to participate in a 45-60 minute, audio-recorded telephone interview regarding the establishment and operations of your faculty mentoring program? Although your model extends beyond your school of medicine, I am especially interested in faculty mentoring programs in academic health center settings.

Current literature on faculty mentoring programs emphasize the structural dimensions of formal faculty programs whereas I am interested in broadening current discourse on faculty mentoring programs to better understand the contextual factors associated with the operation of successful faculty mentoring programs in schools of medicine within major research universities in the United States. Interview questions would be provided to you in advance. There are no foreseeable risks associated with this project nor any direct benefits to you, other than helping to contribute to our understanding of faculty mentoring in schools of medicine within major research universities.

My sample will include 10-12 formal faculty mentoring programs from schools of medicine within AAU-member institutions. I will be the only individual aware of the identities of the participating respondents and universities. Any documentation in this regard will be kept in a secured location. During transcription, pseudonyms will be used; all identifiers of respondents and institutions will be removed and audio recordings will be deleted. You will have the opportunity to review the written transcription of your interview.

Your participation is voluntary and you may withdraw from this project at any time. Please contact me at [zellersd@pitt.edu](mailto:zellersd@pitt.edu) or (412) 648-8522 if you have any questions.

I look forward to your response.

*Darlene*

Darlene F. Zellers, Director  
Office of Academic Career Development  
University of Pittsburgh Health Sciences

Suite 301 Scaife Hall  
3550 Terrace Street  
Pittsburgh, PA 15261

## **APPENDIX C: INTERVIEW QUESTIONS PROVIDED TO RESPONDENTS**

1. Tell me how the faculty mentoring program came to be established?

Such as: a white paper, committee report, grassroots initiative

2. How is funding provided?

3. How is mentoring defined?

4. How did you determine need?

5. What are the program goals?

6. How does the program operate?

7. How is administrative oversight provided?

8. How is program evaluated?

9. What do you see as motivating factors for participation? (mentor/mentee)?

10. How is mentoring represented (or valued) within larger institutional culture?

11. Tell me what seems to make this program work?

12. Tell me about any barriers or obstacles to this program?

13. In hindsight, would you do anything differently?

## APPENDIX D: CASE VIGNETTE TEMPLATE

Code name	ALPHA
Respondent	
Website	
Published articles	
1.Came to be established?	
2.Funding provided?	
3.Mentoring defined?	
4.Determine need?	
5.Program goals?	
6. Program operate?	
7.Administrative oversight	
8. Program evaluated?	
9. Motivating factors	
10.Mentoring represented	
11.Make this program work?	
12.Barriers or obstacles	
13.Do anything differently?	
Organ Model	
Length Fixed/open	
Matching Assignments	
Selection	
Structure	
Skill building	
Monitoring	
Goal Functional Developmental	

## BIBLIOGRAPHY

- Allen, T. D., Eby, L. T., & Lentz, E. (2006). The relationship between formal mentoring program characteristics and perceived program effectiveness. *Personnel Psychology*, 59, 125–153.
- Allen, T. D., Poteet, M. L., & Russell, J. E. (2000). Protégé selection by mentors: What makes the difference? *Journal of Organizational Behavior*, 21, 271–282.
- Ancona, D., Kochan, T. A., Scully, M., Van Maanen, J., & Westney, D. E. (2005). *Managing for the future: Organizational behavior & processes* (3<sup>rd</sup> ed.). Mason, OH: South-Western College Publishing.
- Association of American Universities (2010). Retrieved August 20, 2010, from <http://www.aau.edu/about/article.aspx?id=5474>.
- August, L., & Waltman, J. (2004, March). Culture, climate, and contribution: Career satisfaction among female faculty. *Research in Higher Education*, 45(2), 177–192.
- Bauer, M. W. (2000). Classical content analysis; A review. In M. W. Bauer & G. Gaskell (Eds.), *Qualitative researching with text, image and sound: A practical handbook*. Los Angeles, CA: Sage Publications.
- Bauer, M. W., & Gaskell, G. (2000). *Qualitative researching with text, image and sound: A practical handbook*. Los Angeles, CA: Sage Publications.
- Bazeley, P. (2007). *Qualitative data analysis with NVivo*. Los Angeles, CA: Sage Publications.
- Bellot, J. (2011, January-March). Defining and assessing organizational culture. *Nursing Forum*, 46(1), 29–37.
- Benson, C., Morahan, P., Sachdeva, A., & Richman, R. (2002). Effective faculty preceptoring and mentoring during reorganization of an academic medical center. *Medical Teacher*, 24(5), 550–557.
- Bergquist, W. H. (1991). *The four cultures of the academy*. San Francisco, CA: Jossey-Bass, Inc.

- Bergquist, W. H., & Pawlak, K. (2008). *Engaging the six cultures of the academy: Revised and expanded edition of the four cultures of the academy*. San Francisco, CA: Jossey-Bass.
- Berk, R. A., Berg, J., Mortimer, R., Walton-Moss, B., & Yeo, T. P. (2005, January). Measuring the effectiveness of faculty mentoring relationships. *Academic Medicine*, 80(1), 66–71.
- Bickel, J., & Brown, A. J. (2005, March). Generation X: Implications for faculty recruitment and development in academic health centers. *Academic Medicine*, 80(3), 205–210.
- Boice, R. (2000). *Advice for new faculty members: Nihil nimus*. Boston, MA: Allyn and Bacon.
- Bolman, L. G., & Deal, T. E. (2003). *Reframing organizations: Artistry, choice, and leadership* (3<sup>rd</sup> ed). San Francisco, CA: Jossey-Bass, Inc.
- Booth, W. C., Colomb, G. G., & Williams, J. M. (2008). *The craft of research* (3<sup>rd</sup> ed.). Chicago, IL: The University of Chicago Press.
- Bower, D., Diehr, S., Morzinski, J., & Simpson, D. (1998). Support-challenge-vision: A model for faculty mentoring. *Medical Teacher*, 20(6), 595.
- Boyle, P., & Boice, B. (1998, Spring). Systematic mentoring for new faculty teachers and graduate teaching assistants. *Innovative Higher Education*, 22(3), 157–179.
- Brutkiewicz, R. R. (2010, November). Research faculty development: A historical perspective and ideas for a successful future. *Advances in Health Science Education*, published online: Springer Science+Business Media.
- Burke, R. J., McKeen, C. A., & McKenna, C. (1993). Correlates of mentoring in organizations: The mentor's perspective. *Psychological Reports*, 72, 883–896.
- Burla, L., Knierim, B., Barth, J., Liewald, K., Duetz, M., & Abel, T. (2008, March/April). From text to codings: Intercoder reliability assessment in qualitative content analysis, *Nursing Research*, 57(2), 113–117.
- Byrne, D. (1971). *The attraction paradigm*. New York, NY: Academic Press.
- Carr, P. L., Pololi, L., Knight, S., & Conrad, P. (2009). Collaboration in academic medicine: Reflections on gender and advancement. *Academic Medicine*, 84(10), 1447– 453.
- Cawyer, C. S., Simonds, C., & Davis, S. (2002). Mentoring to facilitate socialization: The case of the new faculty member. *Qualitative Studies in Education*, 15(2), 225–242.
- Chao, G. T., Walz, P. M., & Gardner, P. D. (1992). Formal and informal mentorships: A comparison on mentoring functions and contrast with nonmentored counterparts. *Personnel Psychology*, 45(3), 619–36.

- Chesler, N., Single, P., & Mikic, B. (2003). On belay: Peer-mentoring and adventure education for women faculty in engineering. *Journal of Engineering Education*, 257–262.
- Chronicle of Higher Education (2010, April 22). *Extended List: Research Financing of AAU Members and Nonmember*. Retrieved January 24, 2013 from: <http://chronicle.com/article/Extended-List-Research/65212>
- Clutterbuck, D. & Lane, G. (Eds.). (2004). *The situational mentor: An international review of competencies and capabilities in mentoring*. Burlington, VT: Gower Publishing Company.
- Cohen, J. G., Sherman, A. E., Kiet, T. K., Kapp, D. S., Osann, K., Chen, L., O'Sullivan, P. S., & Chan, J. K. (2012). Characteristics of success in mentoring and research productivity – A case-control study of academic centers. *Gynecologic Oncology*, 125, 8–13.
- Committee on Maximizing the Potential of Women (2006). *Beyond bias and barriers: Fulfilling the potential of women in academic science and engineering*. Washington, DC: National Academies Press.
- Cook, S. G. (2008). A perfect storm: Gen X and today's academic culture. *Women in Higher Education*, 17(5), 1–3.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Daloz, L. A. (1999). *Mentor: Guiding the journey of adult learners*. San Francisco, CA: Jossey-Bass Publishers.
- Denzin, N. K., & Lincoln, Y. S. (Eds.) (2008). *Collecting and Interpreting Qualitative Materials*. Los Angeles, CA: Sage Publications.
- Fagenson-Eland, E. A., Marks, M. A., & Amendola, K. L. (1997). Perceptions of mentoring relationships. *Journal of Vocational behavior*, 51, 29–42.
- Feldman, A. M. (2008). Does academic culture support translational research? *CTS Journal*, 1(2), 87–88.
- Feldman, M. D., Huang, L., Guglielmo, J., Jordan, R., Kahn, J., Creasman, J. M., Wiener-Kronish, J. P., Lee, K. A., Tehrani, A., Yaffe, K., & Brown, J. S. (2009). Training the next generation of research mentors: the University of California, San Francisco, Clinical & Translational Science Institute mentor development program. *CTS Journal*, 2(3), 216–332.
- Gibson, S. K. (2004, Spring). Being mentored: The experience of women faculty. *Journal of Career Development*, 30(3), 173–188.



- Girves, J. E., Zepeda, Y., & Gwathmey, J. K. (2005). Mentoring in a post-affirmative action world. *Journal of Social Issues*, 61(3), 449–479.
- Grigsby, R. K. (2004, May). Five potential pitfalls for junior faculty at academic health centers. *Academic Physician & Scientist*, 2–3.
- Gunn, E. (1995). Mentoring: The democratic version. *Training*, 32(8), 64
- Harshman, E. M., & Rudin, J. P. (2000). Corporate mentoring programs: Legal landmines? *Journal of Employment Discrimination Law*, 2(1), 13–140.
- Hegstad, C. D. (1999). Formal mentoring as a strategy for human resource development: A review of research. *Human Resource Development Quarterly*, 10(4), 383–390.
- Hegstad, C. D. & Wentling, R. M. (2005, December). Organizational antecedents and moderators that impact on the effectiveness of exemplary formal mentoring programs in Fortune 500 companies in the United States. *Human Resource Development International*, 8(4), 467–487.
- Huskins, W. C., Silet, K., Weber-Main, A. M., Begg, M. D., Fowler, V. G., Hamilton, J., & Fleming, M. (2011). Identifying and aligning expectations in a mentoring relationship. *CTS Journal*, 4(6), 439–447.
- Johnson, W. B. (2007). *On being a mentor: A guide for higher education faculty*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Johnson-Bailey, J., & Cervero, R. M. (2004, April). Mentoring in black and white: The intricacies of cross-cultural mentoring. *Mentoring and Tutoring*, 12(1), 7–21.
- Kanter, R. M. (1977). *Men and women of the corporation*. New York, NY: Basic Books, Inc.
- Keyser, D. J., Lakoski, J. M., Lara-Cinisomo, S., Schultz, D. J., Williams, V. L., Zellers, D. F., & Pincus, H. A. (2008, March). Advancing institutional efforts to support research mentorship: A conceptual framework and self-assessment tool. *Academic Medicine*, 83(3), 217–225.
- Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life*. Glenview, IL: Scott, Foresman.
- Kram, K. E. (2004). Foreword: the making of a mentor. *The situational mentor: An international review of competencies and capabilities in mentoring*. Clutterbuck, D. & Lane, G. (Eds). Burlington, VT: Gower Publishing Company, xi–xiv.
- LeCompte, M. D., & Schensul, J. J. (1999). *Analyzing & interpreting ethnographic data*. Walnut Creek, CA: Rowman & Littlefield Publishers.

- Lee, A., Dennis, C., & Campbell, P. (2007). Nature's guide for mentors. *Nature*, 447(14), 791–797.
- Leslie, K., Lingard, L., & Whyte, S. (2005). Junior faculty experiences with informal mentoring. *Medical Teacher*, 27(8), 693–698.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H., & McKee, B. (1978). *The season's of a man's life*. New York, NY: Alfred A. Knopf.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created "social climates." *Journal of Social Psychology*, 10, 271–299.
- Lindenberger, J. G., & Zachary, L. J. (1999). Play '20 questions to develop a successful mentoring program. *Training & Development*, 53(2), 12–14.
- Luecke, R. (2004). Coaching and mentoring: How to develop top talent and achieve stronger performance. *Harvard Business Essentials*. Boston: Harvard Business School Press.
- McCauley, C. D., & Van Velsor, E. (Eds.). (2004). *The Center for Creative Leadership handbook of leadership development* (2<sup>nd</sup> ed). San Francisco: Jossey-Bass.
- Merriam, S. (1983). Mentors and protégés: A critical review of the literature. *Adult education Quarterly*, 33(3), 161–173.
- Merriam, S. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass Publishers.
- Merriam, S. B., Thomas, T. K., & Zeph, C. P. (1987, Winter). Mentoring in higher education: What we know now. *The Review of Higher Education*, 11(2), 199–210.
- Merriam-Webster (2012). *Learner's Dictionary*. Retrieved January 20, 2013 from <http://www.merriam-webster.com/dictionary>.
- Mertens, D. M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage publications.
- Merton, R. K. (1968, January 5). The Matthew effect in science. *Science*, 159(3810), 56–63.
- Morse, J. M. (Ed.) (1997). *Completing a qualitative project: Details and dialogue*. Thousand Oaks, CA: Sage Publications
- Murray, M. M. (2001). *Beyond the myths and magic of mentoring: How to facilitate an effective mentoring process*. San Francisco, CA: Jossey-Bass.

- Murrell, A. J., Forte-Trammell, S., & Bing, D. A. (2009). *Intelligent mentoring; How IBM creates value through people, knowledge, and relationships*. Upper Saddle River, NJ: IBM Press.
- National Institutes of Health (2012). *Research portfolio on-line reporting tool*. Retrieved January 24, 2013 from: <http://report.nih.gov>.
- Noe, R. A. (1988). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology*, 41, 457–479.
- O'Meara, K. A., & Terosky, A. L. (2010, November-December). Engendering faculty professional growth. *Change*, 45–50.
- Perlmutter, D. D. (2008, March 11). *Get another life*. Chronicle of Higher Education. Retrieved January 24, 2013 from: <http://chronicle.com/article/Get-Another-Life/45726>.
- Pettigrew, A. M. (1979). On studying organizational cultures. *Administrative Science Quarterly*, 24, 570–581.
- Perna, F. M., Lerner, B. M., & Yura, X. X. (1995). Mentoring and career development among university faculty. *Journal of Education*, 177(2), 31–45.
- Piantanida, M. & Garman, N. B. (1999). *The qualitative dissertation: A guide for students and faculty*. Thousand Oaks, CA: Corwin Press, Inc.
- Pololi, L., Conrad, P., Knight, S., & Carr, P. (2009). The study of the relational aspects of the culture of academic medicine. *Academic Medicine*, 84(1), 106–114.
- Pololi, L., Kern, D. E., Carr, P., Conrad, P., & Knight, S. (2009). The culture of academic medicine: Faculty perceptions of the lack of alignment between individual and institutional values. *Journal of General Internal Medicine*, 24(12), 1289 – 1295.
- Pololi, L., & Knight, S. (2005). Mentoring faculty in academic medicine: A new paradigm? *Journal of General Internal Medicine*, 20, 866–870.
- Pololi, L., Knight, S., Dennis, K., & Frankel, R. (2002). Helping medical school faculty realize their dreams: an innovative, collaborative mentoring program. *Academic Medicine*, 77(5), 377–84.
- Powell, D., Scott, J. L., Rosenblatt, M., Roth, P. B., & Pololi, L. (2010, April). Commentary: A call for culture change in academic medicine. *Academic Medicine*, 85(4), 586–587.
- Ragins, B. R. (1997). Antecedents of diversified mentoring relationships. *Journal of Vocational Behavior*, 51, 90–109.

- Ragins, B. R. (1999). Where do we go from here, and how do we get there? Methodological issues in conducting research on diversity and mentoring relationships. In A. J. Murrell, F. J. Crosby, & R. J. Ely (Eds.), *Mentoring dilemmas: Developmental relationships within multicultural organizations* (227–247). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and women in formal and informal mentoring relationships. *Journal of Applied Psychology*, 84(4), 529–550.
- Ragins, B. R., & Cotton, J. L., & Miller, J. S. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal*, 43(6), 1177–1194.
- Reis, A., Wingard, D., Morgan, C., Farrell, E., Letter, S., & Resnick, V. (2009). Retention of junior faculty in academic medicine at the University of California, San Diego. *Academic Medicine*, 84(1), 37–41.
- Roche, G. R. (1979, January-February). Much ado about mentors. *Harvard Business Review*, 14–27.
- Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: The art of hearing data* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Sandelowski, M. (1995). Focus on qualitative methods. *Qualitative Analysis: What it is and how to begin*. *Research in Nursing & Health*, 18, 371–375.
- Sandelowski, M. (2000). Focus on research methods. Whatever happened to qualitative description? *Research in Nursing & Health*, 23, 334–340.
- Sambunjak, D., Straus, S. E., & Marusic, A. (2006). Mentoring in academic medicine. *Journal of the American Medical Association*, 296(9), 1103–1115.
- Sands, R. G., Parson, A. L., & Duane, J. (1991, March). Faculty mentoring faculty in a public university. *The Journal of Higher Education*, 62(2), 174–193.
- Santucci, A. K., Lingler, J. H., Schmidt, K. L., Nolan, B. A., Thatcher, D., & Polk, D. E. (2008, November-December). Peer-mentored research development meetings: A model for successful peer mentoring among junior level researchers, *Academic Psychiatry*, 32(6), 493–497.
- Scandura, T. A. (1992). Mentorship and career mobility: An empirical investigation. *Journal of Organizational Behavior*, 13, 169–174.
- Schein, E. H. (1987). Defining organizational culture. In J. M. Shafritz & J. S. Ott (Eds.), *Classics of organizational theory* (2nd ed.), 381–396. Chicago, IL: The Dorsey Press.

- Schein, E. H. (2004). *Organizational culture and leadership* (3rd ed.). San Francisco: Jossey-Bass.
- Seibert, S. (1999). The effectiveness of facilitated mentoring: A longitudinal quasi-experiment. *Journal of Vocational Behavior*, 54, 483–502.
- Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (2<sup>nd</sup> ed.). New York, NY: Teachers College Press.
- Shea, J. A., Stern, D. T., Klotman, P. E., Clayton, C. P., O'Hara, J. L., Feldman, M. D., Griendling, K. K., Moss, M., Straus, S. E., & Jagsi, R. (2011). Career development of physician scientists: A survey of leaders in academic medicine. *The American Journal of Medicine*, 124(8), 779–787.
- Speziale, H. J. S., & Carpenter, D. R. (2007). *Qualitative research in nursing: Advancing the humanistic imperative* (4<sup>th</sup> ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation*, 7(17). Retrieved August 16, 2010 from <http://PAREonline.net/getvn.asp?v=7&n=17>.
- Straus, S. E., Chatur, F., & Taylor, M. (2009, January). Issues in the mentor-mentee relationship in academic medicine: A qualitative study. *Academic Medicine*, 84(1), 13–139.
- Straus, S. E., Johnson, M. O., Marquez, C., & Feldman, M. D. (2013, January). Characteristics of successful and failed mentoring relationships: A qualitative study across two academic health centers. *Academic Medicine*, 88(1), 1–8.
- Thorndyke, L. E., Gusic, M., & Milner, R. J. (2008). Functional mentoring: A practical approach with multilevel outcomes. *Journal of Continuing Education in the Health Professions*, 28(3), 15–164.
- Tillman, L. C. (2001). Mentoring African American faculty in predominantly white institutions. *Research in Higher Education*, 42(3), 295–325.
- Turban, D. B., & Dougherty, T. W. (1994, June). Role of protégé personality in receipt of mentoring and career success. *The Academy of Management Journal*, 37(3), 688–702.
- Westring, A. F., Speck, R. M., Sammel, M. D., Scott, P., Tuton, L. W., Grisso, J. A., & Abbuhl, S. (2012). A culture conducive to women's academic success: Development of a measure. *Academic Medicine*, 87(11), 1–10.
- Whitely, W., Dougherty, T. W., & Dreher, G. F. (1992). Correlates of career-oriented mentoring for early career managers and professionals. *Journal of Organizational Behavior*, 13, 141–154.

- Wilson, P. P., Valentine, D., & Pereira, A. (2002, Spring/Summer). Perceptions of new social work faculty about mentoring experiences. *Journal of social work education*, 38(2), 317–333.
- Wingard, D., Garman, K., & Reznik, V. (2004). Facilitating faculty success: Outcomes and cost benefit of the UCSD National Center of Leadership in Academic Medicine, *Academic Medicine*, 79(10), 9–11.
- Wunsch, M. A. (Ed.). (1994, Spring). Mentoring revisited: Making an impact on individuals and institutions. *New Directions for Teaching and Learning*, 57, San Francisco: Jossey-Bass.
- Yin, R. K. (2003). *Case study research: Design and methods* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Zellers, D. F., Howard, V. M., & Barcic, M. A. (2005). *New professional development paradigms in practice: A benchmarking study on faculty mentoring programs in higher education*. Unpublished manuscript, University of Pittsburgh.
- Zellers, D. F., Howard, V. M., & Barcic, M. A. (2008). Faculty mentoring programs; Reenvisioning rather than reinventing the wheel. *Review of Educational Research*, 78(3), 552–588.