2002

Interorganizational relationships in higher education: A case study

Paul Edward Roche

College of William & Mary - School of Education

Follow this and additional works at: https://scholarworks.wm.edu/etd

Part of the Higher Education Commons

Recommended Citation

https://dx.doi.org/doi:10.25774/w4-fak4-sq51

This Dissertation is brought to you for free and open access by the Theses, Dissertations, & Master Projects at W&M ScholarWorks. It has been accepted for inclusion in Dissertations, Theses, and Masters Projects by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.
This work is dedicated to my Family.
# CONTENTS

Acknowledgments ........................................................................................................ vii

List of Tables ............................................................................................................. viii

List of Figures ........................................................................................................... ix

Abstract ..................................................................................................................... x

Introduction .................................................................................................................... 2

- Importance of the Study ............................................................................................. 5
- Purpose of the Study .................................................................................................. 10
- Research Questions Guiding the Study ..................................................................... 11
- Format of the Study .................................................................................................. 12
- Definitions and Assumptions of the Study ............................................................... 13
  - Organizations ........................................................................................................ 13
  - Organizational autonomy .................................................................................... 14
  - Interorganizational relationships .................................................................... 16
  - Organizational interdependence .................................................................. 19

Review of the Literature ............................................................................................. 22

- Context: Environmental Uncertainty ...................................................................... 22
  - Constituents ......................................................................................................... 23
  - New entrants and substitutes .......................................................................... 25
  - Competitive rivalry .......................................................................................... 28
- Institutional Responses to Environmental Uncertainty ........................................... 31
- Motives: Relevant Theories of Interorganizational Relationships ......................... 35
  - Transaction cost theory .................................................................................... 36
  - Resource dependence theory .......................................................................... 41
  - Open systems theory ......................................................................................... 44
  - Contingency theory .......................................................................................... 45
  - Organizational ecology ...................................................................................... 48
- Integrating Motives of Interorganizational Formation ............................................ 51
- Relationship Characteristics .................................................................................... 54
  - Partner reputation ............................................................................................... 54
  - Partner trust ......................................................................................................... 56
  - Organizational similarity .................................................................................... 58
The Performance Outcome ................................................................................59
Competitive advantage .............................................................................. 60
Value .......................................................................................................... 61

Methods ...................................................................................................... 65

Introduction .................................................................................................. 65
Rationale for a Qualitative Study ................................................................. 65
Rationale for the Use of a Conceptual Framework in a Qualitative Study .... 66
Rationale for a Case Study Design ............................................................... 68
The case selection ....................................................................................... 69
Participants .................................................................................................. 71
Data Collection Procedures ........................................................................ 72
  Interviews .................................................................................................. 72
  Documents ................................................................................................ 75
How the Research Questions Were Answered ........................................... 76
Data Collection Process ............................................................................. 79
Data Analysis Procedures .......................................................................... 81
  Process of Analysis - Interviews .............................................................. 84
  Process of Analysis - Documents ............................................................. 85
Trustworthiness of the Study ...................................................................... 86
Limitations and Delimitations of the Study .................................................. 92

Data Analysis .............................................................................................. 94

Introduction .................................................................................................. 94
The Midwest College Consortium - Current Status .................................... 96
The Midwest College Consortium - Historical Perspective ...................... 98
Environmental Uncertainty ........................................................................ 100
  Enrollments ............................................................................................. 102
  Competitive rivalry .................................................................................. 103
  Constituents ............................................................................................. 109
  New entrants and substitutes .................................................................. 114
  Summary of environmental uncertainty ................................................. 117
Motives .......................................................................................................... 119
  Transaction cost theory ........................................................................... 120
  Organizational ecology ............................................................................ 128
Organizational Interdependence ................................................................. 133
Relationship Characteristics ....................................................................... 134
  Partner Reputation .................................................................................... 134
  Partner trust ............................................................................................. 137
  Organizational similarity ......................................................................... 140
Organizational Autonomy ............................................................................ 145
Performance Outcome .................................................................................. 148
Summary of Findings and Conclusions ....................................................... 151

Summaries and Conclusions ....................................................................... 156
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>156</td>
</tr>
<tr>
<td>Rationale for the Study</td>
<td>156</td>
</tr>
<tr>
<td>Summary of Principal Findings and Integration with Theory</td>
<td>157</td>
</tr>
<tr>
<td>The Conceptual Model</td>
<td>170</td>
</tr>
<tr>
<td>Suggestions for further Study</td>
<td>171</td>
</tr>
<tr>
<td>Policy Implications for Colleges</td>
<td>174</td>
</tr>
</tbody>
</table>

**Appendices** ............................................................................................................................... 176

| Appendix A: Case Study Protocol                        | 176  |
| Appendix B.1: Letter of Introduction                   | 185  |
| Appendix B.2: Letter of Introduction - Attachment       | 187  |
| Appendix C: Midwest College Consortium Comparisons     | 190  |
| Appendix D: Interview List* for Data Analysis Section  | 193  |
| Appendix E: Midwest College Consortium Documents        | 194  |
| Appendix F: Data Coding Scheme                         | 196  |

**References** ............................................................................................................................... 198

**Vita** ............................................................................................................................................... 225
Acknowledgments

This work is dedicated to my Mother, who has given me much to be thankful for, including constant encouragement, the ability to believe in myself, and a lifetime of loving support.

Special thanks to my sister Julie for her diligent support, unlimited patience, technical expertise, and disregard for the budget.

Thanks to my colleagues Anthony Foster and Beth Stokes for their friendship, advice, and help.

Finally, grateful thanks to my dissertation committee, Dr. Roger Baldwin, Dr. Jill Burruss, Dr. Lawrence Dotolo, and Dr. David Leslie. They are great teachers.

I would like to give special recognition and thanks to Dr. David Leslie, my dissertation committee chairperson. Dr. Leslie was the inspirational force behind this work. His advice and counsel made all the difference in my ability to complete this work successfully.
List of Tables

Table 2-1. Relevant Theories of Interorganizational Relationships .............. 51
Table 3-1. Source of Interview Questions .................................................... 74
Table 3-2. Data Sources .............................................................................. 77
List of Figures

Figure 1-1. Organizational Continuum ...............................................................18
Figure 1-2. The IOR Continuum.................................................................19
Figure 1-3. Theoretical Assumptions of this Study ..........................................21
Figure 2-1. Motives for IOR Formation .........................................................53
Figure 2-2. The Relationship Between Partner and Relationship Characteristics and Performance Outcome .........................................................62
Figure 2-3. Conceptual Model Guiding the Study ...........................................64
Figure 5-1. IOR Conceptual Model Revised .................................................171
INTERORGANIZATIONAL RELATIONSHIPS
IN HIGHER EDUCATION: A CASE STUDY

Abstract

American higher education is moving into a new phase in which environmental challenges are likely to intensify, threatening the survival of some institutions. Small private colleges, especially those that are reliant on enrollments and the tuition revenue that enrollments generate, are especially vulnerable to environmental challenges. This puts them at a competitive disadvantage with stronger private institutions and state-supported institutions. The formation of interorganizational relationships (IORs) is one coping strategy that may be an important factor for survival.

The purpose of this study is to examine interorganizational relationships in higher education using a comprehensive, theory-based model. The model examines both the partner characteristics and relationship characteristics of IORs. Partner characteristics describe the motivations institutions have for engaging in IOR behavior. It is the resource-based aspect of the model. Relationship characteristics describe the social aspects that help enable and maintain the IOR over time. The performance outcome is essentially the result of the IOR. It is a function of the level of perceived satisfaction among members in the IOR, and the measure of success by which members judge the

x
relationship. Both partner characteristics and relationship characteristics contribute to success.

This was an instrumental case study examining a consortium of six small, private liberal arts colleges. Findings show that partner and relationship characteristics both contribute to the success of the IOR in this case; however, the desire for institutional autonomy is also an important factor in the perceived success of the IOR.

PAUL EDWARD ROCHE
SCHOOL OF EDUCATION
THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA
INTERORGANIZATIONAL RELATIONSHIPS
IN HIGHER EDUCATION: A CASE STUDY
Introduction

During the decade of the 1990s, the economy of the United States showed unprecedented strength: low inflation, low unemployment, booming financial markets, and strong corporate profits (Gilpin, 1998). Despite this favorable economic climate, American corporations were restructuring at a rate usually seen only during times of economic downturn and retrenchment. The greatest change in corporate structure, according to management guru Peter Drucker (1995), was in the growth of corporate partnerships. Corporate businesses, both large and small, were forming alliances, partnerships, and joint ventures at unprecedented rates.

These relationships, more formally called Interorganizational Relationships (IORs) in the theoretical literature, result from the competitive pressures associated with the globalization of national economies. Corporate businesses are in a world-wide race to introduce new products and services, expand markets, open new markets, and improve quality and service (Gomes-Casseres, 1996). Interorganizational relationships between what are essentially autonomous organizations allow member organizations to quickly establish, develop, and terminate partnerships as needed to meet the demands of the marketplace. Interorganizational relationships provide a degree of organizational flexibility and adaptability to market conditions which help organizations compete more effectively in the global marketplace (Berquist, Betwee, & Meuel, 1995;
Drucker, 1992). This is especially true for smaller corporate businesses, which may not have the capability of competing against large, multinational corporations (Gomes-Casseres, 1996).

American higher education also benefited from the United States' favorable economic climate. A bullish stock market pushed the average return on endowments over 20% for fiscal year 1997, the sixth time in the nineties that college and university endowments earned double-digit returns (Strosnider, 1998a).

Despite this favorable economic climate, not all institutions were able to capitalize on the strength of the U.S. economy. A report released in 1998 by Moody's Investor Services, a credit-rating company, and reported in the Chronicle of Higher Education (Strosnider, 1998b), stated that the bull market widened the gap between rich and poor institutions. Financially strong institutions were able to capitalize on the strong economy through aggressive investment strategies, while financially weak institutions, with small endowments and heavy debt burdens were not. As a result, many of these weaker institutions had their debt-ratings downgraded, putting them in a precarious financial position. The authors of the report predict possible increases in retrenchments, mergers, and acquisitions as a result. This fact, coupled with other trends affecting these institutions, could threaten their survival.

This study proposes that American higher education is moving into a new phase in which competition is likely to intensify due to environmental challenges...
posed by the demands of constituents, threats posed by new entrants into the higher education marketplace, substitute forms for traditional higher education, and the increasing intensity of competitive rivalry among institutions. These environmental factors may cause a restructuring of American higher education in the coming decades as new patterns of competition increase environmental uncertainty and threaten some institutions' survival (Lenzner & Johnson, 1997; Duderstadt, 1997; Penrod & Dolence, 1992). Small, less competitive institutions, which are unable or unwilling to adapt to environmental challenges may be forced to close (Canon, 1991; Davies, 1997; Duderstadt, 1997; KPMG, 1997).

Small private colleges are especially vulnerable to intense competitive rivalry and face a number of unique challenges that puts them at a disadvantage with more selective private institutions and state-supported institutions (Cobb & Nelson, 1997; Kerr, 1990).

However, some authors are more optimistic and predict that the willingness and capacity of higher education institutions to develop interorganizational relationships may be an important factor for their future survival and success (Bridges, 1996). The formation of interorganizational relationships among colleges and universities is nothing new. Consortial arrangements, joint programming, and resource sharing have been described in the higher education literature as coping strategies during times of expansion and contraction (Pritzen, 1988). In the future, however, collective competition will be used increasingly by small private colleges as a strategy to pool
capabilities and resources in order to establish competitive advantages over rivals, thereby assuring institutional survival in the higher education marketplace (Breuder, 1996).

**Importance of the Study**

This study is important for several reasons. First, small private colleges are an important sector of American higher education and should be preserved. They provide an added degree of diversity, especially for groups who have traditionally been under represented in larger, private institutions or state-supported systems (Zusman, 1994). They are more willing and able to break from tradition and experiment with educational innovation (Whalen, 1992). They reduce state taxpayers' burden because their students are not as heavily subsidized (Simpson, 1991).

Second, a gap exists in the higher education literature on interorganizational relationships. Extensive research of ERIC CD-ROM databases was conducted using 24 combinations of approximately 20 keyword search terms. The search terms were taken from the *Thesaurus of ERIC Descriptors* (Barnett & Colby, 1995), the controlled vocabulary of terms used to abstract and index each document in the ERIC database. Only a few of the documents which were reviewed were categorized by ERIC lexicographers as research-oriented journal articles, containing original research in the area of interorganizational relationships. None of these articles presented a comprehensive model such as the one presented in this study or specifically...
targeted small private colleges. The majority of these articles were categorized as descriptive, evaluative, or opinion papers, and contained little or no theory-based discussion of interorganizational relationships.

Some descriptive articles containing insights into IORs in higher education, which are either directly or tangentially related to the focus of this study, are briefly referenced here. The descriptions of programs and cooperative activities referenced in these articles parallel this study's findings, as reported in the data analysis chapter presented later.

According to Dorger (1999), effective cooperation among higher education institutions includes sharing resources, joint purchasing programs, and service provision to other institutions. According to Strosnider (1998e), private colleges across the country are collaborating increasingly to cut costs and increase efficiencies. These efforts include shared library resources, joint classes, cross-registration, joint purchasing, and cooperative student events. According to Nicklin (1994), although colleges and universities are cooperating increasingly to save money, obstacles to greater cooperation include the fear of losing institutional identity. According to Neal (1987), consortia are invaluable vehicles for achieving collective action in a variety of areas important to colleges and universities. Young (1984), said that successful higher education partnerships have common elements, including strong commitment from the administrations and administrative support structures to facilitate communication and cooperation among institutions.
Several empirically based research articles, which are either directly or tangentially relevant to this study and its findings, are briefly referenced here. These findings parallel the findings of this study, as reported in the data analysis chapter presented later. In a mixed study design, Bogo and Globerman (1999), tested a framework for analyzing IORs between schools of social work and field agencies to determine important factors in these collaborative relationships. The findings suggest that four components – commitment, organizational resources, interpersonal relationships, and collaborative activities – captured the nature of these relationships. In a case study of inter-institutional cooperation among college and university libraries and municipal public libraries, Livingston and Rosen (1998) found that a long history of mutual trust and organizational interdependence combined to lead to a successful relationship. In a case study of a failed IOR between a community college and a local university, Cooper (1991) found that the balance between competition and cooperation was disrupted. Both the community college and university competed for many of the same students, while at the same time trying to cooperate by sharing resources. Thompson (1985), in another case study, found that successful college and university alliances and mergers are often conditioned by previous cooperative ventures, compatible programs, academic excellence, and common interests and goals.

An extensive search of the electronic database, “Dissertation Abstracts On-line” (1999), was conducted using 34 combinations of approximately 20
relevant keyword search terms. Most of the dissertations on IOR research are from the field of business administration and management. Only a few of the higher education dissertations reviewed were relevant to the study of interorganizational relationships. None of these studies presented a comprehensive model such as the one proposed in this study or specifically targeted small private colleges. The dissertations referenced below have findings that are either directly or tangentially relevant to the study of IORs in higher education. They parallel the findings of this study, which are presented in the data analysis chapter.

Lin (1995) studied economically oriented partnerships among public comprehensive universities to identify various organizational structures and the factors that affect the partnerships over time. Relevant findings include: (1) Partnerships take many forms and have various objectives, and (2) the objectives remain fairly stable over time. Miller (1995) studied the transaction model of Resource Dependence Theory, which suggests that educational institutions form IORs to fulfill goals of survival and growth, and that institutions avoid partnerships which they perceive to limit their autonomy. The findings relevant to this study show that the effects of the transactional and collaborative dimensions of the partnership on autonomy are considerations in the formation of IORs. In a case study of three inter-university research partnerships, Hoeflich (1994) shows that organizational interdependence among partners is vital to successful collaboration. Partnerships in which members are dependent on one
another to fulfill goals are important factors in IOR formation. Phillips (1994) used case study methodology to study a collaboration of business schools to form a new accrediting agency. Findings support theory, which states that social, political, and economic pressures in the environment lead to the formation of IOR governance structures designed to cope with these environmental pressures. Varecka (1992) studied the formation of a consortium among three colleges. This case study examined a collaborative academic program sponsored by an academic department in each of the three colleges. Findings relevant to this study suggest that a decrease in enrollments and institutional funding threatened the survival of these departments and motivated the departments to form a joint program. Schmick (1986) used in-depth case study methodology to trace the development of a consortium to determine the factors which contributed to its long-term stability. Findings relevant to this study show that environmental conditions are important factors in IOR formation among institutions, and that institutional autonomy and conflict resolution contribute to long-term success. Finally, Offerman (1985) studied the termination of three higher education consortia originally designed to support adult and continuing education. In this case study, findings show that the consortia failed in part because of a lack of (1) focus and mission clarity, (2) commitment among the institutions themselves, and (3) compatibility among partners.

Third, this study is important because it adds to the literature on interorganizational relationships in higher education by researching, developing,
and testing a unique, integrative model, which will link the theoretical with the empirical through data collection and analysis.

**Purpose of the Study**

According to Saxton (1997), previous research on IORs has progressed in two directions. Some studies have focused on partner characteristics, which describe the environmental context and motives organizations have for engaging in interorganizational relationships. Other studies have focused on relationship characteristics, which describe the social aspects of interorganizational relationships. Partner characteristics describe why organizations engage in interorganizational relationships. Relationship characteristics describe how the relationships are maintained. In a longitudinal study of corporate business alliances, Saxton used an integrative approach to demonstrate that both partner and relationship characteristics contribute to overall alliance success.

This study builds on Saxton's study by developing a comprehensive theory-based model of interorganizational relationships for higher education institutions using the relevant literature from the disciplines of Economics and Sociology and the field of Administrative Science. The purpose of this study is to advance the current knowledge of the subject by examining interorganizational relationships in higher education using the conceptual model, while also evaluating the model's relevance to higher education by examining (1) the context of the decision and the motives institutions have for engaging in interorganizational relationships, (2) the social aspects that maintain the
interorganizational relationships, and (3) the overall level of perceived success or desired outcome with interorganizational relationships.

This study utilizes case study methodology. The focus of the study is a consortium of six small, private, religiously affiliated, liberal arts colleges. To ensure the anonymity of the respondents and their institutions, pseudonyms were used to mask the names of the colleges, their locations, as well as the name of the consortium. Specifically, this study attempts to examine interorganizational relationships in higher education by answering the following questions. First, why do these small private colleges engage in this IOR? Second, how do these small private colleges maintain the relationship over time? Third, what is the measure of success in this IOR, and what is the level of satisfaction with the IOR?

The proposed model may serve a dual purpose as (1) a diagnostic tool to determine problems in an existing relationships or (2) a road map to help institutions identify potential problem areas before engaging in interorganizational relationships. Furthermore, this study relies on organizational theory as a basis for analysis. It is hoped that the study will further contribute to the understanding of organizations in higher education.

**Research Questions Guiding the Study**

The following questions will be used to guide the research of this study:

- How do member institutions view the current higher education environment?
• What motivates member institutions to engage in interorganizational relationships?
• What is the degree of interdependence that exists among member institutions?
• How do member institutions view their partners in the interorganizational relationship?
• How do member institutions define or measure the success of the interorganizational relationship?
• What is the member institutions' overall level of satisfaction with the interorganizational relationship?

Format of the Study

First, the definitions and assumptions of the study are presented to help the reader understand the direction and concepts of the study. Second, the environmental context, which frames the study, is presented. Third, relevant theories of organization are presented to explain institutional motives for engaging in interorganizational relationships. Fourth, the relationship characteristics that enable and maintain the relationships are discussed. Fifth, the concept of performance outcome is defined. The performance outcome is essentially the result of the IOR. It is the measure of member institutions' perceived level of overall satisfaction with the relationships. Sixth, a comprehensive model is presented which links all of the concepts and research
propositions.

Definitions and Assumptions of the Study

Organizations.

According to Katz and Gartner (1988), organizations are defined by four distinct characteristics: The first is intentionality, the specific purposes or mission of the organization; the second is transactions, the attainment of resources needed to maintain the organization; the third is processes, the conversion of resources to achieve organizational purposes; the fourth is boundaries, the clearly defined barriers that distinguish organizational members from the environment. What differentiates more modern theoretical definitions of organizations from earlier definitions is the concept of intentionality.

During the early days in the evolution of organizational theory, organizations were characterized as monolithic, bureaucratic, highly structured, and goal-oriented. Goals were quantifiable targets such as return on investment and market share. Although these are still valid and important concepts, modern theorists down-play organizational goals because they are fluid, and may change based on an organization's interaction with its environment (Aldrich, 1979; Gottfredson & White, 1981; Hodgson, 1994; Pfeffer & Salancik, 1978).

Though still characterizing organizations by transactions, processes, and boundaries, modern theorists argue that organizations should be defined as self-perpetuating social groups whose primary intention is organizational survival.
Therefore, the first theoretical assumption of this study is that organizational survival is an organization's ultimate goal.

Pfeffer's (1997) definition of organizations as social groups implies collective action: individuals attempting to accomplish together what cannot be accomplished individually (Aldrich, 1979). One of the criticisms of organizational theory has been its supporters' tendency to emphasize collective action to the point where they "anthropomorphize the organization" (White, Levine, & Vlasak, 1975, p. 186). However, Gray (1996) notes that people relate to each other as people, not as organizations. Therefore, the importance of understanding organizations in terms of norms, values, customs, and cultures must be recognized. This has implications for understanding organizations as individual units worthy of analysis because what an organization does is a function of its members' collective values, norms, and customs (Pfeffer, 1997). From this perspective, individuals are actors embedded in a social system, which shapes their collective behavior and actions, allowing for analysis at the organizational level (Hodgson, 1994; North, 1991). The second theoretical assumption of this study, therefore, is that organizations can be studied as separate actors, who have purposes, missions, motivations, and actions.

**Organizational autonomy.**

Organizational autonomy is defined as the ability of an organization's decision-makers to pursue the courses of action, allocate internal resources, and operate in specific environments that they deem appropriate without regard to
the demands and controls of others (Levine & White, 1961). Institutional autonomy has been recognized in the literature as particularly important to higher education (Patterson, 1994). No organization, however, is completely autonomous: They are subject to laws and regulations of controlling agencies and the demands, values, and norms of constituents. The nature of interorganizational relationships (IORs), however, almost guarantees that organizations entering into a relationship with other organizations will lose some degree of autonomy (Martin & Samels, 1994). The more structured the IOR, the less autonomy each organization has in the relationship. In fact, much of the literature on IOR formation suggests that organizations attempt to avoid IORs to preserve autonomy (Aldrich, 1979; Galaskiewicz, 1985; Oliver, 1990; Pfeffer & Salancik, 1978; Williamson, 1985).

The need for resources to maintain organizational survival motivates organizations to compromise autonomy by forming IORs (Pfeffer & Salancik, 1978). Because IORs are perceived as a threat to organizational autonomy, organizations seek to structure IORs in such a way as to preserve as much organizational autonomy as possible (Knoke, 1983; Oliver, 1991).

The third theoretical assumption of this study, therefore, is that while organizations will engage in IORs to obtain resources needed for organizational survival, they will also attempt to maintain as much organizational autonomy as possible. To accomplish this, organizations attempt to structure IORs to maximize their resource gain and minimize their loss of autonomy.
**Interorganizational relationships.**

IORs range on a continuum between the mutual adjustments of legally independent, autonomous organizations in a competitive market to the formal, unified control of hierarchical organizations such as corporations. A variety of IORs fall between these two extremes (Whetten, 1981).

Markets are distinguished from hierarchies and IORs by the mechanism that governs exchanges. In economic theory, perfect markets consist of autonomous organizations interacting through spontaneous mutual adjustments. Resource exchange is the principal interaction and price governs the exchange (Alexander, 1995). An example is a market consisting of self-interested customers and suppliers. Customers will seek suppliers who have the resources they need at the lowest possible price. The customers and suppliers adjust their buying and selling behavior based on resource availability and market price (i.e., supply and demand).

In the hierarchy, the exchange is merged into a single autonomous organization. An example is a customer who purchases his or her source of supply. In this example two or more organizations legally become one. The mutual adjustments of the market exchange, based on price, are replaced by command and control, based on authority, in the hierarchical organization.

IORs are “intermediary organizations”, which are “forms of collective action to address the common interests or needs of a specific client group” (El-Khawas, 1997, p. 67). IORs are attempts to coordinate the actions of what are
essentially autonomous, legally independent organizations. IORs are a mix of market and hierarchy. They are separate organizations, acting in self-interest, seeking something from other organizations. They also resemble hierarchies because they coordinate actions and decisions with other organizations to obtain and process resources (Gomes-Casseras, 1996). The mechanism that governs the exchange is a mediated form of trust, ranging from a handshake to more formal agreements, such as contracts. Figure 1-1 (on the following page) is a summary presentation of the organizational continuum with the relative degree of autonomy versus control for each organizational form.

IORs exist on a continuum based on the degree of intensity and risk associated with the relationship (Contractor & Lorange, 1988). The relationship intensifies as the level of interaction and risk associated with failure of the IOR increases (Saxton, 1995). Trade associations are IORs with low intensity and low risk. The intensity is low because members may join only to acquire market information in exchange for annual dues. Members may have little interaction with other members beyond occasional meetings. The risk is low because dissolution of the association would probably have little effect on the individual members.
Joint ventures are IORs with relatively high intensity and high risk. An IOR formed to jointly plan and build a facility is an example of a joint venture with high intensity and high risk. The intensity may be relatively high because of the complexity of planning and implementing the venture. The risk may be relatively high because of the financial investment in the venture. Figure 1-2 (on the following page) is a summary presentation of the IOR continuum adapted from Oliver's (1991) scale of IOR intensity and Samels' (1994a) typology of higher education models. The figure depicts the degree of intensity and risk associated with each IOR form.
The fourth theoretical assumption of this study is that IORs range on a continuum between (1) the degree of autonomy and control and (2) the degree of intensity and risk.

**Organizational interdependence.**

The theory-based concept of interdependence is essential to understanding why organizations engage in IORs. Organizational interdependence is the degree of similarity and compatibility that exists in the resource needs between two organizations in a relationship. Interdependence exists whenever an organization does not entirely control all of the resources it needs to achieve some outcome (Pfeffer & Salancik, 1978). For example, a seller and a buyer are interdependent because one’s output is the other’s input. Two sellers are interdependent if they are competing for the same customer. The source of interdependence, as defined here, is that the organization’s
success or failure is dependent, in part, on the actions of others in the environment (Pennings, 1981).

In all sectors of society, few organizations act alone. The norm is interconnectedness because most organizational outcomes are beyond the scope of a single organization (Alexander, 1995). Almost every organization has constituents to which it must answer.

From the above examples, different types of interdependencies clearly exist, and different types of interdependencies result in different types of IOR structures. Because the focus of this study is the formation of IORs among higher education institutions, the concept of pooled interdependence is most appropriate to understanding IORs. Pooled interdependence is the result of some commonality among organizations in an environment (Alexander, 1995). Two types of pooled interdependence are recognized in the literature: symbiotic interdependence and commensal interdependence. Organizations with complimentary resources are symbiotically interdependent (Pfeffer & Salancik, 1978). A buyer and a seller are symbiotically interdependent because each has something the other wants (e.g., money for products or services). For example, organizations form joint ventures to pool complimentary resources to achieve together what they might not be able to achieve separately.

Organizations that need or compete for the same resources are commensally interdependent (Carney, 1987). Two sellers are commensally interdependent if they compete for the same buyers. Commensally
interdependent organizations form trade associations and lobbying groups to more effectively position themselves in the marketplace or exert control over needed resources (Alexander, 1995). Commensally interdependent organizations may compete in one area and cooperate in another.

The fifth theoretical assumption of this study is that organizations recognize some level of interdependence and act on that recognition by forming IORs (Berquist, Betwee, & Meuel, 1995). The motive for IOR formation is based on organizational theory described later.

Figure 1-3 (below) is a summary presentation of the theoretical assumptions of this study.

Figure 1-3. Theoretical Assumptions of this Study

- Survival is the organization's ultimate goal.
- Organizations can be studied as separate actors.
- Organizations seek to maintain autonomy.
- Forms of IORs range on a continuum.
- Organizations recognize and act on their interdependencies.
Review of the Literature

Context: Environmental Uncertainty

The formation of interorganizational relationships (IORs) is a response to environmental uncertainty (Aldrich, 1979; Galaskiewicz, 1985; Oliver, 1991; Pennings, 1981; Pfeffer & Salancik, 1978; Williamson, 1985). Environmental uncertainty has been defined as the degree to which the future state of an organization's operating environment cannot be predicted accurately (Pfeffer & Salancik, 1978). An organization's operating environment consists of customers, competitors, suppliers, and regulators, as well as its social, cultural, political, legal, and economic contexts. Organizations, groups, and individuals in the environment interact to affect the parties in an exchange (Van De Ven, Emmett, & Koenig, 1975) or their behavior (Aldrich, 1975).

Uncertainty increases as the environment becomes more complex and turbulent (Hatch, 1997). Complexity describes the number of environmental factors an organization must take into account when planning for organizational survival and growth. Complexity increases as the number of competitors, laws, regulations, customers, and suppliers increases. Turbulence describes the rate of change in the environment. Rapid changes in technology, resource availability, values, and tastes all increase turbulence. Environmental uncertainty becomes more intense as the environment becomes more complex and turbulent.
Adapting Porter’s (1980) structural analysis of for-profit industries to the higher education marketplace, environmental complexity and turbulence are predicted to lead to more uncertainty in higher education because of the increasing power of constituents, the threat posed by new entrants into the marketplace, the availability of substitute’s forms of higher education, and the competitive rivalry among institutions.

**Constituents.**

Constituents are defined here as those individuals and groups who have a vested interest in or influence on American higher education. These include students, parents, politicians, business leaders, and taxpayers. Their influence occurs primarily in the areas of consumerism and demographics. Consumerism refers to the demands of constituents for cost controls, increased services, quality, and affordability (Porter, 1980). Demographics refer to the changing nature of constituents in the higher education marketplace.

Constituents are more consumer oriented than ever (Adams, 1995; Vittala, 1998). Issues of affordability, quality, and productivity have increased the scrutiny of higher education among constituent groups (Penrod & Dolence, 1992). Reasons for this scrutiny include the fact that college costs more than doubled in the decades of the 1980s and 1990s, rising 10 times faster than the median family income (Babcock, 1997). Despite the strong economic growth of the 1990s, the bottom 60% of the American public experienced little or no growth in real income (KPMG, 1997).
Different constituent groups in the higher education marketplace tend to have a slightly different consumer orientation. All are concerned with quality. Families tend to want value; business leaders and politicians tend to want productivity. Most families understand the economic benefits of a college education (Hartle, 1996) and are generally satisfied with the system of American higher education (Harvey, 1996). These families are concerned, however, with issues of cost and access and are increasingly demanding more and better services and proof of educational benefits for their money (Harvey, 1996). Colleges and universities are predicted to come under increasing pressure to provide value for the tuition dollars families spend on higher education (Lenhardt, 1997; Sims & Sims, 1995).

Most leaders in business and politics understand the importance of a well-educated, highly-skilled workforce for economic growth, prosperity, and a civil society. These constituents are primarily concerned with issues of quality and productivity and fear the costs of higher education have risen faster than the quality of higher education's output (Penrod & Dolence, 1992). Colleges and universities will be increasingly accountable for cost controls and proof of academic quality (Berdahl & McConnell, 1994).

Demographics of the higher education marketplace are predicted to change substantially in the next decade and beyond (KPMG, 1997). Demographic trends affecting higher education include the increasing diversity of students, changing patterns in enrollments, and shifts in the geographic
Examples of these changing demographics affecting the higher education marketplace include the following: First, competition for a growing but changing pool of future students is predicted to intensify the complexity of recruiting and retaining students. This will occur as colleges and universities attempt to fill the specialized needs of an increasingly diverse student body reflecting an increasingly diverse nation (Zusman, 1994). Second, although overall enrollment is projected to increase over 14% in the coming decade ("Enrollments Slowly Start to Build", 1997), the enrollment pool is predicted to begin shifting from the traditional cohort of 18-year-olds. The total number of 18-year-olds has dropped since 1980 from 43% of the population to approximately 37% by 1997 (KPMG, 1997). These figures represent the proportion of the baby-boomer generation, which dominates the population. If trends continue, much of the growth in higher education will take place in adult and continuing education. Third, the northeast and midwest are projected to lose high school graduates in the coming decade due to regional population shifts (KPMG, 1997). A disproportionate number of small, private colleges reside in these regions and depend on this age segment to fill their classrooms (Breneman, 1994). A significant population shift could have a definite impact on recruiting strategies of these institutions.

*New entrants and substitutes.*

The threat of new entrants into the higher education marketplace and the
availability of substitute forms of higher education are primarily driven by the opportunity to generate profits, reduce costs, or both. Technology is the enabling force allowing new entrants and substitute forms to transform the higher education marketplace. According to Peterson and Dill (1997) the "greatest challenge" to traditional higher education in the next decade may be the use of interactive telecommunications technology (p. 13). In the future, education will be increasingly "time and location independent" and less reliant on large, costly physical plants (KPMG, 1997, p. 39). Technology will allow institutions to compete regionally, nationally, and internationally. Distance education programs are already “flourishing” (Floyd, 1998, p. A37) because of the demand for this type of educational alternative, and the potential for profits has resulted in the private sector establishing numerous for-profit educational alternatives (Sauser and Foster, 1991).

New entrants into the higher education marketplace are primarily driven by the opportunity to generate revenues and profits. For example, research on for-profit industries shows that businesses enter new markets to exploit unfulfilled consumer demand (Peters, 1992). In the higher education marketplace, demand for flexible, convenient education alternatives has been increasing. Some authors believe that colleges and universities are threatened by new entrants who can use technology to deliver the information traditionally generated and disseminated by them faster and cheaper, with greater flexibility and convenience for consumers (Klinger & Iwanowski, 1997).
The financial incentives are increasing. Proprietary, for-profit postsecondary education was a $3.5 billion industry in 1995. While this is still a small percentage of the over $200 billion higher education marketplace, Wall Street analysts predict that the rapid growth in this segment should continue at a rate of between 15% to 20% during the coming decade (Strosnider, 1998c). With the success of for-profit institutions like the University of Phoenix (Shea, 1998), other previously not-for-profit distance education institutions like the National Technological University are opening for-profit divisions to more widely market their educational courses (Strosnider, 1998d).

Although most for-profit postsecondary educational institutions concentrate on adult education, the fear, says Columbia Teachers College President Arthur Levine in a Chronicle of Higher Education article, is proprietary institutions will attempt to take over vulnerable non-profit colleges and universities (Strosnider, 1998c). New entrants will continue to increase competitive pressures on traditional higher education institutions (Davies, 1997).

Substitute forms of higher education are organizations that are enabled by technology and can reduce costs of education by providing cheap, flexible, convenient alternatives to traditional higher education for their employees (Ginsburg, 1997). Employer sponsored technical training and general education is estimated to be $70 billion per year (KPMG, 1997). Although no employer sponsored programs are fully accredited to grant degrees, over 200 American corporations including Apple, ATT, and Intel now offer on site academic courses
that count toward degrees ("Experts See Higher Education as a Growth Industry", 1996). Another 1,500 corporations offer college level courses on site (Ginsburg, 1997) with additional corporate course offerings expected to be granted accreditation (Johnson, 1996). As these employer sponsored programs grow, they threaten to shift control away from traditional higher education institutions and erode an important source of revenue for many colleges and universities.

**Competitive rivalry.**

Rivalry among traditional competitors in a marketplace occurs as they attempt to improve their market position relative to each other (Porter, 1980). Rivalry is a form of mutual dependence because organizations act and react to the competitive moves of other organizations or to the rules and regulations of controlling agencies.

Competition -- for resources, students, and personnel -- is a hallmark of American higher education (Bok, 1986; Breneman, 1994; Bridges, 1996; Duderstadt, 1997; Kerr, 1990). Competition for students and resources has always been intense among private colleges and universities (Atwell, 1985). Small private colleges with "second tier" reputations have been especially vulnerable to competitive pressures because of their heavy reliance on tuition, fees, grants, and gifts to generate needed operating revenue (Martin, 1994, p. 97).

Competitive rivalry between the public and private sectors also has been
intense (Atwell, 1985). Because of their diverse institutional types, affordability, course offerings, and available resources, competition from public institutions has helped to erode the enrollment yields of many small private colleges (Dehne, 1991). Since enrollments in public institutions are expected to increase at a faster rate than private enrollments, and all but the most selective private institutions are expected to struggle to maintain enrollments (KPMG, 1997), small private colleges will continue to face increasing competitive pressures from public institutions for students, resources, and political support (Breneman, 1994).

A review of some recent articles indicates that the competitive rivalry between sectors may be increasing. Examples include various proposals that community colleges offer 4 year degrees (Healy, 1998a), eliminate tuition (Owen, 1998), and expand and strengthen articulation agreements with 4 year public institutions (Lenhardt, 1997). Other proposals include a shift in aid preferences to community colleges (Lederman, 1998), financial aid for distance learning students (Lederman, 1998; Haworth, 1998), and increases in the number of prepaid tuition plans in state higher education systems (Healy, 1997).

Small private colleges are most vulnerable to intense competitive rivalry and face a number of unique challenges (Cobb & Nelson, 1997; Kerr, 1990). They have few revenue sources, small endowments, and are heavily reliant on uncertain sources of revenue including gifts and grants (Breneman, 1994). Tuition at small private colleges may account for as much as 90% of annual
revenue (Perlman, 1990); therefore, these institutions are heavily reliant on enrollments and must compete hard to fill spaces (Breuder, 1996; Settel, 1990; Treadwell, 1994). Small size, high costs, and tuition dependence puts these institutions at a competitive disadvantage with more selective private institutions and state-supported institutions (Breneman, 1994).

To summarize, consumerism and demographic changes, threats posed by new entrants into the higher education marketplace, substitute forms for traditional higher education, and the increasing intensity of competitive rivalry among colleges and universities all lead to greater complexity and turbulence in the higher education marketplace. These environmental forces are predicted to cause a possible restructuring of American higher education in the coming decades (Penrod & Dolence, 1992; Lenzner & Johnson, 1997) as new patterns of competition increase environmental uncertainty and threaten some institutions’ survival (Peterson & Dill, 1997).

None of the authors cited above is predicting the collapse of the American system of higher education. American colleges and universities have a history of resiliency, and most institutions will be able to survive and adapt to greater complexity and uncertainty. A market will always exist for the traditional, residential college experience, and the most selective institutions will continue to thrive because of their resources, reputations and perceived value (Davies, 1997). However, institutions that are less selective, financially weak, of questionable quality, and unable or unwilling to respond to the environmental...
challenges may not be able to survive in the evolving higher education marketplace (Canon, 1991; Davies, 1997; Duderstadt, 1997; KPMG, 1997; Penrod & Dolence, 1992). In particular, small private colleges may be at a distinct competitive disadvantage.

**Institutional Responses to Environmental Uncertainty**

According to theory, organizations will seek to develop coping strategies to reduce or manage environmental uncertainty as means to assure organizational survival (Pfeffer & Salancik, 1978). Institutional responses to environmental uncertainty are the strategies, tactics, and techniques that colleges and universities use to maintain competitive advantage and, thereby, maintain organizational survival. College and universities have a history of adopting corporate business techniques to help them solve their institutional problems (Gumport & Pusser, 1997; Sherr & Lozier, 1991).

Institutional responses to environmental uncertainty include efforts to reduce costs, increase revenues, or both. The responses are of three types (1) management tactics to restructure internal processes, (2) marketing tactics to reposition the institution in the marketplace, and (3) the formation of interorganizational relationships.

Recent articles on higher education reform have outlined a number of ways colleges and universities attempt to restructure internal processes. Retrenchment efforts to reduce costs include program cuts (Lewington, 1997), service cuts (Martin & Samels, 1994), and mission realignments (Hotchkiss,
1995). Others describe efforts to increase operating efficiency through the use of management tactics to help organizations reform business processes. These include benchmarking programs to identify and incorporate best practices (Lewis & Smith, 1994), total quality management programs to increase quality and productivity (Seymour, 1994; Sims & Sims, 1995), and reengineering programs to reform and reorganize business processes (Penrod & Dolence, 1992; Glenn, 1997). Cost reductions and management tactics to increase efficiency and effectiveness have been used by colleges and universities to deal with environmental uncertainty; their use in education is widespread (El-Khawas, 1993; Horine, Hailey, & Ruback, 1993).

Although effective overall in the higher education marketplace, cost reductions and management tactics may not have the same financial impact at small private colleges because these institutions tend to be financially and academically lean, offering narrowly focused curricula, basic services, and small bureaucratic structures; therefore, significant savings are not always feasible (Breneman, 1994; Cobb & Nelson, 1997; Penrod & Dolence, 1992).

Repositioning institutions in the higher education marketplace is an attempt to increase the demand curve of an institution by using marketing tactics to adjust price and product. The goal is to attract more students (KPMG, 1997). The higher education literature includes numerous examples of efforts to use advertising and promotion to increase awareness among potential students (Dehne, 1991). Other examples include (1) attempts to increase the pool of
potential applicants by opening single-sex institutions to both sexes in response to declining enrollments ("Fisher College Decides," 1996; Nicklin, 1998), (2) changing the name of the institution as a way to alter perceptions (Grant, 1994), and (3) offering more services (Hartle, 1996), better facilities (Gose, 1998), or more flexible class schedules (Lenhardt, 1997).

Accelerated degree programs (Selingo, 1998; Lenhardt, 1997; "Accelerated Degree Programs," 1996) and pricing strategies such as free senior-year tuition ("Free Tuition Offered," 1997), smaller tuition increases (Reisberg, 1998), tuition discounting (Breneman, 1994), and new private prepaid tuition plans (Healy, 1998b), are attempts by small private colleges to increase enrollments by reducing the time and costs of attendance.

These marketing tactics may prove only marginally effective for less selective, middle- and lower-tier private colleges for several reasons. First, the more selective and prestigious private colleges have no difficulty recruiting large numbers of quality students to fill spaces. Their reputations for quality and value almost guarantee large numbers of applications. As a result, many of these institutions have lower recruiting costs per student than their less selective counterparts (Treadwell, 1994). For example, the cost of recruiting at small private colleges can range from $190 to $1600 per student ("Institutions Work Harder," 1997). As marketing costs associated with recruitment rise, many small private colleges with second-tier reputations can probably expect only minimal returns because they are forced to spend more time and resources to recruit
qualified students; therefore, they may prove only marginally effective at increasing student yields (Breneman, 1994).

Second, marketing efforts may be ineffective because many small private colleges have little room to drastically increase or decrease enrollments. These institutions have a fixed capacity and must try to maintain a tuition-revenue-enrollment balance (Breneman, 1994). For example, tuition discounting can lead to increased enrollments but may be only marginally effective if the institution has little or no excess capacity to enroll additional students (Breneman, 1996). Significantly increasing capacity may lead to extremely high capital outlays for facilities, which is a strategy many small private colleges may not be able to afford. Finally, decreasing enrollments to cut overhead can reduce an institution's break-even point but may also adversely affect the institution's economies of scale (i.e., buying power) and academic scope (i.e., course and program offerings) and, thereby, erode the institution's academic viability (Breuder, 1996).

Given the level of environmental uncertainty in the higher education marketplace, and the limited ability of some small private colleges to respond to environmental challenges in significant ways, authors of recent articles and books view interorganizational relationships as a possible strategy to assure small college survival. The willingness to form IORs will be an important condition for the success of higher education in the future (Bridges, 1996). IORs are increasingly viewed as an alternative for small, private middle- and lower-tier
colleges ("Financially Strapped Colleges," 1997). Authors predict that partnerships, alliances, joint programs, and collaborative relationships of all types will increase in frequency and regularity as means to assure educational viability, competitive advantage, and institutional survival (Breuder, 1996; Davies 1997; Duderstadt, 1997; KPMG, 1997).

From the literature on business alliances and education consortia, IORs have several characteristics that make them attractive alternatives to other forms of reorganization including their voluntary nature (Patterson, 1974), maintenance of legal and cultural identity (Kantor, 1989), institutional independence (Sacks, 1994), operational flexibility (Samels & Zekan, 1994), and the potential to achieve more collectively than any one institution could achieve independently (Neal, 1988).

Motives: Relevant Theories of Interorganizational Relationships

Motives are defined in this study as the reasons, based in theory that organizations engage in IORs. The fundamental question in the study of IORs is what causes or motivates organizations to engage in IOR behavior? To understand the subject, it is necessary to understand theories of collective behavior (Gray, 1996; Pfeffer, 1997). IOR research has taken place in a variety of fields and disciplines and distinct perspectives have emerged. The most important theories that explain the conditions and contingent factors that motivate IORs have been developed in the disciplines of Economics, Sociology, and the field of Administrative Science. These academic areas have produced
three major schools of organizational study and are the basis for much of the
literature on the study of IORs (Alexander, 1995; Granovetter, 1994). Economic
theories tend to focus on increasing operational efficiency. Social theories tend
to focus on managing relationships (Pfeffer, 1997). The literature from
Administrative Science tends to focus on environmental fit and adaption.
Existing theories are important to understand why organizations engage in IORs
and how those relationships are structured (Gomes-Casseres, 1996).

Four major theories relevant to the study of IORs are (1) Transaction Cost
Theory, (2) Resource Dependence Theory, (3) Contingency Theory, and (4)
Organizational Ecology. These theories attempt to describe IORs in terms of
context (i.e., the environmental conditions increasing the likelihood of IOR
formation), motives (i.e., the organization's reasons for engaging in IORs), and fit
(i.e., the degree and type of interdependency). Each theory explains IORs from
a different perspective. What all have in common is the use of environment to
explain motives for IOR formation.

Transaction cost theory.

Transaction Cost Theory (Williamson, 1975; 1985) is one explanation for
the emergence of IORs and has become an important paradigm in the literature
(TCT) attempts to explain why organizations create IORs and how the IORs are
structured based on the specific type of transaction required for organizational
survival (Gomes-Casseres, 1996). Transaction Cost theorists posit that
organizations engage in IORs to minimize transaction costs and increase operating efficiency (Perrow, 1990; Williamson, 1985). Three types of transaction costs are recognized in the literature: (1) the associated costs of writing, investigating, negotiating, selecting, monitoring, and enforcing contractual arrangements to assure compliance (Williamson, 1985); (2) the investment costs of personnel training, facilities, equipment and other investment costs of assets specific to a transaction (Alexander, 1995); and (3) the costs of cheating, opportunism, incompetence and other unanticipated problems associated with a transaction (Williamson, 1991).

Transaction costs are the result of environmental uncertainty caused by imperfect market conditions (Williamson, 1975). Operating efficiency is a ratio of resource inputs to outputs (Lembeke, 1994; Pfeffer & Salancik, 1978). Operating efficiency can be increased by reducing the costs of resources by establishing economies of scale (i.e., buying power) or by reducing the costs of processing resource inputs.

Transaction Cost Theory predicts how resource exchanges are structured. As uncertainty in resource exchanges increases, organizations shift from market-based solutions to hierarchical-based solutions or intermediate-based solutions (Williamson, 1981, 1994). If transaction costs of a resource exchange are greater than the cost of integrating the exchange into the organization, then internal coordination is more efficient (Williamson, 1985). For example, the organization may seek market-based solutions such as outsourcing if the
transactions costs are low; it may seek hierarchical-based solutions by integrating the resource exchange into the organization by providing the good or service in-house or acquiring the source of needed resources if the transaction costs are high.

Intermediate-based solutions (IORs) also are an attempt to minimize transaction costs; they are dependent upon the nature of the transaction, the level of resource interdependency among organizations, and the nature of the relationships. The loosely coupled nature of IORs allows independent organizations to obtain needed resources while maintaining institutional autonomy and organizational flexibility (Weick, 1976). IORs structure the interactions between or among independent organizations so that their fit is based on a certain level of resource interdependency — either complementary or commensal interdependency (Alexander, 1995). From research in the for-profit sector, TCT predicts that organizations with commensal interdependency will form trade associations if the costs associated with this IOR will be less than the economic benefits the trade association provides (Williamson, 1985). Joint ventures and joint programs are more likely to form among organizations when they possess complimentary resources and the economic benefits are greater than self-provision (Oliver, 1990).

According to Ferris (1991), IORs are most likely to form among colleges and universities to pool complimentary assets when (1) environmental resources are limited and (2) transaction costs incurred in market-based solutions (i.e.,
contracting) or hierarchical-based solutions (i.e., self-provision) are very high. For example, College A may wish to provide its students with psychological counseling services but finds the transaction costs associated with investigating, hiring, and monitoring a counseling staff too costly given its available resources. College A may approach College B if College B has an underutilized counseling staff (i.e., excess capacity). By paying to use B's counselors, College A minimizes its transaction costs but does not eliminate them. Some monitoring costs will still be incurred as College A assures that its students are getting good service. If the costs associated with monitoring the transaction exceeds the benefits of the IOR, then the incentive for forming the IOR would be eliminated (Jones, 1983).

Almost any type of cooperative arrangement -- joint programming, facilities sharing, information sharing, faculty sharing, and buying consortia -- has a basis in TCT (Hill, 1990; Pennings, 1981). IORs enable colleges and universities to "perform particular functions and provide particular services" by creating structures that establish scale economies and cost reductions (Ferris, 1991, p. 20). From the TCT perspective, college and university buying consortia are means to establish economies of scale and reduce the costs of providing goods and services (Baus, 1988). The thirty-five private colleges in Ohio that recently formed a buying consortium is an example of institutions attempting to increase their relative buying power and reduce costs (Strosnider, 1998e). Cross registration, facilities sharing, and joint program development of Five Colleges,
Inc., one of the oldest educational consortia in the nation (Cox, 1991), is an IOR structured to reduce transaction costs and improve operating efficiency by pooling complimentary resources.

As an economic theory of organization, TCT receives most criticism from advocates of social-based theories. Because the primary focus is on economic motives, TCT does not account for multiple motives for IORs; it ignores relationship characteristics that maintain IORs (Granovetter, 1985); it ignores power differentials that develop in IORs (Nohria & Gulati, 1994); it downplays the importance of loose coupling (Perrow, 1990). Even Williamson (1981) believes TCT may not be applicable to the non-profit sector because of the lack of merger activity needed to test empirical assumptions; however, TCT is still a powerful theoretical explanation for an economic motivation for IORs (Alexander, 1995; Nohria & Gulati, 1994).

To summarize: TCT states that IORs are attempts to minimize transaction costs and increase operating efficiency. The enabling factors in the relationship are the desire for autonomy, loose coupling, and resource interdependence. The individual organization in an IOR is internally focused on increasing operating efficiency. Motives for IOR formation that can be shown to have a basis in TCT include the following:

- Operating Efficiency
- Cost Reduction
- Scale Economies
Resource dependence theory.

Resource Dependence Theory (Pfeffer & Salancik, 1978) is another explanation for the motives and resulting structures of IORs (Van Vught, 1997) and has received much attention in the literature on organizations (Galaskiewicz, 1985). Whereas the Transaction Cost Theory of Williamson (1975,1985) attempts to explain IORs in terms of economic motives, Resource Dependence Theory (RDT) focuses on the relationship characteristics and structures that emerge to manage power dependencies among organizations.

According to Pfeffer and Salancik (1978), all organizations need to exchange resources for survival and growth. This leads to dependence on other organizations. Environmental uncertainty due to competition for resources increases the level of dependence and can result in power differentials among organizations (Aldrich, 1979). Organizations attempt to reduce environmental uncertainty and manage dependencies through IOR strategies. In RDT, the effective organization is able to establish relationships to obtain needed resources for organizational survival and growth while maintaining institutional autonomy (Aldrich, 1979; Burt, 1992; Pfeffer & Nowack 1976; Stearns, 1990).

RDT treats power dependencies as the central concept in IOR formation (Aldrich & Whetten, 1981). From the RDT perspective, power is defined in relational terms: organizational power resides in another organization's dependency (Galaskiewicz, 1985); power is the result of dependency (Aldrich, 1979); power is defined in terms of dependence (Pfeffer, 1981). Because IORs
are critical to obtaining needed resources, three factors determine the relative power of one organization over another (i.e., dyadic relationships), one organization over a group of organizations (i.e., monopolistic relationships), or one group of organizations over another group of organizations (i.e., oligopolistic relationships). These factors are (1) the importance of the resource to organizational survival and growth, (2) availability of the resource in the environment, and (3) the availability of substitutes. Power, as defined here, is the ability to possess and allocate resources or the ability to regulate resource procurement and use (Pfeffer & Salancik, 1978). Resource Dependence theorists posit that organizations seek to avoid power dependencies (Pfeffer, 1981) and exert power over other organizations (Aldrich, 1979).

Organizations attempt to manage their dependencies through adaptive strategies by modifying existing organizational boundaries through IOR formation (Nohria & Gulati, 1994). Reviews of research show that increased dependency on external resources leads to more formal IOR structures, such as joint ventures, joint programs, trade associations, and consortia (Oliver, 1990). Research on dominant versus weak firms in an industry shows that dominant firms with large pools of resources constantly win competitive battles because of size, market position, technology, and expertise. Dominant firms seek to preserve autonomy and tend to avoid IORs until market conditions place stress on available resources (Gomes-Casseres, 1996). RDT predicts that small, structurally equivalent organizations with commensal interdependency will form
IORs to equalize their competitive positions vis a vis more dominant organizations in the same industry (Galaskiewicz, 1985). From research on business alliances, RDT suggests that trade associations form to manage power dependencies vis a vis political and legal authorities (Pfeffer & Salancik, 1978). Consistent with RDT is the proposition that consortia may form among educational institutions to enhance their power over rivals (Bridges & Husbands, 1996). From the Resource Dependence perspective, private colleges in Virginia are motivated to membership in the Council of Independent Colleges in Virginia as means to exert influence over state agencies and balance power vis a vis state colleges and universities.

Research studies in the for-profit sector suggest that the formation of joint programs and joint ventures is motivated by the desire of small organizations with complimentary resources to enhance market power and competitive position (Kogut, 1988). From a Resource Dependence perspective, theorist would predict that small colleges with complimentary educational programs, expertise, and facilities will form consortia to compete more effectively against larger rivals for students, resources, and influence. Distance education consortia, for example, are forming with greater frequency each year among groups of small private colleges (Guardino & Rivinius, 1995). Advocates of RDT would consider this an attempt by these institutions to pool their resources in order to increase their market power.

RDT predicts that less dominant members in an IOR will develop
mechanisms to help them avoid power dependencies vis a vis more dominant members. Structures such as written agreements or other formal arrangements help member institutions manage power dependencies within an IOR (Pfeffer, 1997).

A strength of RDT is its ability to explain multiple motives for IORs. Because organizations are constrained by the political, legal, social, and material aspects of their environment, they attempt to overcome these constraints by forming IORs to influence opinion, obtain resources, and avoid dependencies (Pfeffer, 1997). Whereas Transaction Cost Theory focuses on economic motives of efficiency and managing uncertainty, RDT recognizes money, authority, services, information, reputation, knowledge, and skills as potentially important resources and sources of dependency (Aldrich, 1979).

To summarize: Organizations will seek to establish IORs that help them overcome power dependencies or establish power dependencies vis a vis rivals. The enabling factors are the desire for institutional autonomy and some degree of interdependence. The individual organization in an IOR is externally focused on managing relationships for self-benefit. Motives for IOR formation that can be shown to have a basis in RDT include the following:

- Manage Power Dependencies
- Influence/Advocacy

*Open systems theory.*

Open systems theorists posit that organizations must continuously interact...
with their environments for survival because the environment and the organization are in a mutual state of interdependence (Kast & Rosenzweig, 1973; Katz & Kahn, 1978). In Open Systems Theory, organizations' survival depends on homeostasis, internal stability and equilibrium with the environment. Two of the more important open systems theories that provide alternate explanations for IORs are Contingency Theory (Lawrence & Lorsch, 1967) and Organizational Ecology (Trist, 1983).

**Contingency theory.**

Contingency theorists posit that the fit between an organization and its environment must be adequate for survival. Contingency Theory (CT) focuses on a single organization's attempt to adapt to environmental demands and limitations. Environmental uncertainty is caused by unstable and unpredictable resource flows and increases the risks associated with business operations. Uncertainty is a primary motivation for organizations to develop coping strategies through adjustments to internal processes or through external relationships (Pfeffer, 1981).

The degree of environmental uncertainty in a marketplace is a predictor of how organizations in an industry will be structured (Lawrence & Lorsch, 1969). The internal structure of an effective organization is contingent on its environment. Formal, highly-structured bureaucratic organizations are more likely to be found in industries with stable and predictable environments (Lorsch, 1975). Based on studies of organizational change, as environmental uncertainty
increases, successful organizations tend to become more open, flexible, and decentralized in response (Lawrence & Lorsch, 1967). The successful organization is able to adapt quickly to changing environmental circumstances.

The formation of IORs is consistent with CT because the loosely coupled nature of IORs allows organizations to establish, manage, and eliminate multiple patterns of relationships as needed to meet environmental conditions while maintaining institutional autonomy (Alexander, 1995). Because CT takes into account material resources, as well as the political, legal, economic, and social aspects of the environment, multiple patterns of IORs form to deal with different kinds of environmental conditions (Lawrence & Lorsch, 1969).

According to research on business alliances and public service sector organizations, organizations with some degree of interdependency will form IORs to establish stable and predictable resource flows (Oliver, 1990) or reduce the risk associated with programs, ventures, and innovations designed to meet the needs, expectations, or mandates of constituents (Aldrich, 1979; Alexander, 1995; Lawrence & Lorsch, 1967). For example, organizations with complimentary resources may form joint programs to reduce the risks associated with new program start-ups designed to meet the needs or mandates of constituents (Kogut, 1988). Developing innovative educational programs for under-represented constituents (Fuller, 1988) or joint investments in new facilities (Perkins, 1993) are examples, from the CT perspective, of colleges and universities acting jointly to reduce the associated risks of action.
IORs that form among organizations with commensal interdependence are consistent with Contingency Theory. Trade associations are means to assure access to stable and predictable flows of information needed to respond to environmental conditions (Oliver, 1990).

Critics of Contingency Theory argue that the idea that organizations are able to adapt to meet environmental conditions attributes too much power and flexibility to organizations and too little power to environmental determinants of organizational success and failure (Morgan, 1986). They argue that the environment "selects" certain organizations to succeed based on their fit with environmental conditions, not on their ability to adapt to those conditions. Organizations have limited ability to adapt because of internal constraints, including history, culture, traditions, capitalization, and financial structure (Aldrich, 1979). However, according to Peterson & Dill (1997) higher education has long been recognized as adapting to the demands of society. Contingency Theory is a powerful alternate explanation for IOR motives and structures and is often cited in the literature on IOR formation.

To summarize: Contingency Theory assumes IORs form to help organizations manage environmental uncertainty and reduce the risks associated with operations by establishing stable and predictable flows of resources and information. The focus is on a single organization's attempt to adapt to environmental conditions for survival and growth. The factors enabling IOR formation are loose coupling, interdependence, and institutional autonomy.
Motives for IOR formation that can be shown to have a basis in Contingency Theory include the following:

- Manage Environmental Uncertainty
- Reduce Risk
- Ensure Stability/Predictability

Organizational ecology.

Organizational ecologists posit that organizations do not completely adapt to their environments, nor are they selected for success because of their fit with the environment. Organizations influence and, in turn, are influenced by their environments. In other words, organizations and their environment interact through mutual adjustment (Trist, 1983). Unlike Contingency Theory, which focuses on a single organization's attempt to adapt to the environment, Organizational Ecology focuses on how groups of organizations linked by some degree of interdependency interact with the environment.

Whereas Resource Dependence Theory focuses on an organization's attempt to manage power dependencies, Organizational Ecology (OE) focuses on cooperation and sharing among organizations for mutual benefit (Morgan, 1986). Organizational Ecology predicts that organizations in an industry, which are linked by a common purpose or are structurally similar, will form IORs as means to overcome environmental uncertainty while maintaining autonomy (Alexander, 1995). IORs form so that members can share information and resources, promote common interests, or seek solutions to common problems.
These relationships imply both competition and cooperation. IORs are a response to factors in the environment that create interdependency and cooperation among what are essentially competing organizations. Organizations with symbiotic interdependence form IORs to exchange needed resources. Organizations with symbiotic interdependence will form joint programs and joint ventures to share the risks associated with innovations. This type of IOR implies reciprocity, which is defined as the extent to which resources are exchanged for mutual benefit (Levine & White, 1961). Organizations with commensal interdependence draw from the same resource pool. This type of IOR implies cooperation and sharing for mutual benefit (Alexander, 1995). Organizations with commensal interdependence are predicted to form trade associations to share information for mutual benefit.

Consortial arrangements in some sectors of the higher education marketplace are examples of commensally interdependent organizations: They draw from the same resource pool of students, faculty and money, while cooperating and sharing for mutual benefit. Advocates of consortial arrangements among HBCUs contend that these relationships reduce member institutions' degree of vulnerability at the hands of external forces while also influencing those forces for mutual benefit using collective power (Hughes, 1992). They compete at one level for resources while cooperating and sharing at another level.
Other consortial arrangements are examples of symbiotic interdependence. The stated goal of many distance education consortia is to increase educational access for constituents (Epper, 1997). Institutions with complimentary resources cooperate and form reciprocal agreements not only to increase access, but also as means to increase enrollments for member institutions.

Organizational Ecology appears to be less empirically developed than the other theories of IOR formation; however, as an alternate theory of IOR formation its application to public service organizations is particularly important. Environments that are dominated by the need to meet social demands tend to reward organizations for conforming to values and norms (Hatch, 1997). Educational institutions and other public service organizations value cooperation and will seek partners in order to demonstrate norms of cooperation (Dimaggio & Powell, 1983) and the education literature has long recognized cooperation as an important norm (Wallace, 1996).

To summarize: Organizational Ecology states that organizations form cooperative IORs to share resources, information, and expertise. The focus is on a group of similar organizations linked by a common purpose and cooperating for mutual benefit. The enabling factors are the desire for institutional autonomy and some degree of interdependence. Motives for IOR formation that can be shown to have a basis in Organizational Ecology include the following:

- Cooperation
- Reciprocity
- Resource Sharing
- Risk Sharing

Table 2-1 (below) presents a summary of relevant theories explaining the formation of Interorganizational Relationships.

Table 2-1. Relevant Theories of Interorganizational Relationships

<table>
<thead>
<tr>
<th>Theory</th>
<th>Context</th>
<th>Unit of Analysis</th>
<th>Motives</th>
<th>Organizational Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction Cost</td>
<td>Environmental Uncertainty</td>
<td>Transactions</td>
<td>Minimize Transaction Costs</td>
<td>Internally Focused on Operating Efficiency</td>
</tr>
<tr>
<td>Resource Dependency</td>
<td>Environmental Uncertainty</td>
<td>Power Dependencies</td>
<td>Manage Dependencies</td>
<td>Externally Focused on Managing Relationships</td>
</tr>
<tr>
<td>Contingency Theory</td>
<td>Environmental Uncertainty</td>
<td>Adaption</td>
<td>Homeostasis</td>
<td>Internally Focused on Organizational Adaption</td>
</tr>
<tr>
<td>Organizational Ecology</td>
<td>Environmental Uncertainty</td>
<td>Mutual Adjustment</td>
<td>Homeostasis</td>
<td>Externally Focused on Mutual Benefits</td>
</tr>
</tbody>
</table>

**Integrating Motives of Interorganizational Formation**

Each of the four theoretical perspectives described above presents an alternate explanation for the formation of IORs. Several researchers have recommended viewing IORs from an integrative perspective. According to Whetten (1981), to understand the motives for IOR formation, one must understand the research perspective behind the theory. According to...
Galaskiewicz (1985), no single theory can best describe the IORs and “different theories are appropriate for explaining IORs in different arenas....These arenas intersect and overlap with one another” (p. 298). According to Oliver (1990), “rigorous adherence to the explanations of any single theoretical paradigm or contingency is likely to reveal only a part of the truth about why interorganizational linkages develop” (p. 260). According to Saxton (1997), an integrative approach to understanding the motives for IOR formation would provide greater “explanatory power” (p. 454).

Research on corporate alliances has shown that organizations engage in IORs for a combination of reasons (Harrigan, 1992; Kogut, 1988; Saxton, 1997) and that their motives may differ among partners in an IOR (Harrigan, 1992; Berquist, Betwee, & Meuel, 1995). A reasonable assumption is that colleges and universities also form IORs for multiple motives. From recent examples of IORs in the higher education literature, multiple motives are evident. The Alliance for Higher Education is a consortium of 27 colleges and universities, 21 corporations and two public libraries in North Texas. This IOR’s stated mission includes regional higher education advocacy (consistent with Resource Dependence Theory) and interinstitutional cooperation and resource sharing (consistent with Organizational Ecology).

Industrial Management Systems, a project led by Educom, is a national consortium of more than 600 colleges and universities dedicated to increasing access to educational materials through technology (Young, 1997). This IOR’s
stated mission can be viewed using several theory-based motives including cooperative sharing of information (consistent with Organizational Ecology) and the cost savings of accessing information (consistent with Transaction Cost Theory).

To Summarize: Motives for IOR formation are found in the theories of organization; however, no one theory can cover all motives because IORs form for multiple motives. The focus should be on economic benefits plus the other characteristics of IORs including managing the relationship, reducing uncertainty, and cooperating for mutual benefit. Figure 2-1 (below) summarizes the motives for forming interorganizational relationships.

Figure 2-1. Motives for IOR Formation

Transaction Cost Theory
- Operating Efficiency
- Cost Reduction
- Scale Economies

Resources Dependence Theory
- Manage Dependencies
- Influence
- Advocacy

Contingency Theory
- Manage Uncertainty
- Reduce Risk
- Stability
- Predictability

Organizational Ecology
- Cooperation
- Reciprocity
- Share Risks
- Share Resources

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Relationship Characteristics

Relationship characteristics are the social factors of the IOR which enable and maintain the relationship beyond the motivations of procuring resources. These factors include partner reputation, partner trustworthiness, and organizational similarity. These factors help assure a satisfactory and extended relationship (Saxton, 1997).

Partner reputation.

Partner Reputation is an important concept in the formation and maintenance of IORs. Reputation is an antecedent of IOR formation as well as a factor enabling the relationship to continue. Reputation is a theory-based concept recognized by both economic and social theories of organization. The assessment of a partner's abilities and the value that the partner brings to the relationship enhances that partner's reputation (Dollinger, Golden, & Saxton, 1997).

For purposes of this study, reputation is recognized as a multidimensional construct and reflects an organization's abilities in the areas of management, product quality, and financial position (Dollinger, Golden, & Saxton, 1997). A college's reputation would include partners' perceptions of the administration's experience and effectiveness, the quality of the faculty and students, and its financial soundness. Reputation can be viewed from two perspectives. Internal reputation refers to partners' perceptions about each member's relative
reputation. External reputation refers to partners' perceptions about how constituents view each partner's relative reputation.

Reputation has an economic value for partners in an IOR (Granovetter, 1994). Transaction Cost Theory recognizes the importance of partner reputation in resource exchanges. A reputation for fair dealing reduces partners' transaction costs of monitoring behavior in an IOR (Perrow, 1990). A good reputation reduces uncertainty associated with transactions and gives each partner an idea of how the others will behave in a relationship (Axelrod, 1984; Ring & Van De Ven, 1994). The value created by resource exchanges with a partner of questionable reputation is reduced by the need to establish costly safeguards such as monitoring mechanisms to assure compliance with agreements (Hill, 1990). Therefore, a good reputation not only assures other partners in the IOR that they will get needed resources; it also adds value to the relationship by reducing transaction costs.

Resource Dependence Theory recognizes that a good reputation is a source of potential market power. A good reputation implies the ability to perform effectively. Effective performance enhances market power relative to other organizations because organizations with good reputations are (1) more likely to be perceived as successful, (2) less likely to be challenged by controlling authorities or competitors, and (3) as a result, more likely to get the resources they need to survive (Pfeffer, 1992). From this perspective, a good reputation is both an intangible resource and a means to acquire more resources (Saxton,
Forming IORs with reputable partners can add value to the relationship by enhancing the other partners’ reputation (Galaskiewicz, 1985).

In a longitudinal study of business alliances Saxton (1997) found that a positive relationship exists between partner reputation and the perceived effectiveness of the alliance among partners.

Whether a relationship has a single episode or is infinite in duration, theory suggests that reputation is an important factor in alliance success....An underlying assumption in these arguments is that firms in an alliance believe a partner’s positive reputation enhances the potential for a satisfactory relationship with that firm (Saxton, 1997, p. 445).

**Partner trust.**

Reputation is an antecedent of trust. A potential partner’s good reputation is transformed into trust through long-term interactions (Eisenhardt, 1989). Trust has been defined as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer, Davis, & Schoorman, 1995, p. 712).

Trust, like reputation, is a multidimensional construct consisting of several interacting characteristics that enforce the perception of trustworthiness. These
characteristics include the following: (1) Intention: the partner will do what is required in the relationship; (2) Competency: the partner can do what is required in the relationship; and (3) Perspective: a satisfactory past experience with the partner (Berquist, Betwee, & Meuel, 1995). Satisfactory past experiences, competence, and good intentions all reinforce the perceived trustworthiness of a partner.

Both economic and social theories recognize the importance of partner trustworthiness in the formation of IORs. Transaction Cost Theory recognizes trust as a component of transactions. Economic actors will be trustworthy if that behavior is in their economic best interest (Granovetter, 1994). If the economic incentive for a partner to behave with trustworthiness is eliminated, the partner may become opportunistic. Partner trustworthiness reduces transaction costs for each partner in a relationship (Friedman, 1991).

According to social theories of the organization, economic exchanges between partners become embedded over time in a social structure of norms and practices which rewards and reinforces trustworthy behavior (Dimaggio, 1994; Granovetter, 1985; Perrow, 1990). This is a form of "social capital" that can improve the effectiveness of collective action among partners (Coleman, 1993, p. 15). Therefore, based on theory, both economic and social reasons exist for partners to be trustworthy.

In several studies, trust was identified by partners in business alliances as an important factor in the formation, maintenance, and perceived success of
In the absence of trust among partners, each partner will seek to reduce the risk of opportunism through controlling mechanisms such as contracts, laws, or other forms of coercion (Gambetta, 1988; Zucker, 1986).

**Organizational similarity.**

Organizational similarity is the degree of fit among organizations which helps the partners maintain a satisfactory relationship outside of the resource exchange. Similarities between partners are predicted to lead to successful alliances (Saxton, 1997). Studies of corporate alliances demonstrate the importance of organizational similarity for successful alliances. In a study of 49 international alliances, one-third was judged to be failures by alliance partners (Bleeke & Ernst, 1991). Most often these alliances fail because the organizations' motives, which lead to the formation of IORs, are not in sync with the goals, values, and cultures of the partners in the relationship (Berquist, Betwee, & Meuel, 1995). Even organizational characteristics such as different degrees of formality and bureaucracy in organizational structure can inhibit a successful partnership (Alexander, 1995).

According to Whetten (1981), an assessment of organizational similarity among partners in a successful IOR should include organizations of (1) comparable status, (2) similar ideologies and approaches to problems, (3) similar organizational structures and procedures, (4) compatible goals, and (5) domain consensus (i.e., general agreements as to the operating areas of each partner).
Similarities in these areas increase the sense of commonality and familiarity among partners. Familiarity increases communication and increases the likelihood of a successful partnership. Unfamiliar approaches, dissimilar structures and procedures, and incompatible goals inhibit the development and maintenance of trust.

For purposes of this study, organizational similarity is considered a multidimensional construct consisting of partners' perceptions of relative similarity in the areas of organizational culture (i.e., norms, values, beliefs, traditions), mission (i.e., goals, purposes, motivation), structure (i.e., procedures, methods, regulations, technology), and status (i.e., prestige, market position, financial position), (Johnson, 1988; Whetten, 1981).

The Performance Outcome

The performance outcome is the result of the IOR. The performance outcome is each partner's overall level of satisfaction with the IOR or the desired outcome of the relationship. It is a function of (1) Partner characteristics: achieving motives and organizational interdependence, and (2) Relationship characteristics: partner reputation, partner trustworthiness, and organizational similarity (Saxton, 1997). This study proposes that, for the IOR's performance to be considered effective by partners' motives must be met and the relationship must be satisfactory.

A second implication of this study is organizational survival: the organization's purposeful effort to sustain itself. A proposition of this study is that
environmental uncertainty motivates organizations to develop coping strategies such as IORs to reduce uncertainty and assure organizational survival.

Uncertainty is the result of four interacting factors in the environment: (1) constituents, (2) new entrants, (3) substitutes, and (4) rivals. New entrants, substitutes, and rivals create uncertainty because of the competitive pressures an organization faces when it competes against other organizations for resources and market position. Constituents create uncertainty because of the competitive pressures an organization faces when it attempts to meet their needs, demands, and mandates. Organizations must compete against new entrants, substitutes, and rivals for resources needed to meet the needs, demands, and mandates of constituents.

Therefore, from this review, it is evident that organizations attempt two things in a marketplace (1) they compete against rivals and (2) they seek to serve constituents. Success in these areas assures organizational survival. From this perspective, the concepts of competitive advantage and value creation are appropriate for defining and measuring a performance outcome.

**Competitive advantage.**

Competitive advantage is a set of capabilities which allows an organization to compete more effectively. A capability is a skill, aptitude, or asset that an organization uses to gain advantages over its competitors (Hamel & Prahalad, 1994). In the higher education marketplace, capabilities are services, facilities, program offerings, faculty, location, price and others things
that an institution uses to its advantage to compete against other institutions (Jones, 1997). IORs form among colleges and universities to pool capabilities in order to gain competitive advantage over other institutions. An organization’s perceptions of its competitive advantage gained through the IOR is a measure of its ability to perform effectively in a marketplace relative to its competitors (Hamel & Prahalad, 1994; Schoell & Ivy, 1982).

**Value.**

Value is the perceived worth of benefits relative to what is given (Smith & Nagle, 1995). It is an estimate of the ability of a product or service to satisfy needs, demands, and mandates of constituents (Kotler, 1984). Organizations create value when they develop capabilities which respond to constituents’ desire for quality, choice, and economy. IORs create value for constituents when their member organizations pool their capabilities to meet the needs, demands, and mandates of constituents, thereby improving their competitive position, which in turn increases their probability of organizational survival (Haspeslagh & Jemison, 1991). For purposes of this study, partners’ perceptions of the transactional value (i.e., quality, price, etc.) they are creating for constituents is the measure of performance by which they judge the IOR (Dunham, Marcus, Stevens, & Barwise, 1993). The greater the transactional value they create through the IOR, the more successful they will perceive the IOR to be.

For purposes of this study, the performance outcome is a function of
partner characteristics (i.e., fulfilling motives and achieving goals, and organizational interdependence) and relationship characteristics (i.e., partner reputation, partner trustworthiness, and organizational similarity) and is manifested in each partner’s perception that it is gaining a competitive advantage from the IOR by creating value for its constituents. Figure 2-2 (below) is a summary presentation of the relationships between partner and relationship characteristics and measurable performance outcome.

---

**Figure 2-2. The Relationship Between Partner and Relationship Characteristics and Performance Outcome**

<table>
<thead>
<tr>
<th>Partner and Relationship Characteristics</th>
<th>Performance Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Meeting Goals</td>
<td>Leads To</td>
</tr>
<tr>
<td>2) Organizational Interdependence</td>
<td>1) Competitive Advantage</td>
</tr>
<tr>
<td>3) Partner Reputation</td>
<td>2) Value Creation</td>
</tr>
<tr>
<td>4) Partner Trust</td>
<td>3) Overall Satisfaction</td>
</tr>
<tr>
<td>5) Organizational Similarity</td>
<td></td>
</tr>
</tbody>
</table>
To summarize: Environmental uncertainty motivates organizations to develop coping strategies to reduce the uncertainty. IORs are one strategy organizations may use to reduce uncertainty. The performance outcome is the measure of overall partner satisfaction with the IOR. The performance outcome is a function of (1) Partner Characteristics: motives for membership in the IOR, and organizational interdependence and (2) Relationship Characteristics: the enabling factors which lead to a satisfactory relationship among partners. The desire for organizational survival is implied. Figure 2-3 (on the following page) is a model presentation which graphically represents the conceptual fit and the assumptions of this study.
Figure 2-3. Conceptual Model Guiding the Study

Partner Characteristics | Relationship Characteristics

Motives
- Operating Efficiency
- Cost Reduction
- Scale Economies
- Manage Uncertainty
- Reduce Risk
- Stability
- Predictability
- Manage Dependencies
- Influence
- Advocacy
- Cooperation
- Reciprocity
- Share Resources
- Share Risks

Fit
- Organizational Interdependence
- Partner Reputation
- Partner Trust
- Organizational Similarities

Enablers
- Partner Trust
- Value Creation
- Overall Satisfaction

Performance Outcome
- Competitive Advantage

Context
- Environmental Uncertainty

Organizational Survival

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Methods

Introduction

The purpose of this study is to advance the current knowledge of interorganizational relationships (IORs) in higher education by examining a consortium of six small, private liberal arts colleges. This study attempts to answer the following questions: First, why do these small, private, liberal arts colleges engage in this relationship? Second, how do these small, private liberal arts colleges maintain this relationship over time? Third, what is the perceived level of satisfaction and measure of success in this IOR?

Rationale for a Qualitative Study

Qualitative research techniques are consistent with this study's purpose, which is to examine the subject of interorganizational relationships in higher education. Whereas quantitative studies may identify sets of variables and seek to predict some cause and effect relationship, qualitative studies generally attempt to search for some understanding of a topic through exploration, description, and explanation (Glesne & Peshkin, 1992). According to Marshall and Rossman (1995), qualitative research methods are especially advantageous when the researcher seeks to examine a topic by asking questions about why and how an event takes place. These types of research questions are not easily answered by instruments using scales or closed-ended questions; they require richer data in order to develop an understanding of the subject. Qualitative
research methods provide detailed, rich data required for this study (Rossman & Rallis, 1998). Furthermore, qualitative research methods have the added advantage of allowing the researcher to look at the situation holistically. This allows the researcher to examine the context in which decisions are made and actions are taken (Marshall & Rossman, 1995; Taylor & Bogdan, 1998).

Because the conceptual model presented in this study is a unique synthesis derived from the literature of several disciplines and fields of study, qualitative research methods go "beyond the narrowness of experimental studies by allowing researchers to be more spontaneous and flexible in exploring phenomena in the natural environment" (Rudestam & Newton, 1992, p. 37). Qualitative research methods are especially appropriate in helping researchers uncover important facts or identify variables which were overlooked in the literature (Borg & Gall, 1989). For these reasons, qualitative research methods guided this study.

Rationale for the Use of a Conceptual Framework in a Qualitative Study

According to Rudestam and Newton (1992), a conceptual framework is "a less developed form of theory" which links abstract concepts (p. 6). According to Glesne and Peshkin (1992), a conceptual framework consists of a structure of categories, which describe abstract phenomena. The conceptual framework establishes what the study is about and what it proposes to study (Rossman & Rallis, 1998).

The use of a conceptual framework to guide a study is consistent with
qualitative research methods and the goal of this study. According to Rudestam
and Newton (1992), qualitative research designs are not typically intended to
prove or test a theory, rather allowing for the theory to emerge once the data are
collected and analyzed. However, they say researchers should not ignore
theoretical propositions that can help guide studies. A conceptual framework
can serve as a road map to guide the study.

This means that the framework may change as the
study evolves. The amount of restructuring will
depend on what is known from the literature about the
phenomenon being studied....Very loose designs
imply the collection of great amounts of data that may
initially look important but turn out to be tangential or
irrelevant and great amounts of time to sift through
them (Rudestam & Newton, 1992, p. 37).

According to Yin (1994), a conceptual framework is essential to
developing an understanding of the study’s purpose and direction. Conceptual
frameworks serve several purposes. First, they guide the methodological
approaches of many qualitative studies, and researchers use conceptual
frameworks to structure questions and discuss findings. Second, researchers
may expand or modify the conceptual framework guiding a study as data are
collected and analyzed. (A revised model, based on the results of the data
analysis, is presented in chapter 5.) Furthermore, a conceptual framework can
help the researcher link the specific situations to larger theoretical constructs, thereby demonstrating how the particular situation serves to illuminate larger theoretical issues (Marshall & Rossman, 1995).

Finally, adopting a conceptual framework allows researchers to (1) structure the study by placing limits on who and what will be studied, and (2) focus the researchers and intended audience on the goals of the study (Rudestam and Newton, 1992). For these reasons, the model in Figure 5-1 served as the conceptual framework which guided the research of this study.

The conceptual model presented in this study served as its guide. It linked several concepts in order to examine the subject of interorganizational relationships in higher education. Partner characteristics are one category of understanding; they identify the motives or reasons why institutions form IORs. Relationship characteristics are another category of understanding; they describe the relationship and explain how it is maintained. Another category of understanding is the outcome of the relationship; this describes the level of satisfaction among partners in the relationship and its measure of success. The how and why questions posed in this study serve as the operational links.

**Rationale for a Case Study Design**

Case study methodology is consistent with the goals of this study. Case study research is an examination of a single subject, whether it is an event, organization, person, or group, and can help illuminate a larger issue (Rossman & Rallis, 1998). According to Borg and Gall (1989), case study research is one
of the best ways to investigate a subject because it requires the researcher to collect extensive data in order to produce an in-depth understanding of the issue in question. According to Yin (1994), case studies are the preferred when attempting to answer questions about how and why a particular event takes place. This is especially true when the researcher is investigating a real-life situation in which the researcher has little ability to manipulate or control the events being studied, such as in experimental studies. Case studies are particularly useful in organizational research because of the potential to collect in-depth data, the relatively unobtrusive nature of investigation compared to more formal field experiments, and the ability to examine organizational questions in the natural setting (Lee, 1999). For purposes of this study, instrumental case study methodology is being utilized because this case study is being guided by research questions which were developed as a result of the conceptual framework guiding this study.

The case selection.

"Case studies of organizations may be defined as the systematic gathering of enough information about a particular organization to allow the investigator insight into the life of the organization" (Berg, 1998, p. 218). Berg continues by saying that the case study method is very useful for researching, among other things, relationships and motivations, which are the central focus of this study. And that a researcher may have a number of reasons for selecting an organization for study.
According to Yin (1994), the single case study is an appropriate design when it can help in testing some theory. Yin defines this case as one, which meets many, if not all, of the conditions necessary for research. This proposition is consistent with one of the stated purposes of this study, which is to examine the relevance of a unique, theory-based model using case study methodology.

Cases should be selected because they can be useful in furthering knowledge. In other words, the researcher selects cases that can further his or her own research (Stake, 1995). Through discussions with the consortium's director, a preliminary review of the operational aspects of the Midwest College Consortium (MCC), and a review of the member colleges, the MCC was chosen as a case, relevant to this study. The consortium has both academic and administrative areas of interaction. The MCC sponsors an array of joint academic and administrative programs in which all six colleges participate. A fairly high level of intensity exits in the relationship. Analysis of the data in Chapter 4 will reveal joint academic programs, which are important to the recruitment of students for these colleges. It will also reveal a high level of administrative interaction in a jointly sponsored administrative computing system, which is vital to the operation of these colleges.

IORs range on a continuum of interaction and intensity. For example, an IOR such as an interlibrary loan relationship probably would have low interactive intensity. A study of such a relationship probably would not yield much data relevant to this study. The MCC has a level of interactive intensity, which yields
valuable data. For these reasons, the MCC was selected as the subject of this study.

Participants

In case study research, participants are often chosen because they are individuals who are well informed about the subject under investigation. These participants can provide valuable information because of their position in, or experience with the social, political, or administrative aspects of the case (Rossman & Rallis, 1998). In consultation with Director of the MCC consortium, 35 individuals were identified as having insights into the administrative and academic operation of the MCC. Of the 35 who were asked to participate, 25 agreed to participate. The others were either unavailable or did not respond. Eleven of the people who agreed to participate were members of the MCC standing committees, which are the primary administrative bodies of the MCC. These committees are comprised of a total of 18 people. The standing committees are the MCC Board of Directors (comprised of the college presidents), the Academic Policies Committee, the Business Policies Committee, and the Budget Committee. Others who were asked to participate were either members of academic or administrative sub-committees, or were deemed to have a sufficient level of involvement with the MCC to provide insightful responses to questions (Appendix D lists the position of each respondent and college affiliation.)
Data Collection Procedures

The data were collected through two methods: in-depth interviews and document analysis. Interviews were the primary method of data collection. Document analysis supplemented the interviews.

Interviews.

Interviewing is a method which is used extensively in qualitative research (Marshall & Rossman, 1995). It is the most common qualitative research method used in organizational research (Lee, 1999). Taylor and Bogdan (1998) describe interviewing as face-to-face encounters between researchers and informants, who have perspectives on the issue under investigation, for the purpose of collecting meaningful data.

Interviewing as a primary data collection method has several advantages. In-depth interviewing allows the researcher to obtain rich and detailed responses (Johnson, 2002). According to Glesne and Peshkin (1992), interviewing gives the researcher the opportunity and flexibility to examine alternate explanations, which may not have been considered but can help shed light on the study. Interviews allow the researcher to gather large amounts of data from a wide variety of informants, thus bringing many perspectives to the issue under investigation (Marshall & Rossman, 1995). Another advantage of the interview is that it provides immediate feedback by allowing the researcher to ask for clarification of points under discussion. (Borg & Gall, 1989). The
researcher frames the questions to uncover respondents’ perspectives on the subject of interest but otherwise allows the respondents to structure his or her own answers (Rossman & Rallis, 1998).

One weakness of the interview as a method of data collection is the potential for a lack of focus and rigor (Marshall & Rossman, 1995). In order to maintain the focus and rigor of the study, a research protocol was used which outlined all of the interview procedures from initial contact of informants to actual interview (See Appendix A). A sound protocol contains the instruments, procedures, and general rules that should be followed in the research to establish reliability (Yin, 1994).

The interview guide made it possible to obtain the required data to meet the objectives of the study. Some standardization in the interview process helps ensure that different answers among respondents are due to differences in their perspectives, not due to differences in the process (Singleton & Straitis, 2002). The standardized nature and purposeful sequencing of the questions provides focus and consistency from interview to interview (Borg & Gall, 1989).

The interview guide consists of a list of semi-structured, open-ended questions (See Appendix A). According to Borg and Gall (1989), open-ended questions promote rich responses, which help develop and understanding of a subject in the fullest possible way. The semi-structured nature of the questions helped the researcher keep focused on the objectives of the study while allowing him to examine informants’ answers in order to pursue unexpected responses.
and gain additional insights into the phenomenon in question. Interview questions, written to obtain data based on the conceptual framework guiding this study, are listed in Appendix A.

The interview questions, which guided this study, were developed by the researcher after a review of the relevant literature on IORs and worded and organized based on the study's conceptual framework. Table 3.1 (below) links the interview questions with the theory behind the questions and the source from literature.

### Table 3-1. Source of Interview Questions

<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>Theory Behind the Questions</th>
<th>Literature Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental Uncertainty</strong></td>
<td>Environmental Uncertainty motivates organizations to seek coping strategies to deal with the uncertainty.</td>
<td>Aldrich, 1979; Pfeffer &amp; Salancik, 1978; Williamson, 1985</td>
</tr>
<tr>
<td><strong>Partnership Characteristics</strong></td>
<td>Motives for IOR formation can be found in Theories of Collective Behavior.</td>
<td>Williamson, 1985; Pfeffer &amp; Salancik, 1978; Lawrence &amp; Lorsch, 1969; Aldrich, 1979; Trat, 1983; Leaven &amp; White, 1961; Alexander, 1995</td>
</tr>
<tr>
<td><strong>Organizational Interdependence</strong></td>
<td>Organizational interdependence is the degree of similarity and compatibility in resource needs that exists among organizations in an IOR.</td>
<td>Pfeffer &amp; Salancik, 1978; Pfeffer, 1981; Berquist, Betwee, &amp; Meuel, 1995</td>
</tr>
<tr>
<td><strong>Relationship Characteristics</strong></td>
<td>Organizational similarity is the degree of fit among organizations in an IOR in areas such as status, mission, values, structure, etc.</td>
<td>Saxton, 1997; Whetten, 1981</td>
</tr>
<tr>
<td><strong>Partner Reputation</strong></td>
<td>Reputation is a multidimensional construct reflecting abilities in management, quality, and financial position.</td>
<td>Dollinger, Golden, &amp; Saxton, 1997; Pettow, 1992; Rong &amp; Van De Ven, 1994</td>
</tr>
<tr>
<td><strong>Partner Trust</strong></td>
<td>Trust is a multidimensional construct of interacting concepts, including; intention, competency, and perspective.</td>
<td>Eisenhardt, 1989; Meyer, Davis, &amp; Schoorman, 1995; Berquist, Betwee, &amp; Meuel, 1995</td>
</tr>
<tr>
<td><strong>Performance Outcome</strong></td>
<td>The performance outcome is the result of the IOR. It is a function of partner and relationship characteristics.</td>
<td>Saxton, 1997</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Documents.

Documents supplemented the data collection process. Documents are often used to supplement other data collection procedures in qualitative research (Marshall & Rossman, 1995). They are an important source of data because they reflect the context in which they were written (Lincoln & Guba, 1985). Documents are also an important source because they provide descriptive data about events and activities; they give researchers ideas about important questions to pursue. Most importantly, they can verify other data sources. According to Lee (1999), the use of documents to verify and support other sources of data is an important aspect of organizational research. Documents have the added advantage of being unobtrusive ways to collect data. For purposes of this study, the documents in Appendix E were used to (1) corroborate data collected during interviews, and/or (2) describe the programs, processes, and operations of the MCC.

Documents used for descriptive or corroborative purposes were selected in consultation with the executive director of the MCC. The criteria for selecting documents included the following: (1) Documents must be able to provide descriptive information to help expand on an issue or topic relating to the academic programs, administrative processes, and financial operations of the MCC. Descriptive documents were used when the descriptive information would help the reader gain greater insight and understanding of the topic. (2) Documents must be able to corroborate other data sources, which were
collected through other methods. The documents must corroborate data related to the academic programs, administrative processes, and financial operations of the MCC. Corroborative documents were used, for example, to support claims that the MCC provided a financial benefit for the colleges.

Some of the documents used in this study were undated; however, these documents contained references to dates, which gave the researcher an indication of when they were produced. Table 3.2 (on the following page) gives the sources and uses of the documents used in this study.

**How the Research Questions Were Answered**

1. Why do these small, private colleges engage in this relationship?

   This research question addresses the partner characteristics in the relationship. It is a function of environmental uncertainty, motives, and organizational interdependence. Environmental uncertainty motivates organizations to seek coping strategies to deal with the uncertainty. IORs are one strategy that organizations can employ. These interview questions ask the respondent to address the level of environmental uncertainty their colleges are facing. Questions to determine uncertainty:

   (a) Describe the challenges that confront your college today.

   (b) What are the most important opportunities your college faces?

   (c) What are the most serious threats your college faces?
<table>
<thead>
<tr>
<th>Document</th>
<th>Year Produced or Data Referenced</th>
<th>Source</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Branford College Academic Catalog&quot;</td>
<td>2000</td>
<td>Brandford College</td>
<td>Descriptive data about college/programs</td>
</tr>
<tr>
<td>&quot;Bristol College Catalog&quot;</td>
<td>2000</td>
<td>Bristol College</td>
<td>Descriptive data about college/programs</td>
</tr>
<tr>
<td>&quot;Course Costs and Revenues&quot;</td>
<td>1999</td>
<td>Brown, R.</td>
<td>Corroborative financial data about programs</td>
</tr>
<tr>
<td>&quot;Kent College&quot;</td>
<td>2000</td>
<td>Kent College</td>
<td>Descriptive data about college/programs</td>
</tr>
<tr>
<td>&quot;Almanac: 2000-2001*&quot;</td>
<td>2000</td>
<td>Midwest College Consortium</td>
<td>Descriptive data on structure</td>
</tr>
<tr>
<td>&quot;Summary Statistics&quot;</td>
<td>2000</td>
<td>Midwest College Consortium</td>
<td>Descriptive data on financial operations</td>
</tr>
<tr>
<td>&quot;MCC Special Education*&quot;</td>
<td>1999</td>
<td>Midwest College Consortium</td>
<td>Descriptive data on programs</td>
</tr>
<tr>
<td>&quot;Athletic Training Educational Program*&quot;</td>
<td>1999</td>
<td>Midwest College Consortium</td>
<td>Descriptive data on programs</td>
</tr>
<tr>
<td>&quot;MCC Computer Center&quot;</td>
<td>1999</td>
<td>Midwest College Consortium</td>
<td>Corroborative financial data on operations</td>
</tr>
<tr>
<td>&quot;Milldale College Catalog&quot;</td>
<td>2000</td>
<td>Milldale College</td>
<td>Descriptive data about college/programs</td>
</tr>
<tr>
<td>&quot;Summers College*&quot;</td>
<td>2000</td>
<td>Summers College</td>
<td>Descriptive data about college/programs</td>
</tr>
<tr>
<td>&quot;Tolland Academic Catalog&quot;</td>
<td>2000</td>
<td>Tolland College</td>
<td>Descriptive data about college/programs</td>
</tr>
</tbody>
</table>

Motives are defined as the reasons, based in theory that organizations have for engaging in IORs. These interview questions ask the respondent to address the reason why their colleges are members of the consortium.

Questions to determine motives:

(a) What are the reasons your college has for belonging to this consortium?

(b) What do you consider to be the most important reason?
(c) What do you consider to be the least important reason?

Organizational interdependence is the degree to which organizations either compete for the same resources or exchange resources for mutual benefit.

These interview questions ask the respondent to address the degree of organizational interdependence among the six colleges. Questions to determine interdependence:

(a) Describe the degree to which your college and your partner colleges compete with each other for students, faculty, grants, and other resources.

(b) Describe the level of interaction among your colleges in terms of sharing faculty, administrative support functions, facilities, and other resources.

2. How do these small, private colleges maintain this relationship?

This question addresses the relationship characteristics or social aspects of the relationship which help enable and maintain the relationship apart from the motivation to procure resources. It is a function of partner reputation, partner trust, and organizational similarity. These interview questions ask the respondent to address the social factors affecting the relationship. Questions to determine the relationship characteristics:

(a) What are the major differences that exist among the colleges in terms of mission, culture, values, and goals?

(b) Describe the reputations of your partner colleges in terms of
academic excellence, administrative competency, and financial soundness.

(c) Where would you rank your college's reputation against your partner colleges?
(d) How do you think that the public perceives the reputations of the colleges in this consortium?
(e) Describe the degree to which your partner colleges have been able to fulfill their obligations to the consortium.

3. What is the perceived level of satisfaction in this consortium, and what is the measure by which respondents describe its success?

This question addresses the performance outcome of the relationship, which is in effect the result of the IOR. These interview questions ask the respondents to address the performance outcome of the relationship. Questions to determine the performance outcome:

(a) How do you characterize the overall level of success in this consortium?
(b) What do you think your college has been able to achieve through this consortium that benefits your college and its constituents?

**Data Collection Process**

Qualitative inquiry, whether observation, interviews, or document analysis, must be systematic and diligent to help ensure trustworthiness of the study (Rossman & Rollins, 1998). The case study protocol in Appendix A serves as the document.
which guided the data collection process.

1. A letter of introduction was sent to the consortium's director. The letter described the purpose and goals of the study, methodology, timeframe, and guarantee of anonymity for respondents and their colleges.

2. The consortium's director secured the permission of the consortium's board to allow the study to proceed on the six campuses.

3. In consultation with the consortium's director, 35 people who were determined to have relevant perspectives on the consortium and its operations were identified as potential participants.

4. A letter of introduction was sent via e-mail to potential interviewees, describing the study and asking for their participation, and assuring them of anonymity. Follow-up calls or e-mails were used as a reminder for non-responders.

5. Twenty-four, hour-long, face-to-face interviews were scheduled during one week in June of 2001 with individuals who agreed to participate. Interviews were set-up via e-mail and phone.

6. A letter of informed consent was sent to each participant. The Letter outlined the purpose of the study, its format, and interview methods (e.g. tape recordings and note-taking). The letter stated that the participant had agreed to cooperate, understood the provisions of the study, and could withdraw from the study at any time for any reason.

7. Hour-long, face-to-face interviews were conducted over one week. The
primary data collection method was tape recording supplemented with handwritten notes.

8. Several follow-up interviews were conducted by phone or e-mail during the course of the week to clarify responses.

9. Letters of thanks were mailed to all of the participants, assuring them of the provisions in the letter of informed consent, including the promise of anonymity.

**Data Analysis Procedures**

Marshall and Rossman (1995) define qualitative data analysis as a search for general statements about relationships that exist between categories of data; it is a process of bringing order, structure and focus to collected data by identifying, coding, and categorizing the data gathered from interviews, observations, and documents. The challenge, according to Patton (1990), is to bring meaning to large volumes of collected data through rigorous analytic procedures.

In much of the literature describing qualitative research methodology, authors cite the need to let theory develop as data are collected and analyzed, even forgoing a rigorous literature review until after the data have been collected and coded. These authors argue that theory should emerge from the data, rather than using data to test a theory or explain an issue (Borg and Gall, 1989). However, other researchers take a different view of the role of qualitative research.
Other researchers, writing from a more positivistic stance, take the position that qualitative research, just like quantitative research, can and should be used to develop and verify or test propositions about the nature of social life (Taylor & Bogdan, 1998, pp 136-137).

The purpose of this study is to examine the subject of interorganizational relationships in higher education by answering why institutions engage in these relationships and how these relationships are maintained. The use of a conceptual framework to guide the study is consistent with this position.

According to Rossman & Rallis (1998), qualitative data analysis is the "process of systematically organizing interview transcripts, field notes, and other material you have collected; bringing meaning to them so that they tell a coherent story; and writing it up so that others can read what you have learned" (p. 171). It is a process of sorting and categorizing data into "chunks" that have meaning. The conceptual framework, research questions, and research design provide the starting point for analysis.

This study follows the data analysis process outlined by Rossman and Rallis (1998). First fundamental decisions were made about the analysis strategy.

Decision 1: Ongoing analysis versus analysis after data collection. Ongoing analysis, or more formally called the Constant Comparative method, is a process
in which the researcher reflects on the data throughout the collection process. In this study, however, formal analysis began after the data were collected. The data were collected over the period of one week at six colleges. Given the time constraints during the collection phase, ongoing analysis was not possible. However, as the data collection process proceeded informally, themes and patterns were noted.

Decision 2: Structured or open-ended analysis. According to Rossman and Rallis (1998), structured analysis is typically controlled by the researcher with analytic categories identified in the conceptual design. Open-ended analysis does not use structured analytic categories, rather letting the analytic direction emerge. Although the conceptual framework presented in this study serves as its guide, the data analysis did not so rigidly adhere to the framework that unanticipated categories of understanding were suppressed.

Decision 3: Analysis related to the qualitative genre. “Analysis is shaped by the genre framing your study” (Rossman & Rallis, 1998, p. 175). Genre is the type of study being used. For example, case studies, as opposed to ethnographies or phenomenological studies, seek to understand a larger issue through intensive study of one situation or event. As discussed earlier, case study methodology was utilized in this study. Case studies that focus on an organization, or in this case, a group of organizations in an IOR, often focus on pertinent areas of interest such as administrative process, decision-making, or relationships.

“These categories then provide the initial ways for thinking analytically and for a
first cut on coding the data" (p. 175). This is consistent with the decision to use the conceptual framework to guide the analysis of data in this study.

**Process of Analysis - Interviews**

According to Rossman and Rallis (1998), each phase of the data analysis process entails data reduction as chunks of data are interpreted and categorized into meaningful themes. Category generating involves identifying patterns (e.g., recurring themes, perspectives, attitudes, etc.), relating to the study's purpose. Early in the analysis process, categories should relate back to the conceptual framework.

In the first phase of data analysis in this study, data were reviewed and analyzed, and chunks of data, whether interview data, observations, or material drawn from documents, were categorized into one of the broadly defined categories of understanding from the conceptual framework: Environmental Uncertainty, Partner Characteristics, Relationship Characteristics, and Performance Outcome. Data not conforming to these categories were categorized separately for further analysis.

The second phase of the data analysis process involved a systematic review of the data and then coding and re-coding the data as chunks of data were further analyzed and reduced. According to Miles and Huberman (1994), codes are labels for organizing units of data collected during the data collection phase. The chunks of data may be varying sizes, and contain phrases, sentences, or paragraphs.
The data from interviews were analyzed for patterns or regularities in themes, perspectives, or ideas, among others. Coded categories of chunked data were transferred from transcripts, documents, or field notes to index cards for further analysis and coding. The base unit of chunked data had to fulfill two characteristics identified by Lincoln and Guba (1985): Regardless of the size of the data chunk, whether it is a phrase, sentence, or paragraph, (1) it must be able to stand by itself without losing meaning, and (2) it must reflect some level of understanding relevant to what is being studied. The coding scheme that emerged from the data analysis is presented in Appendix F.

In the next phase of analysis, the chunks of coded data were integrated into the categories of understanding, which were revealed in the data analysis. In this phase of analysis, the categories of understanding which were revealed through the data analysis process were compared to the conceptual framework. Comparisons were made and differences noted between the conceptual framework developed from the theoretical literature and what emerged from the data analysis. In the final phase, the findings were revealed and the conceptual model presented earlier was revised to reflect the findings. The revised conceptual model, which emerged from the data analysis in Chapter 4, is presented in Chapter 5.

**Process of Analysis - Documents**

Documents were selected for review that could provide information about the academic programs, administrative processes and structure, and financial
operations of the MCC. Documents were reviewed and relevant data were grouped into categories using note cards to record and sort the data. The data were cross-referenced against the interview data, which had already been coded and categorized, to see where the data taken from the documents either help to further describe some topic, or either corroborate or refute other data. Appendix E lists the documents used for this study.

**Trustworthiness of the Study**

For purposes of this study, the criteria for judging the trustworthiness of qualitative research as outlined by Yin (1994) will be utilized. The terms Yin uses to describe the trustworthiness of qualitative research match those used to describe the trustworthiness of quantitative research; however, this approach to establishing trustworthiness is not universally accepted among qualitative researchers. Multiple perspectives exist about establishing the trustworthiness of qualitative research. According to Creswell (1998), researchers such as Yin (1994) are more positivistic in their research prospective, and their approach to establishing trustworthiness. These researchers use terms that have “qualitative equivalents that parallel traditional quantitative approaches to validity,” because they desire to overcome traditional criticisms of qualitative research (p. 197). Creswell says that qualitative research methodology has long been criticized by quantitative researches as lacking proper rigor, reliability and validity, which these researchers consider benchmarks of sound research. Creswell goes on to say that researchers who are more constructivist in their research perspectives,
for example, Lincoln and Guba (1985), view researchers who use positivistic terms as attempting to gain the acceptance of qualitative research among quantitative researchers. This, says Creswell, tends to undermine qualitative research as an important methodology in its own right.

Creswell (1998) favors the more constructivist approach to establishing trustworthiness used by Lincoln and Guba (1985), who use terms which apply to their more naturalistic approach to qualitative research. Creswell says that the very nature of qualitative research — extensive research time spent in the field; the use of detailed, thick descriptions; the ability to question and observe participants in natural settings — all increase verification and add to the value of the study. The use of constructivist terms such as "verification" as opposed to "validity," says Creswell, "underscores qualitative research as a distinct approach, a legitimate mode of inquiry in its own right" (p. 201).

Lee (1999) acknowledges that Yin (1994) uses traditional quantitative terms in his approach to establishing the trustworthiness of qualitative research; however, Lee believes that the traditional ideas of reliability (confirmability of results in constructivist terms) and validity (credibility of results in constructivist terms) are important concepts to both quantitative and qualitative research and should be addressed in research. Lee goes on to say that many of the procedural aspects of Yin's research methodology (e.g., member checks, triangulation with multiple and converging sources, and study protocols with rigorous data collection and data analysis procedures) are utilized to some
degree by both positivists and constructivists. The goal he says is to get it "right." Therefore, the use of Yin's (1994) methodology to establish the trustworthiness of this study is neither an endorsement of the positivist perceptive nor a repudiation of the constructivist perspective. It is merely considered to be one sound approach to establishing the trustworthiness of this study. The purpose of the criteria is to assure the researcher's audience that rigorous procedures were maintained in order to demonstrate the reliability and validity of the study. Yin's (1994) criteria for judging the trustworthiness of qualitative research are the following:

1. **Construct validity.** The researcher must establish proper measures of the concepts under investigation. The purpose of this study is to examine interorganizational relationships in higher education by examining why institutions engage in IORs (motives), how the IORs are maintained (relationship characteristics), and what the overall level of satisfaction is in the IOR (outcome).

   The conceptual framework limits and focuses the study; the research questions further direct the study by seeking answers about motives, relationships, and outcomes. Interviews with respondents from the six colleges and relevant documents, when available, were used to collect data about why and how institutions engage in IORs.

   Construct validity can be further strengthened, according to Yin (1994), through the use of multiple sources of evidence. Using several kinds of data sources contributes to the trustworthiness of the study because multiple sources
provide multiple measures of the subject (Borg & Gall, 1989; Glesne & Peshkin, 1992; Yin, 1994). Further construct validity is established when the multiple sources converge (i.e., two different data sources such as interviews and documents) to support the same fact. For purposes of establishing construct validity in this study, the conceptual framework and research questions focused and limited the study. Multiple and converging data sources were used, when available, to establish fact and support propositions. For example, the proposition that the consortium is considered a success and benefits the colleges was supported by internal documents which show a financial benefit to the colleges from certain programs sponsored through the consortium.

2. Internal Validity. Qualitative research has been criticized for a lack of internal validity, which is defined as threats or distortions to research findings by extraneous variables and poor research designs (Borg & Gall, 1989). In other words, are the findings credible and do they make sense?

Yin (1994), suggests several tactics for increasing the internal validity of qualitative research studies. First, multiple sources of data should lead to converging conclusions about their meaning. In other words, do multiple sources of data support the same conclusions or do they support rival explanations? A second tactic used to increase the internal validity of qualitative research is the use of member checks (Lincoln & Guba, 1985). This tactic involves follow-up conversations with respondents to make sure that data have been recorded accurately, interpretations of interviews are sound, and that any
misunderstandings or errors are corrected. Member checks increase the validity of inferences, interpretations, and conclusions by allowing the researchers to systematically verify the data underlying the conclusions of the study. Member checks were done both informally and formally. Informal member checks were made with respondents to clarify points or verify facts as the data were reviewed. Formal member checks were made with selected respondents to get feedback on interpretations, findings, and conclusions of the study.

A third tactic used to increase the internal validity of a qualitative study is inherent in the mode of analysis. In this study, the systematic collection, coding, and interpretation of data, coupled with the reporting of the findings, increases the internal validity of the study. For purposes of this study, internal validity is demonstrated by the use of multiple sources of data, member checks, and rigorous and systematic data analysis.

3. External Validity. Yin (1994), defines external validity as the degree to which a case study’s findings are generalizable to other cases. The external validity of qualitative research has been viewed by quantitative researchers as a primary weakness of this methodology (Marshall & Rossman, 1995). The external validity of case studies has been criticized because the study of one or two cases is seen as a week basis on which to generalize. However, according to Yin (1994), the true test of external validity in case study research is whether the case study results are generalizable to a broader theory, not to a particular population. Case studies are generalizable to “theoretical propositions” and the
researcher's goal is to expand on theory, not predict from sample to population (p. 10).

Here Yin (1994) differentiates between statistical generalizability, in which a conclusion is drawn about a population based on a sample, and analytical generalizability, in which "a previously developed theory is used as a template with which to compare the empirical results of the case study" (p. 31). Analytical generalizability is consistent with this study and the use of a conceptual framework to guide the study. The purpose is to explain IORs and further refine the theory-base underlying the conceptual framework. The purpose is not to predict to a population. Generalizability is strengthened by using the conceptual framework as the basis for analysis (Marshall & Rossman, 1995).

4. Reliability. Yin (1994) defines reliability as the ability to replicate the study and obtain the same findings and conclusions. In other words, can the results of the study be confirmed by other researchers? Attitudes, values, beliefs, motivations, and recollections can change with the passage of time (Marshall & Rossman, 1995). However, Yin (1994) argues that the reliability of qualitative research can be increased by (1) the use of multiple sources of data, and (2) the use of a formal, detailed case study protocol, which operationalizes the study and allows others to see how the study was conducted, the types of research questions that were asked, and the processes and procedures implemented. The use of a case study protocol increased the reliability of this study because it lays out a map of how the study was conducted. For purposes of this study,
reliability is demonstrated through the use of multiple sources of data and the use of a case study protocol. Credibility and verification of results are proven by using a chain of evidence from data collection procedures and analysis using tape recorded interviews, transcriptions, field notes, and a systematic procedure to categorize and code data.

The concept of triangulation to demonstrate validity and reliability is relevant here. According to Berg (1998), methodological triangulation can entail within-method triangulation and between-method triangulation. In between-method triangulation, multiple methods, which could include interviewing, document analysis, and observations would be utilized. Within-method triangulation could entail interview methods using multiple sources of data (i.e., multiple respondents). Within-method triangulation (multiple respondents) and between-method triangulation (multiple methods) are used in this study to strengthen reliability and validity.

**Limitations and Delimitations of the Study**

According to Rossman & Rallis (1998), a study is delimited by the conceptual framework, which guides the study. This defines what the study is and is not. This is a single case study of six small colleges designed to seek answers to the research questions outlined earlier. The purpose of this study was to examine (1) why these colleges engage in this relationship, (2) how they maintain it over time, and (3) the performance outcome of the relationship.

Limitations define the weaknesses of the study. Here an inherent
weakness may be the over reliance on one primary mode of data collection and one case study. Although documents were used to corroborate sources, and within-method triangulation using multiple respondents was employed, a more robust selection of available documents would have been preferred. The greater availability of relevant documents would have strengthened the study. Using a single case study approach probably was a limiting factor as well. According to Miles and Huberman (1994), multiple case studies can help assure the researcher that events and processes are not the idiosyncrasies of one particular case. Multiple case studies can help the researcher identify processes and outcomes across many cases to see how they are affected by local conditions, thus developing a deeper understanding of the situation.
Data Analysis

Introduction

The stated purpose of this study is to advance the current knowledge of interorganizational relationships (IORs) in higher education by examining the relationships using the conceptual model presented in Chapter 2. This study seeks to evaluate the model’s relevance by examining (1) the environmental context and the motives for membership in IORs, (2) the social aspects that help maintain the IORs over time, and (3) the measure of success and the overall level of perceived satisfaction with the IOR.

The conceptual model presented in this study serves as its guide. According to theory, environmental uncertainty motivates organizations to seek coping strategies to reduce the level of uncertainty. The formation of IORs among autonomous organizations is one coping strategy organizations may employ to reduce uncertainty and obtain needed resources for survival. The model links several concepts that attempt to illuminate the subject. Partner characteristics are one category of understanding; they identity the motives organizations have for engaging in IORs. Motives for IOR formation can be found in theories of collective action. Organizational interdependence is also a partner characteristic. It is the degree of resource compatibility among partners. Relationship characteristics are another category of understanding; they describe the social aspects of the relationship that help maintain it over time.
These social enablers include partner trust, partner reputation and organizational similarity. Another category of understanding is the outcome of the relationship; this describes and defines the measure of success and the level of satisfaction with the relationship.

The analysis of data collected during interviews with members of the Midwest College Consortium (MCC) is presented in the following format: First, a brief description of the consortium is presented. (Relevant data about each of the six colleges including mission and focus are presented in Appendix C.) Second, the study examines the environment in which these colleges operate. Competition, constituents, and economic factors, among others, are analyzed. Third, the motives or the reasons that these colleges have for membership in this consortium are examined. Fourth, organizational interdependence is analyzed. Fifth, the social characteristics that help these colleges maintain this relationship are examined. Sixth, the desire for autonomy and differentiation is examined. This is each college’s attempt to maintain its own identity and independence. Finally, outcomes are examined. This is the measure of the consortium’s perceived level of success and the members’ level of overall satisfaction with the relationship.


The Midwest College Consortium – Current Status

Founded in 1966, The Midwest College Consortium (MCC) is a partnership of six, small, private, church-affiliated, liberal arts colleges located within a 40 mile radius of the consortium’s central office in Milldale, Kansas. The MCC is an independent, non-profit organization. Its members include: Branford College, Bristol College, Kent College, Milldale College, Summers College, and Tolland College (See Appendix C for details on each college). Approximately 3,500 students are enrolled in the six colleges. Over 800 faculty and staff teach and work on the six campuses (Midwest College Consortium, n.d. a). The MCC Board of Directors is the consortium’s governing body. The presidents of the six colleges serve as the board. Several standing committees meet regularly to
attend to the academic and administrative business of the consortium. The Academic Policies Committee is comprised of the college's academic deans. The Business Policies Committee is comprised of the college's business officers. The primary function of these committees is to develop policies and procedures governing the joint programs and administrative activities of the consortium. It is in these committees that issues are discussed, proposals are made, and details are negotiated among the representatives of the six colleges. Recommendations for action are then sent to the board for approval. The MCC has several other professional and academic committees which serve the business of the consortium. The academic committees are comprised of the teaching professionals who work in the educational programs administered through the consortium. The professional committees are comprised of professionals from various academic support areas.

The MCC Executive Director, who reports to the board, is responsible for overseeing the activities of the consortium. The Director also serves as an ex officio member of the Board. The MCC is supported by a staff of approximately 21 F.T. E. faculty and administrators. Total operating expenses for 1999 - 2000 were $1,565,555 (Midwest College Consortium, n.d. b).

Programs offered through the consortium include computer science, secondary teaching methods, certification in special education, and athletic training. Students also can cross-register for courses offered at any other MCC college for the same tuition that they would normally pay at their own colleges.
January inter-term courses and programs are also available to students from any other college. Students can register for a three week course or participate in field experiences and educational tours sponsored by the other colleges (Branford College, 2000). The colleges participate in a library exchange program, share a common 4-1-4 calendar (except for Kent College), and share an administrative computing system which provides a platform for all registrations, billings, payrolls, and other administrative functions of the colleges. The consortium also provides a regularly scheduled courier service to facilitate exchanges among the six colleges and the MCC central office. Overhead expenses are divided equally among the six colleges. Program charges are billed out based on student usage (R21).

**The Midwest College Consortium – Historical Perspective**

By 1966, there were approximately 1,100 higher education institutions participating in some sort of cooperative relationship, with approximately 79% of all liberal arts colleges involved in some sort of cooperative arrangement. According to Renich (1968), there were many reasons for this level of activity, but the primary reason was the federal legislation that encouraged cooperation among institutions under Title III of the Higher Education Act of 1965. It may have been an important reason for the formation of the MCC. Prior to 1965 and the passage of Title III, a history of limited cooperation and interaction existed among the colleges that would eventually form the MCC. For many years prior to 1965, some of these colleges participated in the same athletic conference.
(Tolland joined the conference in the mid-1960s.) And for about 20 years prior to 1965, these colleges and others in the region held annual faculty meetings to discuss issues relevant to their fields and disciplines.

All six future MCC colleges were members of the Kansas Council of Church Related Colleges, which totaled 17 member institutions. Out of one of these meetings, the six colleges agreed to cooperate in a joint program in non-Western studies. The program commenced in the fall of 1964. As a result of this program, during the fall of 1965, the President of Bristol College requested a meeting of the other presidents and deans. He proposed establishing further cooperation among the six colleges. In a joint memorandum of understanding issued after a series of meetings to work out details of joint cooperation, the colleges agreed to the following: (1) to form an association for the purpose of advancing cooperative ventures among the six; (2) to investigate the possibility of federal support under Title III funding initiatives; (3) to investigate the possibility of developing a joint data processing program to serve the administrative needs of the colleges; (4) to investigate the possibility of faculty sharing, among other joint academic programs. After the memorandum of understanding was issued, the presidents met frequently to work out issues associated with legal incorporation. The articles of incorporation were adopted on May 4, 1966, and the MCC was established as a legal entity under Kansas law.

In April of 1966, each college had applied for a $4,000 matching grant
from the Department of Health, Education, and Welfare under Title III. The applications were approved. Each college added $4,000 to match the grant money, and the total of $48,000 comprised the first budget of the MCC. Over the next few years, the MCC expanded its administrative operations and joint academic programs to include the establishment of an administrative policies committee; a January interterm program; computer instruction; administrative services for student records, accounting, admissions, and alumni data; interlibrary loan program; visiting scholars program; faculty development program; administrative workshops; communications systems; and a special education program. The foundation for all of the administrative and academic programs of the MCC was the non-Western studies program and the data processing program. As described in the previous section, today the MCC sponsors an array of administrative and academic programs for the six colleges. It is one of the oldest associations of its kind in the United States.

Environmental Uncertainty

According to theory, the formation of an interorganizational relationship (IOR) among a group of autonomous, legally independent organizations is a response to environmental uncertainty (Aldrich, 1979; Galaskiewicz, 1985; Pfeffer & Salancik, 1978). Environmental uncertainty is the degree to which an organization's operating environment cannot be predicted with accuracy. Competition, demographic changes, economic fluctuations, laws and regulations, and resource scarcity all contribute to complexity and turbulence in the
environment. The more complex and turbulent the environment is, the more uncertainty the organization faces (Hatch, 1997). Organizations seek to develop coping strategies to reduce and manage uncertainty as means to ensure organizational survival (Pfeffer & Salancik, 1978).

Responses to environmental uncertainty are the strategies and tactics that an organization employs to ensure survival. Organizational responses include management tactics to increase internal operating efficiencies and marketing tactics to reposition the organization in the marketplace. To employ these tactics successfully, a certain amount of resources - money, skill, experience, or time - is required.

In the previous chapter, it was argued that given the level of environmental uncertainty in the higher education marketplace, and the limited ability of some small private colleges to respond to environmental challenges in significant ways, the formation of IORs is viewed as a possible coping strategy to help small private colleges with limited resources survive. If, according to theory, environmental uncertainty is an underlying factor in the formation and maintenance of IORs among autonomous, legally independent organizations (Williamson, 1985), then understanding the environmental context in which small private colleges operate is essential to understanding why these colleges form IORs. One of the stated purposes of this study was to examine the reasons why small private colleges form IORs. Specifically, how do respondents in the six colleges of the consortium view the higher education environment as it pertains
to their colleges? What are the factors in the environment that threaten the survival of these institutions?

Interviews with respondents reveal that the six colleges of the MCC are threatened with an uncertain higher education operating environment. The level of uncertainty is caused by an intersection of six colleges, which are dependent on enrollments and the tuition revenue enrollments generate, operating in an environment with strong competitive rivalry, unfavorable demographic and economic conditions. They serve constituents who are consumer-oriented, and they face non-traditional forms of competition enabled by technology.

**Enrollments.**

The importance of the environmental context in which the MCC colleges operate and the level of uncertainty they face is evident in their reliance on enrollments to generate the necessary tuition revenue for survival. Environmental factors that affect enrollment and, therefore, tuition revenue can put these colleges in a precarious financial situation. Respondents described the colleges of the consortium as highly susceptible to even small changes in enrollments. Many of the respondents described these colleges as "enrollment-sensitive" and "tuition-driven". "I think that the single greatest threat to institutions of our type would be enrollments," said the provost of one of the colleges (R4). According to the academic dean of another college, "I have to say I think the most important issue is admission and retention....No matter how good a shape we're in, in other ways, we're tuition-driven, and when enrollments
go down, we’re in trouble (R20).” “As you can see, many of these things are either related to resources or enrollments,” agreed a vice president for enrollment services (R14). Other respondents expressed similar thoughts about the importance of maintaining enrollments and the dependence of these colleges on the tuition revenue that enrollments generate.

The biggest threat for us is the theme that you’ll hear over and over again, is the whole enrollment picture. We’re so tuition-driven that it’s tough when our numbers are down. You take a school like ours that has on a good day five hundred students. If we lose four or five students, it’s significant compared to major universities where it’s not nearly as significant (dean of students, R2).

The President of Tolland College said that with a small endowment and no other significant revenue stream other than tuition, meeting enrollments is important. At the time of this interview, he was concerned because applications were 30 behind were they should be at this time of year (R25).

**Competitive rivalry.**

Competitive rivalry among organizations in a marketplace occurs as they attempt to improve their market position relative to each other (Porter, 1980). In
the higher education marketplace, colleges compete for many things, including financial resources, students, faculty, staff, and status (Bridges, 1996). The need to compete is driven by the need for organizational survival. Other than the elite, highly selective colleges with sizable endowments and national reputations, many small private colleges are vulnerable to intense competitive rivalry and face a number of unique challenges. Because of their relatively small endowments and reliance on enrollments to generate tuition revenue, many of these colleges must compete aggressively to attract students (Breuder, 1996).

Respondents from the MCC colleges reported a highly competitive environment where they compete for students with an array of private colleges, public universities, and community colleges. For example, the Kansas Board of Regents governs six state universities and coordinates 19 community colleges, five technical colleges, six technical schools, and a municipal university (Kansas Board of Regents, 2002). Kansas also has 19 private colleges operating within the state (Peterson's, 2002).

As far as private colleges and [public] universities in the state of Kansas, I think the competition itself seems to be one of our most major challenges for the future. We have about 17 private colleges and seven board of regents universities, and then, I don't know, 15 or 20 community colleges (vice president for business and finance, R6).
A provost from another college supported this statement. "[Non-MCC colleges are] our greatest threat, much more so than the consortium institutions. Kansas has six regents institutions, 19 community colleges, and 17 privates in a state of approximately 2.7 million people" (R4).

One theme that was repeated by several respondents was the perception that the ratio of students to available spaces in Kansas colleges and universities is unfavorable to the institutions. In other words, Kansas colleges and universities have too many available spaces for too few students, increasing the competitive pressure on all Kansas institutions. Replied an associate dean for student development, "In Kansas they have such a [large] number of higher education institutions per capita....Along with that, in the state of Kansas, we have upper teens in the number of junior colleges. We have a couple of state universities" (R3).

The perception that the per capita availability of spaces in Kansas colleges and universities is unfavorable to these institutions is supported, in part, by statistics. The population of Kansas grew approximately from 2.5 million people in 1990 to 2.7 million in 2000. This represents an 8% increase in 10 years. However, this growth lags behind overall growth in the population of the United States, which grew approximately 10% during the same period (U.S. Census Bureau, 2000). Although the overall population of Kansas grew during that 10 year period, the proportion of school-age children (5 years of age to 19 years of age) remained relatively flat at 22% in 2000 compared to 21.6% in 1990.
(Kansas Division of the Budget, 2000). Because Kansas is viewed as an agricultural state with relatively few other opportunities, Kansas loses a considerable proportion of its young people to other states (Britannica, 2002).

These factors increase the competitive pressure on Kansas' colleges and universities and, in turn, increase the necessity to recruit students more aggressively in order to meet enrollment requirements. According to a dean of admissions, "I think another threat is the activism that we see on the part, recently, on the part of state colleges and community colleges. They are allocating more of their budget for the purpose of recruiting talented students" (R8). An academic dean at another MCC college agreed that the level of competition for students has intensified in Kansas.

Admissions has become so competitive because universities, as you know, are competing as hard as private colleges. It used to be that we were the only ones who were out there recruiting. And there was a time when the state universities did not recruit. They literally did not recruit (R20).

Because the proportion of school age children in Kansas has remained stagnant over a ten year period, competition for students has not only been intense, but has forced these colleges to search for students beyond the borders of Kansas. However, respondents report that because of budget constraints, MCC colleges are limited in their ability to aggressively recruit outside the state.
In a state with a declining student population, we've got six state schools that also fight for these students....So, I think that it pushes a lot of us to recruit outside the state, and on the budgets we have, it's harder for smaller schools to meet [enrollment] needs and go out and get these students (vice president for enrollment services, R14).

Recruiting students from surrounding states also can be a daunting task because the colleges face strong competition from colleges and universities in neighboring states. "We do have [constituents] in Oklahoma, Colorado, the Dakotas, and in Nebraska," said one respondent, "But they too have state universities who lure our constituents away...."(R6).

The sheer size and visibility of the six state supported universities in Kansas increases the competitive pressure on the MCC colleges. The six state supported universities together account for approximately 79% of the total enrolled students in Kansas higher education (Brunner, 1998). The six colleges together account for approximately 5.5% of all enrolled students in Kansas higher education. Respondents spoke of state institutions that have "visibility," "name recognition," and "a presence in the minds of Kansans." Said one president, "There's a conversation in every community in this state everyday about KU and K State. There's not a conversation everyday in this community and in this state about [MCC colleges]. So the presence of these large
institutions in the minds of the people is very significant” (R18). The provost of another MCC college made a similar point by saying, “The land grant institutions, the large public institutions, the regents institutions, have a visibility. I think there is a perception that bigger is better” (R4).

Competing for students with universities that have name recognition and state-wide visibility increases the pressure on recruiters at MCC colleges. According to vice president for enrollment management:

I think there’s also a mind set of people. When you get into the foothills of Kansas, which is very agricultural-based, they tend to think of K State because of the agri-business. And when you get into large communities like Emporia, Emporia State is right there, which is a hometown school (R22).

According to one academic dean, the net effect on small colleges in Kansas that compete with high-visibility, a state-supported institution is: “There’s just fewer people choosing private liberal arts colleges anymore a smaller percentage of those going to college, I should say” (R20). “It’s almost like you have to un-enroll students from one of these institutions psychologically before you can ever talk to them about one of these small colleges,” said another president (R18).
Constituents.

The nature of an organization’s constituents can add to the level of environmental uncertainty facing the organization. Constituents were defined earlier as those individuals and groups who have a vested interest in or influence on an organization. For small private colleges, depending on the context of the discussion, constituents could include students or potential students, parents, faculty, staff, and members of the community, among others.

Constituents can influence an organization primarily in the areas of consumerism and demographics (Porter, 1980). Demographics refers to the changing nature of constituents in terms of racial diversify, age patterns, and geographic distribution. Consumerism refers to the demands of constituents for service, quality, value, and affordability. According to Porter, that demand is tempered over time by changes in lifestyles, tastes, perceptions, philosophies, and economic and social conditions.

Demographics. As earlier established, the MCC colleges are enrollment-sensitive and tuition-driven. They operate in a higher education marketplace with strong competitive rivalry. The intersection of these six small private colleges, dependent on enrollments and facing strong competition for students, with what respondents characterized as “unfavorable” demographic trends in Kansas and the Midwest plains region, adds to the environmental uncertainty each must face. “There are simply not an increasing number of high school graduates to attend,” said one president (R1). Another president responded
similarly: "There’s a decreasing number of high school graduates, decreasing every year. So the competition for students gradually increases." (R18). Another president agreed:

So [enrollment sensitivity and unfavorable demographics] collide and the metaphor of the Great Plains tornado is not lost on me, because you look at high school classes within a day’s drive from here that are a third less than they were a generation ago....Literally, you’d have to go 700 to 900 miles from here to find a meaningful increase in traditional 10 to 20 year olds (R13).

Migration away from rural areas to more industrialized cities in Kansas and other states also results in unfavorable demographics. “Rural Kansas is drying up. All these communities are drying up. How are we going to thrive within this environment?.” asked a dean of students (R9). “People are moving away from the family-owned farm, demographics are changing, and that combination is talking away from the rural areas....So all of us are having to look at demographics” (R7).

Consumerism. Competition tends to increase in an operating environment when many organizations compete for the same limited resources or the same customers. Whereas competitive rivalry describes the degree of interaction among organizations competing for resources or customers in a
marketplace, consumerism describes the degree and type of interaction between organizations and their customers in a marketplace. When many organizations are competing for a diminishing number of customers, power tends to shift from the suppliers of a product to the consumers of a product (McConnell, 1978). The more power consumers have in a relationship with suppliers, the more discretion the consumers have in terms of choice, product price, and style, among other product attributes. Unfavorable demographic and economic trends, coupled with strong competitive rivalry have increased consumerism among constituents of higher education in Kansas. Consumerism among constituents of the MCC colleges results in a market of potential students and their parents who are price sensitive and have numerous educational choices.

Price sensitivity on the part of higher education constituents in Kansas may be the result of what one respondent characterized as the "one dimensional" aspect of the Kansas economy: a reliance on agriculture. "Things have been pretty tight in the Midwest for 20 years now...[and] there hasn't really been much of [an economic] boom because we just don't have the technology and the manufacturing and others," said a dean of student life (R9). A dean of admissions at the same college agreed: "I've thought about threats to the college. I think they are two dimensional. One is the economic impact of agriculture in the state of Kansas and the surrounding area and the decline of prices that farmers are able to get for their products....So you have the economic impact of not being able to afford a private college as readily as we could maybe
10, or 15, or 20 years ago" (R8).

Numerous educational options in Kansas exacerbate the problem. “There are so many schools in Kansas....There are privates, community colleges, and regents schools where kids can go, and they have an overabundance of choices in terms of higher education in the state,” said a dean of students (R12). Another respondent, a vice president for enrollment management agreed:

So you go to some states and they have more colleges and universities than we do, but they have a ton more kids, and so I think one of the things that mitigates against us is just the fact that per capita, per graduate, we have so many options (R22).

The cost of a private education in a state with numerous educational choices and state-supported institutions is another factor increasing the level of consumerism in Kansas. According to one dean of students, “We compete with public universities that cost a fraction of what we need to charge for the educational enterprise” (R12). The registrar of another MCC college agreed:

I would say that one of our biggest concerns is the cost of private education concerning the state schools, especially in Kansas. The state legislature subsidizes, being state schools, so much that I don’t know what tuition at KU is these days; I don’t know, it has been roughly a fifth [of private tuition] (R11).
Price sensitivity and the unwillingness or inability to pay for private higher education increases the level of consumerism facing the MCC colleges in Kansas. "I mean the biggest single change over that 25 year period has been the deadly intersection of demographics in certain parts of the country and an unwillingness of families to pay for private higher education," said a president (R13).

According to Porter (1980), consumerism is influenced by culture, perception, philosophy, and taste, among others. Another effect of consumerism has been the difficulty that some respondents reported in trying to communicate the value of a private education in a state which some respondents characterized as "egalitarian," "populist," and "equitable." According to one president, "Kansas is an egalitarian state, not an elitist state. Consequently, the private colleges are not seen as necessarily providing an improved educational experience over state universities" (R18). This "mind set" that every educational alternative is equally good results in the "difficulties of helping students understand the value of a more expensive private education" (R12). "There's a populist mentality," said one academic dean, "that everyone, that every college, is equally good, and that community colleges are equally good" (R7).

The statement that all educational alternatives are perceived to be equally good by egalitarian-minded Kansans was affirmed by another vice president for enrollment services: "I'm not sure that people in the state of Kansas recognize private schools as quality programs....They don't recognize the quality of that
education” (R14). The result, she said, is increased competitive pressure to recruit students by increasing their visibility in the state and region relative to the already highly visible state-supported institutions.

New entrants and substitutes.

As described in the review of relevant literature, other factors contributing to environmental uncertainty in the higher education marketplace are (1) the competitive threats posed by new entrants into the marketplace and (2) the availability of substitutes for traditional forms of higher education. The threats of new entrants and the availability of substitutes are primarily driven by the opportunity to generate profits, reduce costs, or both.

Substitutes. Substitutes for traditional forms of higher education were defined as organizations which provide technical training, continuing education, professional development, and other forms of employer-sponsored educational programs. These programs are either developed “in-house” or through third party, for-profit vendors. Much of this education was traditionally provided by colleges and universities. Organizations find self-provision or third party, for-profit vendors to be inexpensive and flexible alternatives to traditional higher education when meeting employee training and continuing education needs (Ginsburg, 1997). The incentive for self-provision by private organizations is the possibility of significant costs savings. The incentive for vendors to enter educational markets and provide educational alternatives is a result of the opportunity to generate significant revenue. According to a report issued by
KPMG (1997), employee sponsored education was estimated to be a $70 billion annual market.

None of the respondents from the six colleges mentioned the threat of any substitute educational alternatives. These are six, small, private, liberal arts colleges primarily located in small farming communities. They primarily serve traditional-aged 18 to 22 year old undergraduates. Graduate degrees, continuing education, professional development, and technical training are either a small piece of the educational enterprise for most of these colleges, or it is something that they do not engage in at all.

New Entrants. New Entrants into the higher education marketplace are primarily driven by the opportunity to generate revenues and profits (Klinger & Iwanowski, 1997). New Entrants are defined as organizations which encroach on the territory, market, or geographic location of an organization. In higher education, colleges and universities have two primary modes of encroachment (1) distance education programs which are enabled by technology, or (2) satellite campuses which operate in what was previously the exclusive educational market of another college or university. The online programs of the University of Phoenix (Shea, 1998) and Virginia Tech's satellite campus inside the beltway of metropolitan Washington, D.C. are examples of educational encroachment. New entrants add to the competitive pressure on other colleges and universities (Davies, 1997).

Although most respondents did not believe that distance education
programs were an immediate threat to the MCC colleges, some voiced concerns similar to this vice president for business and finance, who said, “As distance learning becomes more and more a reality, we just thought that it would be more opportunity for institutions from outside the state of Kansas to have an impact on us as well” (R6). A colleague from the same college agreed: “You know, I still think in some ways people have to ask if all of this distance education is going to kill schools like [Tolland]. I just don’t know the answer to that” (R22).

Respondents who cited distance education as a potential threat to the colleges did so with a level of speculation and uncertainty. However, these respondents who saw it as a potential threat also speculated about the opportunities it posed. A registrar thought that distance learning might be an option that the MCC could pursue (R23). Several respondents posed questions similar to this controller: “I wondered with the internet, well we’re behind the curve there, you know, how will that impact the [MCC]?” (R21). The implication was that although distance education posed threats from other institutions, the potential opportunities for cost savings in terms of shared classrooms, joint programming over the internet, and the ability to overcome geography were intriguing.

The threat to MCC colleges from the satellite campus of another college or university is limited. Again, the colleges are located primarily in small, rural farming communities. Most of these communities are not prime markets in which to open a competing campus. Only respondents from Kent College
expressed concerns about competition from the satellite campus of K State.
Kent is located in an urban area with a population of 44,176 (Brunner, 1998). It is the seventh largest urban area in Kansas. Because it is a relatively large market, several respondents from Kent were concerned that institutions "are beginning to encroach on [Kent's territory]."

Over a decade ago, K State opened a satellite campus in the city. As a result, Kent has had a significant competitor located close to its campus. In order to remain competitive with K State, Kent adopted the regents calendar to benefit from cross registrations with K State, among other benefits. Kent is the only MCC college to adopt the regents calendar. All other MCC colleges are on the same academic calendar. Respondents reported an erosion of Kent's competitive edge in the city as K State offers more and more similar courses and programs on its satellite campus. "But I think that the challenges have grown....I mean K State has come to [the city] offering many upper-level study classes that we offer in computer science, psychology, and English. This year there's going to be Spanish for the first time," said Kent's vice president and dean of faculty (R17).

Summary of environmental uncertainty.

This analysis shows that respondents believe that the six colleges of the MCC operate in a highly uncertain environment. Several factors contribute to this uncertainty. The first factor is the nature of the colleges: Their survival is dependent on maintaining enrollments and the tuition revenue that enrollments

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
generate. Second, the colleges operate in a highly competitive environment, where they compete for students with an array of private and state-supported colleges and universities. Third, the nature of constituents of higher education in Kansas further increases the level of environmental uncertainty. The unfavorable economic and demographic conditions add to the competitive pressures facing these colleges. Operating in a state with an agriculturally based economy and relying on a stagnant population of 18 to 22 year olds from which to generate enrollments are symptoms of this unfavorable economic and demographic pressure. Constituents in Kansas are also characterized by their consumerism, which is a product of Kansans' sensitivity to the price of tuition coupled with the numerous educational choices they have in the state.

The threats from distance education programs and satellite campuses are not significant at this time; however, they still cause some uncertainty and concern for the colleges.

The result of competitive rivalry, unfavorable economic and demographic conditions, and consumerism is the fact that in order to survive, MCC colleges must spend more and more scarce resources to compete for students who live further and further away. One provost summed up the predicament of these colleges by saying:

> Approximately half of our students at this institution come from more that 500 miles away. And because of the number of institutions, because of the
competition, because of the aging population, because of the decline in high school grads, these consortium institutions are forced to reach further to fill classes (R4).

A president of another MCC college said that the real issue is not even one of sustained growth, but of fighting for existence: “Oh, I think in Kansas the question is one more nearly of survival. There are a lot of very fine schools who have been supporting and embracing appropriate missions and because of dropping enrollments particularly, and because of precarious economic environments, institutions aren’t able to survive” (R1).

**Motives**

Motives are defined in this study as the reasons, based in theory that organizations engage in IORs. A fundamental question of this study is what causes or motivates organizations to form IORs? Theories of collective behavior, outlined in the previous chapter, attempt to explain IORs from several unique perspectives. Analysis of the data shows that two theories - Transaction Cost Theory (TCT) and Organizational Ecology (OE) - provide an explanation for the formation and maintenance of the MCC. Research on Corporate alliances has shown that organizations engage in IORs for a combination of reasons (Harrigan, 1992; Saxton, 1997) and, therefore, no one theory can explain all of the motives for IOR behavior (Oliver, 1990). One assumption of this study has
been that colleges and universities form IORs for multiple reasons.

Transaction cost theory.

According to Transaction Cost theorists, organizations engage in IORs to minimize transaction costs and increase operating efficiencies by reducing costs, increasing economies of scale, or both (Williamson, 1985). IORs are most likely to form among college and universities when resources are limited and the transaction costs of market-based solutions, such as contracting, or self-provision are very high (Ferris, 1991). From the TCT perspective, joint ventures, joint programming, facilities sharing, information sharing, cross registration, and joint purchasing are all means to reduce the transaction costs associated with the need to provide services for constituents. Joint purchasing programs or buying consortia are means to establish economies of scale and reduce the costs of providing goods and services by increasing members' buying power. Joint programming and cross registration are means to provide educational opportunities for constituents without the required up-front investment in personnel, facilities, and equipment associated with self-provision. An underlying assumption of the theory is that some level on interdependence exists among the partners in an IOR.

Analysis of the data collected in interviews with respondents from the MCC colleges reveals that TCT does provide an explanation for the formation and maintenance of the consortium. Member colleges benefit from joint programming, cross registration, joint purchasing, and a decades-old joint
venture that is described as the "backbone" of the consortium. Much of the joint programming, including special education, secondary teacher education, and computer science, is taught at the MCC central offices.

Joint Programming. The colleges of the MCC sponsor several joint programming initiatives which are designed to enhance the educational experiences that they can provide to their students. According to a dean of students, through joint programming, her department is able to provide "significant benefits" to students (R12). Budgets for student services at each of the colleges are "strapped," she said. Through the consortium, the colleges can pool resources, apply for grants together, and deliver programs, training, and services that none probably could deliver alone. Examples of joint programming in the student services area include RA training, on-campus entertainment, and the ability to bring guest speakers on campuses.

Student services professionals on the campuses are trying to build more cooperative kinds of opportunities that can be beneficial to all of the colleges. They meet periodically to discuss opportunities for joint programming. According to another dean, "I think especially in terms of student's activity, it's become a very expensive venture to have provided an entertainer, group, or lecturer to college campuses. We can't do it on our own" (R2).

Another important joint programming initiative for the colleges is the undergraduate program is special education. Since 1973, colleges of the MCC have cooperated to offer teacher education leading to the Kansas certificate
endorsement in special education (Midwest College Consortium, n.d. c). One respondent described the program as “very strong” and “a great advantage to our students,” who are interested in pursuing this career (R11). Courses are offered in classroom space located in the MCC central offices. According to a provost, the MCC produces over half of all the special education teachers in the state of Kansas, and it is the only undergraduate program in the state available through a private college education (R4).

In a recent analysis, it was estimated that it would cost approximately $600,000 per year to offer special education programs independently; however, by offering the program jointly, each campus saves approximately $60,000 per year (Brown, 1999). “It would be too expensive for any of us to operate individually at cost efficiency. We just couldn’t afford to do it,” said the provost (R4). The real cost savings, according to several respondents, is in the ability of the six colleges to share the cost of maintaining a special education faculty. “If you had six institutions all hiring two to three faculty, you wouldn’t have a special education program on these campuses,” said a vice president for business and finance.

By keeping transaction costs to a minimum and pooling resources through the MCC, the colleges are able to offer a joint program that benefits their constituents and their institutions without incurring huge investment costs.

It’s a niche market for us. We are able to do it and do it extremely well. To be able to have a superior
special education program does not require us to have a super capital outlay in the buildings, equipment - only high quality, dedicated teachers. As a resource, we're able to share all of that (college president, R1).

In 1999, the MCC Board of Directors voted to offer a joint program leading to a certificate in athletic training. The certified trainer specializes in the rehabilitation and prevention of sports-related injuries (Midwest College Consortium, n.d. d). The joint athletic training program sponsored by the consortium came about as a result of changes imposed by the national accrediting organization. Beginning in January 2004, all undergraduate candidates seeking certification in athletic training through the national association must graduate from an accredited program. The accrediting process was made more stringent and educational requirements were increased making it more difficult for colleges and universities to develop and maintain an accredited program. Five of the six colleges realized that they could not offer the program on their own; therefore, they decided to offer the program jointly through the consortium (R16). The MCC began the accreditation process in the fall of 2000 and should be eligible for formal accreditation in the fall of 2003.

Only Kent College opted to pursue accreditation on its own. Part of the reasoning behind the decision to offer the program on its own, said one respondent, was the fact that Kent already had much of the resources in place to
offer a program in athletic training (R17). Kent's Department of Health, Physical Education, and Recreation already offers a certificate in athletic coaching, along with majors, minors, and other certificates in seven areas of health, physical education, and recreation (Kent College, 2000). Self-provision is consistent with TCT. If the transaction costs associated with self-provision are less than the cost of partnering or contracting, then theory holds that the organization will opt for self-provision (Williamson, 1985).

The motivation for five of the six MCC colleges is similar to the motivation for partnering in special education. They are able to provide an educational opportunity to their students that none could provide on their own. According to one respondent, “It's something that our campus couldn't support by itself, but it's a nice program to have through the [MCC]” (R11).

Several admissions officers in the MCC spoke about the importance of these joint programs to the recruitment effort. Special education, secondary teaching, and athletic training are popular programs. According to the Dean of Admissions at Branford College, every year the college graduates 30 to 40 education majors out of a class of approximately 110 students. He predicated that with the accreditation of the MCC athletic training program, 15 to 20 incoming freshmen will declare athletic training as their major (R8).

At Tolland College, said the Vice President for Enrollment Management, the programs have been a “benefit” to the recruiting effort at Tolland. “But having the cooperative, the shared programs, special education, now athletic
training, and some of the others, it would not happen if it weren't for the [MCC], and I think we'd all be worse without this" (R22).

Cross Registration. Cross registration is another area in which the colleges are able to minimize transaction costs while providing educational opportunities to their students. Being small liberal arts colleges, they can't match the depth and breadth of educational offerings that Kansas' larger, state supported institutions can offer. The colleges have small departments, perhaps as few as two professors. One professor, for example, may specialize in American History or European History (R11). Branford College, for example, does not offer French courses; however, a Branford student who is interested in taking French courses can cross-register at either Milldale or Kent, both of which offer French and are within 10 to 15 miles of Branford (R11).

The benefit of cross-registration is both economic and academic. The consortium allows students to access a broader curriculum which would be available only at larger institutions. Cross-registration means that students are able to get the classes they need in order to graduate in four years. It also benefits the colleges when professors teach upper level courses. The colleges are able to achieve economies of scale in these classes, which might normally have only 10 students in a class. Through cross-registration, the classes have more students (R4). According to a president, “For any institution with an enrollment of 450 students, how can we really provide the kind of broad-ranging offerings in the curriculum [given] the size of the endowment, the size of the
budget?" (R1). “Definitely, the economic benefit would be the number one benefit, being able to offer more options to students than we could offer if we were on our own,” said a vice president for finance (R6).

Joint Purchasing. Consistent with TCT is the formation of buying consortia or joint purchasing programs to establish economies of scale. For small private colleges, the ability to form buying consortia can increase their purchasing power, ultimately saving these colleges money. Two recent joint purchasing initiatives sponsored by the MCC are the health insurance plan and the internet service. According to a computer systems administrator, the colleges were able to achieve a “substantial discount” by approaching an internet provider together, rather than if they were to purchase the service separately (R24). The joint purchase was “an opportunity that we just couldn’t bypass” and is a “tangible benefit of collective buying power,” said another respondent (R12).

The joint health insurance program sponsored by the MCC serves over 600 employees across all six colleges (R5). The consortium, said a business manager, gives the colleges “buying power” (R6). Rather than having six separate policies, each supporting no more than 100 employees, the colleges have been able to achieve economies of scale that none could match without working jointly through the consortium. “The first six months [of the joint health plan] have been a Godsend to us all. Great company, you know. Solid savings,” said a president (R13). The savings have been so significant that the colleges are contemplating a joint liability insurance program, among others (R6).
Joint Venture. The largest and historically most important joint venture sponsored by the MCC is the shared administrative computing system. Housed in the MCC central offices in Milldale, its support staff consists of five programmers and a print operator. Each specializes in one or more administrative service areas (Midwest College Consortium, n.d. e). The computer system supports the administrative needs of all six colleges with computing modules dedicated to development, admissions, registration, students' accounts, and payrolls, among others. "I mean it's everything we do, and I'll tell you it's just the life blood that makes us function," said a controller (R21). The importance of the administrative computing system to the operation of the colleges is evident in the responses from members in the MCC. For example, one called it "a unifying element" (R8). Another said it was "the glue that holds [the consortium] together" (R18).

The importance of the administrative computing system is evident, not only in the functions it provides in service of each college, but also in the annual savings that each college is able to realize. For example, the operating budget for the administrative computing system in 1998 through 1999 was $351,551. According to an internal report, the shared system saves the six colleges a combined $500,000 per year in operating expenses (Midwest College Consortium, n.d. e). None of the colleges could afford the staff, maintenance, and equipment to run a system on its own, said a business manager (R5). "That would be very difficult to justify purchasing and supporting annually with the kind
of budget we operate on," said a business manager from another college (R6).

"So, I think that the greatest advantage is that we have a very good level of administrative computing available to us, at less costs, greater continuity, than we can afford ourselves," said a president (R18).

In summary, from the TCT perspective, joint action such as special education, teacher education, athletic training, cross registration, purchasing, and administrative computing are all ways that the colleges come together to reduce transaction costs of doing business, achieve certain efficiencies, and increase economies of scale, thereby providing more to their constituents while saving resources. "Oh, I think cost reduction and economies of scale work into it clearly," said a president (R1).

Organizational ecology.

Organizational Ecology (OE) focuses on cooperation and sharing among organizations for mutual benefit (Morgan, 1986). OE predicts that organizations in an industry, which are linked by a common purpose or are structurally similar, will form IORs as means to overcome environmental uncertainty (Alexander, 1995). IORs form so that members can share information, promote common interests, or seek solutions to common problems (Trist, 1983). In higher education, organizational ecologists would state that colleges and universities form IORs to share resources, information, and expertise. The focus is on a group of similar organizations with a certain level of interdependence and linked by a common purpose and mission, cooperating for mutual benefit.
Analysis of the data collected in interviews with respondents from the MCC colleges reveals that OE provides an explanation for membership in the consortium. The data show that respondents value interactions with colleagues from the other MCC colleges. They cited professional mentoring, and the ability to share ideas, problems, and solutions with like-minded colleagues who face similar circumstances.

The MCC has a series of committees which meet to address various issues important to the operation of the consortium and its member colleges. The steering committees have regularly scheduled meetings throughout the course of the year. The MCC Board of Directors is comprised of the college presidents. The Business Policies Committee is comprised of the colleges' business officers. The Academic Policies Committee is comprised of the colleges' academic deans. The professional committees are comprised of professionals from various academic support areas. They include committees of career services counselors, admissions directors, librarians, registrars, and student affairs. Academic committees are comprised of professionals who work in the education programs administered through the consortium: computer science, athletic training, and teacher education, and special education (Midwest College Consortium, n.d. a).

These committees, some of which are formal and meet regularly, and some of which are less formal and meet less frequently, serve two purposes. First, these committees attend to the business of the MCC. Second, they serve
as a setting for colleagues to share, commiserate, and express a sense of collegiality. "We get together monthly," said a business officer, "and same with the deans, the academic deans, and the presidents. We each have a monthly meeting. It's wonderful because it provides a network where you can, you know, share ideas, the latest issues, and solutions" (R5).

These meetings give members of the MCC the opportunity to discuss issues of common interest, said an academic dean.

It's really unusual in a small college situation to have an opportunity to get together regularly with your peers. We have an opportunity to share things that are going well on our campus, but also seek advice from people on issues that are challenging (R4).

An academic dean from another college agreed by saying that they discuss everything from academic and administrative issues to social and cultural issues on the campuses (R17). A dean of students describes these meetings as opportunities to overcome the professional isolation that can result from small colleges with small professional staffs. "You look at the staff. Ours is essentially a two person staff. Most of the campuses are one or two people. It's not a university where you have a student life staff with 25 or 30 folks who can walk down a hall and bounce an idea off a colleague" (R2). A dean of admissions said that he often picks up a phone to call an MCC colleague about an issue. "I'll talk to one of them to say, 'Hey, what do you do about this? What are you doing
about that?" (R8). A registrar said that when they have been able to attend
conferences, she and her colleagues have roomed together (R23).

Mentoring among the college's professional staff and teaching faculty is
another aspect of the consortium that has a theoretical basis. Sharing
knowledge, expertise, and skills for mutual benefit is one way the colleges come
together to help one another. Small departments with small budgets means that
these colleges cannot take advantage of the professional development and
training opportunities that their counterparts at the larger state institutions may
have to offer their employees (R2). An academic dean recounted the support
she felt from her colleagues when she first started in her position. "I felt that
when I was a new dean, I felt that I received good mentoring from more
experienced deans, and it was so both as a faculty member. I experienced that
collegial sharing with the [MCC]. That was very important to me" (R17). Two
registrars recounted their experiences with colleagues from other MCC colleges.
"I am just beginning my fourth year as registrar. Some of the [MCC] schools
have registrars with much more experience, and I was able to train over to
[Milldale], and I spent some time with their registrar" (R15). According to the
register at Branford College, "The register at [Tolland] was extremely helpful to
me when I first started. And the registrar down at [Milldale] College was very
helpful to me in teaching me how to do my job" (R11).

The mentoring among professions in the colleges even extends to
admissions offices and enrollment managers who would seem to have a natural
inclination to be competitive. "I was surprised, I guess. I was really surprised to find enrollment managers, really, those who had been in the business a long time, were willing to help people learn the business" (R14).

From this analysis, OE does provide an explanation for membership in the consortium. Mentoring, cooperation, and sharing for mutual benefit are evident in the responses. As one person put it, "I think there's a high level of trust and willingness to share for mutual benefit" (R5).

No evidence was found that Resource Dependence Theory (RDT) or Contingency Theory (CT) explain the motives to form and maintain this IOR. RDT predicts that small, structurally equivalent organizations with some degree of interdependence will form IORs to equalize their competitive position vis a vis more dominant organizations in an industry (Galaskiewicz, 1985).

Consistent with RDT is the proposition that consortia form among educational institutions to enhance their market power over larger rivals (Bridges & Husbands, 1996). The MCC does not serve as a body to manage power differentials with larger state institutions or advocate on behalf of member organizations before the state legislature (R1). All of the colleges in the MCC belong to the Kansas Independent College Association (KICA). The KICA is the primary lobbying organization for all private colleges and universities in Kansas. Most also belong to the NAICU.

Although the formation and maintenance of the MCC cannot be explained in terms of RDT, at a different level, the formation and maintenance of the KICA
and NAICU is consistent with RDT. According to Alexander (1995), organizations can be members of multiple IORs, with each serving a different purpose.

Contingency Theory predicts that IORs will form to establish stable and predictable resource flows (Oliver, 1990), or to reduce the risk associated with programs, ventures, and other initiatives designed to meet the needs of constituents (Aldrich, 1979). While one could surmise that the consortium helps members reduce risk and establish predictable resource flows, the evidence from data collected does not indicate this.

Organizational Interdependence

Organizational interdependence is the resource-based aspect of the relationship. It is the degree of similarity and compatibility in resources needs among partners in an IOR. Organizational interdependence exists whenever organizations form an IOR to share or exchange resources. To be a successful IOR, organizations must recognize some level of interdependence and act on that recognition by forming an IOR (Berquist, Betwee, & Meuel, 1995). The motive for IOR formation is based in theory; however, if no degree of interdependency exists among partners, then no reason would exist to form the IOR. One could surmise that a fairly high level of interdependence exists between an automobile manufacturer and a tire manufacturer; however, one might not expect much interdependence between an automobile manufacturer and a frozen pizza manufacturer.
Analysis of the data indicates that organizational interdependence exists among the colleges of the MCC. The colleges share or exchange an array of resources in their IOR to develop and maintain joint programs such as athletic training, special education, and cross registration, among others. Based on the IOR continuum (Figure 1-2), shared programs, cross registration, and other programs, represent a moderate level of intensity among partners in the MCC. These programs were described by a respondent as a major benefit to the colleges and their constituents; however, while very important to each college, dissolving any or all of these programs might not endanger any of these colleges. The joint administrative computing system represents a much higher level of intensity in the relationship. Many respondents described this venture as the “backbone” and “life blood” of the MCC because of (1) its importance to the overall operation of each college, and (2) the financial investment required to provide this service independently.

Relationship Characteristics

Relationship characteristics are the social factors that help enable and maintain the relationship over time. Components include partner reputation, partner trust and organizational similarity.

Partner Reputation.

Partner Reputation is an important concept in the formation and maintenance of IORs. Evidence suggests that a positive relationship exists
between partner reputation and the perceived effectiveness of an IOR among its partners. In other words, a positive reputation increases the chance that the relationship will be satisfactory (Saxton, 1997).

Reputation is considered to be a multidimensional construct and reflects an organization's abilities in the areas of management, product quality, and financial soundness (Dollinger, Golden, & Saxton, 1997). A college's reputation would include perceptions about its administrative experience and effectiveness, the quality of its students and faculty, and its financial soundness. Reputation can be viewed from two perspectives. Internal reputation refers to partners' perceptions about each member's relative reputation. External reputation refers to how partners perceive constituents' views of each partner's reputation.

Analysis of the data reveals (1) that with minor exceptions, members view one another as having positive reputations in terms of academics, administrative effectiveness, and overall quality, and (2) that constituents view their reputations as being similar and positive.

Respondents from Bristol College believe their college is the most academically eminent of the six MCC colleges (R20). Respondents from other MCC colleges seemed to agree with this assertion. Several respondents cited the U.S. News & World Report rankings, in which Bristol consistently ranks as one of the top liberal arts schools in the Midwest and "quite a bit higher" than the other five MCC colleges (R16). "I would not want to give more credence to such vanity polls as U.S. News & World Report. At the same time, one takes a look at
these kinds of ranking systems and discovers that there is a pecking order [in reputation]." said the president of another MCC college.

However, another president disagreed, saying that he sees the reputations actually "converging" and "equalizing" (R18). Although Bristol, he said, has had traditionally the stronger academic reputation, each college excels in areas of importance. A provost from another MCC college agreed. "In fact, I see an equalizing in the schools," he said (R4). Citing similarities in enrollment patterns, faculty, students, financial soundness, and academic offerings, "Reputation, then, is really not much of an issue in terms of the relationship."

Bristol College's academic dean said that he thought Bristol was the strongest academically; however, in terms of overall reputation, "I think that they're very similar" (R20). He cited the ebb and flow of each college's fortunes in meeting enrollments, financial strength, and other areas.

Kent College's dean, who also happens to be an alumna of Bristol, also believed that Bristol's academic reputation was the strongest; however, "Nobody has broken out of the pack [in terms of reputation]. I think they're very, very similar....But I think in any one of the colleges, there are really good people. There are good faculties. There are good administrators" (R17).

Respondents generally thought that constituents tended to view the six as having similar reputations. One respondent said that she does not think the public made "a great deal of distinction" between the colleges (R17). Several respondents said that all the private colleges in Kansas tended to be perceived
to be about the same. They said that private colleges in Kansas tend to have less visibility than state institutions. "You know, private schools don't get enough press in this state from the media to give an impression" (R6). And without the visibility and exposure he said, "I don't know that the average student being recruited in Kansas is going to be able to tell you any differentiation between the schools [in the consortium] in terms of reputation academically" (R6).

One president said that he thought all of the colleges were perceived as being good because education is valued in Kansas and in the region. And while the colleges are perceived as being good, none is perceived as being great. No one college stands above the others in the minds of people in Kansas. "We all do a lot of very good things," he said, "but none of us has the premier academic program in something. So, I think from the public's perceptive, we all look the same" (R13).

**Partner trust.**

Reputation is an antecedent of trust. A partner's good reputation is transferred into trust through long-term interactions (Eisenhardt, 1989). Partner trust, like reputation, is a multidimensional construct consisting of several interacting characteristics that reinforce the perception of trustworthiness. These characteristics include the following: (1) Intention: the partner will do what is required in the relationship; (2) Competence: the partner can do what is required; and (3) Perspective: satisfactory experience with the partner. Resource exchanges among partners become embedded overtime in a social structure of
norms which rewards and reinforces trustworthy behavior (DiMaggio, 1994). Satisfactory past interactions, good intentions, and competence all reinforce the perceived trustworthiness of a partner. Trust is identified as an important factor in the perceived success of IORs (Rackman, Freidman, & Ruff, 1996; Berquist, Betwee, & Meuel, 1995).

Analysis of the data collected during interviews with respondents from the MCC colleges reveals that a high level of trust exists among the members of the colleges. This trust has developed and been fostered over a 35 year-long history of interactions among succeeding generations of presidents, deans, and other academic and administrative officers, who have regularly met and worked together over the years. This level of trust, embedded in social norms over time, has resulted in a strong sense of collegiality among members of the colleges. Respondents mentioned the value of collegiality that is felt among members of the colleges. Other respondents mentioned the ability to commiserate with, and lend support to, like-minded colleagues who face similar problems and concerns. According to a president, a 35 year-long history of working together, and similar values, histories, and experiences, has led to a high level of trust among the colleges that has resulted in a strong sense of cooperation and cohesiveness (R18).

Some respondents cited presidential leadership as an important factoring in fostering a sense of trust among the colleges' officers.

There's some great leadership at the top, and I think
that’s where it starts. I think the presidents work hard. They meet regularly. They’re respectful of each other and understanding, too, and all value trust, and everybody’s made [the consortium] as strong as they possibly can (R3).

Leading by example, the presidents help nurture trust in other working groups in the MCC, and create an atmosphere conducive to cooperation. “I think there is a lot of trust,” said another president, “but that trust is led a great deal by the trust the presidents have for each other….We want people to work together” (R1). The President of Tolland said that there is a good level of interaction among the presidents, and that he was well received and welcomed when he assumed his role as president (25).

This sense of trust is evident in the responses of other MCC members. According to a dean, “The trust level is very high,” among her colleagues in the other MCC colleges (R4). Another dean agreed, “There is a trust level among the deans, as well, and so [the consortium] has really served as a good outlet” (R2). A registrar said that she agreed with her colleagues from other MCC colleges that a strong level of trust exists among them. She cited the spirit of cooperation fostered in monthly meetings, frequent phone calls, and informal exchanges. “It’s just a very workable group,” she said (R15). The level of trust and the resulting collegiality is described by a registrar as an important aspect of the consortium. “We find ourselves kind of bonding together,” she said. Kent’s
Director of Information Systems said that the collegiality among his peers at the other colleges is good. They also meet periodically to discuss the administrative computing system sponsored by the MCC (R19).

Citing the regularly scheduled meetings of deans, business officers, financial managers, and student life officers, all of whom meet to address issues affecting their colleges and the functioning of the consortium, said a president: "The other thing that I have seen is the collegiality develop among certain administrative officers....Its effect is healthy because people gain confidence. So, the collegiality is good" (R18).

The sense of trust, of being able to meet regularly and discuss issues relevant to themselves and their colleges, even to the point of being able to commiserate with colleagues, was mentioned over and over by respondents as important. A "support group" was how a couple of respondents characterized the meetings. "From my personal standpoint," said a dean of students, "some of these meetings are truly counseling sessions themselves. When the deans get together and unload, empathize with each other - we commiserate" (R3). "But having a group of people who gets together, who understands what I do, what I go through, is a professional and personal support that I undervalued initially," said another dean of students (R12).

**Organizational similarity.**

Organizational similarity is the degree of fit among partners in an IOR, outside of the resource exchange. It is one of the social aspects of the IOR. For
purposes of this study, organizational similarity is considered a multidimensional construct consisting of similarity among partners in the areas of organizational culture, mission, structure, and status. Domain consensus also is a aspect of organizational similarity. It is the general agreements as to the operating areas of each partner in the IOR (Whetten, 1981). In other words, are the colleges serving the same students, faculty, and constituents?

"I do believe that there are many ways in which these colleges are very much alike," said an academic dean (R20). And on paper, the colleges seem very similar. (See Appendix C). They are small, private, religiously affiliated, liberal arts colleges with similar missions. They offer approximately the same number of majors, and for the most part, in similar subjects. "I think we see each other as being largely similar in what we offer," said a vice president (R21).

Our director of admissions has shown very often that one could take a catalog of one of the institutions and remove the cover and the name reference and sometimes it might be difficult to pick out what the actual differences were between the institutions (provost, R4).

"I think that's what makes this work," said a controller citing the 35 year-long history of the MCC. "I mean, really, we're more alike than we're different....We're all very similar, our size, our religious affiliation, our focus" (R21).
Although many of the respondents agreed that on the surface, the colleges do seem very similar, especially in terms of organizational structure, status, size, and program offerings, there are subtle but important differences among them. These subtle differences are the result of each college's religious affiliation, its constituents, and the type of student it attracts. Although conceding that there are many similarities among the six, the differences probably can be traced to the constituent denomination of each college, said a provost. “I think you might find a different mood, different modus operandi on some of the campuses, probably more reflecting that denomination's background, I think, part of the institution's fabric” (R4). The President of Tolland College said that Tolland and Summers College are the closest in terms of religious values (R25).

An academic dean said that using terms like “liberal” and “conservative” to describe and compare the colleges is problematic. Some may appear to be theologically conservative and politically liberal, while others may appear to be just the opposite. He cited a report by George Dehne, a higher education consultant, who wrote that there's a range of colleges within the MCC. All are church affiliated but on a continuum of religious and denominational influence. On one end are a couple of colleges “that just exist primarily to be Christian and education is subordinate to that. And others where the religious ties are subordinate to the educational mission. In this range is where you find each college” (R20).

Summers College encourages faith-based instruction in classrooms.
They have required church attendance, and they impose certain restrictions on their students. "Three of us are truly faith-based in our curriculum and the other three are church-related," said the president of Summers. "I've worked for both [types]. I know the difference in here....It's just a different culture" (R13).

Religion, philosophy, perhaps even English Literature would be taught very differently at Summers and Tolland than they would be at some of the other colleges, he said. Although computer science, athletic training, and special education are taught though the consortium, they are professional programs, not based in philosophy or religion. He believes that it would be very difficult for the six colleges to agree on a consortial approach to teaching religion and philosophy courses. "Now we have individual faculty who, if they were part of the consortia process, would raise holy heck" (R13).

This difference in culture and its impact on the curriculum of each college has been a barrier to doing more joint academic programming and faculty sharing, said a dean from another college (R20). Even if technology could enable more academic joint programming, cross registration, and faculty sharing, the question is: Would that dilute the missions of the more faith-based institutions? The cultural differences, according to a dean of students, means that each college attracts different types of students. Tolland and Summers would be more intentional about weaving their Christian beliefs throughout the curriculum and social life of the campus.

It's not that the others are not [Christian]. They have
very similar polices and very similar philosophies. The more conservative student would say, 'But they're fairly liberal in their interpretation; they let a lot of things go; they're not as intentional about being Christ-centered' (R12).

The Dean of Student Life at Branford College, which he conceded probably, would be considered "a more liberal school" than the more faith-based colleges of the MCC, agreed with his counterpart at Summers. Although Branford is a Christian college with close ties to its denomination, Christianity is not infused throughout the curriculum and social life of the campus, as much as it is on some of the others. He cited the restrictive behavioral codes several of the campus has. Branford, he said, has a much less restrictive environment.

They're really pretty rigid, alcohol, sex, that whole thing, closely monitoring that, and very severe penalties for those types of things. We're not promoting a brothel or anything like that here, but at the same time, we're trying to deal with society as society is (R9).

The result of these subtle but important cultural differences means that relatively little competition exists among the six colleges for students. The different cultures attract different students. "We're not competing with each other very much at all," said an academic dean (R20). "I would say, no. We
don't compete for the same students," said the Dean of Admissions at Branford College. Each year he said that he may lose a few recruits to Milldale or Tolland, but generally only a few. "Our students who choose [Branford] over [another consortium college] will probably choose it because of the church relation or probably because they, you know, have a legacy of [Branford] College. They know someone who went here before...." (R8). Occasionally, the colleges will compete to recruit the same student athlete, but even this is not close to the majority of the recruiting efforts, said Tolland's Vice President for Enrollment Management (R22).

**Organizational Autonomy**

In the previous section, it was determined that there is a good fit among the six MCC colleges. The relationship is facilitating certain types of collective action; however, it is limited in other areas of collective action by the subtle but important differences in culture, resulting from differences in denominational influence and religious perspective. Ultimately, more aggressive joint action among the colleges may be limited by the desire for institutional autonomy.

Institutional autonomy is defined as the ability of institutional leaders to pursue courses of action, allocate resources, and operate in certain markets without the control of others (Levine & White, 1961). The need for resources sometimes motivates organizations to compromise autonomy by forming IORs (Pfeffer & Salancik, 1978). IORs have characteristics that make them attractive alternatives to other solutions, including their voluntary nature (Patterson, 1974),

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
maintenance of cultural and legal identity (Kantor, 1989), institutional independence (Sacks, 1994), and operational flexibility (Samels & Zekan, 1994). And autonomy is recognized as particularly important to institutions of higher education (Patterson, 1994).

Analysis of the data shows that each college in the MCC values its autonomy, and rather than moving closer, each college is seeking ways to differentiate itself to preserve autonomy and identity. According to several respondents, at one time there were conversations among some members within the MCC community about the possibility of merging to form a single institution. "I've heard some people in the past said all six of these schools should come together and form the University of Central Kansas or something....There's too much individual ownership, and I think that would be a real mistake" (R22). A respondent from another college agreed. "We want to share a few things, but yeah, we want to be autonomous, who we are." He recounted the same story about merging the colleges and said that the desire for autonomy and the importance of preserving the culture, history, and identity of each college is a reason why more cooperation has not taken place. "Why don't we get together and just make a university? I don't see it happening because of the historic roots," he said (R7). Branford's Director of Communication said that any type of merger would be out of the question (R10).

The desire for autonomy and the sense that each institution has a unique culture, identity, and history is evident in how respondents described each
college's attempt to "differentiate" itself by promoting its "uniqueness" through efforts to develop special marketplace "niches," areas in which each college excels or wishes to excel. According to a dean of admissions, to successfully recruit students, "It's going to be because of the uniqueness that each one of [the colleges] has in the offerings for students as opposed to what the [MCC] could develop there" (R8). A vice president for enrollment management at another college agreed. He said that although the colleges appear to be similar on paper, "Each of us has our own distinctiveness. I think if we lose our distinctiveness, we lose all reason for existence" (R22).

Each college is attempting to forge its identity in both the social and academic aspects of its campus. "For [Tolland], it's Christian. It's Christian centered and there's really a strong emphasis, for there is a niche in the market to target," said a Tolland respondent (R6). And Tolland's Vice President for Enrollment Management agreed. He cited not only Tolland's Christian centered mission, but also its unique programs in religion, its degree in youth ministry, as well as other programs that Tolland believes differentiates them from others. At Milldale College, according to the Provost, "We intentionally choose to be a residential campus. Approximately 70 to 80 percent of our students reside in residential halls" (R4). The focus on residential campus life gives a sense of accessibility on campus and fosters rapport among the students, faculty, and staff, he said. Respondents from Kent College, the only urban college among the six, cited its urban location; its diverse student body; its adult, accelerated
degree, and professional programs, as ways that it is differentiating itself and developing its own niche. Although similar in so many ways, said the President of Kent, “Each of us is attempting to develop our own niche. I think ours is still under development” (R18).

Performance Outcome

The performance outcome is essentially the result of the IOR. It is each partner’s overall level of satisfaction with the IOR. It is a function of motives (i.e., the reasons why organizations engage in IORs), a satisfactory degree of resource interdependence, and relationship characteristics, including partner trust, partner reputation, and organizational similarity.

Analysis of the data shows that respondents generally believe that the MCC is a successful relationship and beneficial to their colleges. “We get a lot of benefits from [the consortium],” said a president. “We love it here, and by comparison, since we have the smallest balance sheet, probably we proportionally benefit from it more than the others” (R13). The Dean of Admission at Branford College cited the importance of the academic programs such as special education, athletic training, and cross registration, which are sponsored through the MCC. “I think we are [better off], and the reason that we are better off with the [MCC] is because in no small part education is the reason most students come to [Branford] College,” he said (R8).

A president of another college said that the MCC is successful because each college needs it to be successful. Each college contributes to ensure the
MCC succeeds because the benefits each college derives - both administrative and academic - are vitally important to the success of each college. Asked to describe the importance of the MCC, he said, "I think it's the highest superlative. I feel very strongly about it. But I have to quickly add the success is a self-fulfilling prophecy. We want it to succeed. We're committed to making it succeed. If it doesn't succeed, we suffer" (R1). "It's been beneficial," said a vice president recounting the long history of the MCC. "It is beneficial. [I] expect it will be beneficial" (R17). The information technology director of one college said that the benefit of the shared administrative computing system alone means his college is better off with the MCC than without it (R19).

It was suggested in an earlier chapter that the performance outcome might be defined by how well an organization is able to compete in a marketplace when trying to successfully meet the needs or demands of constituents. Two measures of performance, (or satisfaction with the IOR), are competitive advantage and transactional value. Competitive advantage is a set of capabilities which help an organization to compete more effectively (Hamel & Prahalad, 1994). In higher education, competitive advantage can be attained through superior academic programs, faculty, location, price, financial condition, or anything an institution may use to compete effectively (Jones, 1997). The greater the perceived competitive advantage gained through the IOR, the more successful the partners will perceive the IOR to be. Value is an estimate of the ability of a product or service to satisfy the demands, mandates, or needs of
constituents. Successful organizations create value when they respond to constituents’ needs (Kotler, 1984). IORs create value for constituents when partner organizations pool capabilities to meet needs. The transactional value they create for constituents is the measure of performance by which they judge the IOR (Dunham, Marcus, Stevens, & Barwise, 1993).

Analysis of the data shows that respondents talked about competitive advantage and value in three intersecting areas. In one area is the abstract concept about the attributes of a small, liberal arts college and how that (1) can be used as a selling point when competing in the marketplace, and (2) the value of that type of education for certain students. For example, a registrar talked about the benefit of a small college setting, and the ability of students to interact with faculty (R23). In another area, some respondents spoke about the specifics of their colleges and the competitive advantage they derive from their colleges’ programs, faculties, and cultures. The value that each college creates for its constituents is a product of this unique blend. Then, in another area, some respondents spoke about the competitive advantage gained by, and the value created by, membership in the MCC - the area on which this study is focused.

For example, a vice president for enrollment services spoke about the benefits of a liberal arts education, especially in a small campus setting, with its accessibility and inclusiveness. She then spoke about the benefits of her college’s special programs, attributes, culture, and mission. Finally, she spoke about the consortium and its value in providing students with educational
opportunities and the importance it has been to the recruitment effort (R14). A vice president for enrollment management at another college spoke about the competitive advantage derived from the MCC. "These kinds of consortia opportunities give you the latitude to be a small campus in a big way. And so you can do some things that you maybe you thought you can only do at K State or KU" (R22). The value added nature of the MCC makes it worthwhile, said another respondent (R10).

Several respondents reinforced the notion that the MCC adds value to the educational experience of students because it provides opportunities and choices. "There's no question from an academic standpoint of providing certain services to students....So, ultimately, the students are better served, too. I think that's critical," he said. He cited the joint programming and administrative support derived from membership in the consortium. "So, I think there's no question that it's very valuable to students" (R3).

**Summary of Findings and Conclusions**

It is evident from the preceding analysis of data that many components of IOR theory are present in the development and institutionalization of the MCC. The following is a summary of the study's findings and conclusions, which are drawn from the data analysis.

**Conclusion One:** The colleges of the MCC operate in a highly uncertain environment. These colleges are reliant on enrollments and the tuition revenue generated by enrollments. As a result, they are in a precarious position due to
(1) a highly competitive marketplace, (2) the unfavorable demographic and economic conditions of the region, (3) a constituent base which is very consumer oriented, and (4) an indeterminate but perceived threat from new forms of competition which are enabled by technology. This perspective was consistent among respondents. According to theory, environmental uncertainty is an underlying factor in the formation and maintenance of IORs (Williamson, 1985); therefore, the environmental context in which these colleges operate is essential to understanding IOR behavior in this case.

Conclusion Two: The motivations or reasons why these colleges are in this relationship can be explained by theories of collective behavior. Two theories, Transaction Cost theory and Organizational Ecology provide an explanation for the MCC. According to Transaction Cost theory (TCT), IORs form to develop certain operating efficiencies by reducing the costs of doing business, increasing economies of scale, or both. Special education, secondary teaching methods, athletic training, and other programs sponsored by the consortium are means to provide services to constituents while reducing the transaction costs of the colleges. Cross registration, joint purchasing, and a shared administrative computing system help establish economies of scale.

Organizational Ecology (OE) is evident in the way the colleges cooperate and share for mutual benefit. The mentoring that takes place, as well as the sharing of ideas, information, and solutions to problems for the mutual benefit, are all consistent with OE and is another factor in the evolution of this
consortium. These perspectives were consistent among respondents.

Conclusion Three: A high level of organizational interdependence exists among the colleges. Organizational interdependence is the resource-based aspect of the relationship. It is the degree of resource compatibility (i.e., sharing and exchanging resources) among partners. The colleges share an exchange or array of resources to develop and maintain the academic and administrative programs sponsored by the MCC. All of these programs benefit the colleges.

Conclusion Four: Strong relationship characteristics are evident. These characteristics are the social aspects of the IOR which enable the relationship and help maintain it over time. Components of this include partner reputation, partner trust, and organizational similarity. The data show that respondents recognize and value each college's positive reputation. Respondents also perceive the reputations of the six colleges to be viewed similarly among external constituents. And according to Saxton (1997), the perception of a positive reputation among partners in an IOR increases the chance that the IOR will be satisfactory.

The other social aspect that helps enable and maintain an IOR over time is trust. Respondents reported a high level of trust among member colleges. The level of trust among members of the MCC has been institutionalized through long-term interactions over many years. Trust has been identified as an important factor in the perceived success of IORs (Rackman, Freidman, & Ruff, 1996). These perspectives were consistent among respondents.
Organizational similarity is the degree of fit among organizations which helps the partners maintain the relationship apart from the resource exchange. Organizational similarity is the multi-dimensional construct describing the degree of similarity in culture, mission, structure and status. Similarities among partners in an IOR are predicted to lead to a successful partnership (Saxton, 1997). Respondents reported that the colleges are similar in many ways. They are small, private, church-related, liberal arts colleges with similar missions and offerings. However, subtle differences in culture exist among the six due to religious and denominational influence. These subtle differences among the six colleges have not been important enough to erode the partnership over time.

Conclusion Five: Each college of the MCC values its autonomy and rather than moving closer together, each college is seeking ways to differentiate itself to preserve autonomy and institutional identity. Autonomy has long been recognized as important to colleges and universities (Patterson, 1994). The sense among respondents is that each college has a unique culture, history, mission, and identity. This is evident in how they reported efforts by each college to differentiate itself. Each college is attempting to develop its own niche and emphasize its own uniqueness both in its academic programs and in its campus life. These perspectives were consistent among respondents.

Conclusion Six: Respondents believe that the MCC is a successful partnership and benefits the colleges. During interviews, respondents cited the importance of the programs and services sponsored through the consortium.
They cited the competitive advantage attained through the partnership, as well as the educational value the colleges are able to provide to their students. These perspectives were consistent among respondents.
Summaries and Conclusions

Introduction

The contents of this chapter are presented in the following format. First, the rationale for this study is reviewed, including its purpose, importance, and goals. Second, a summary of principal findings is presented, and how the findings relate to theory is reviewed. Third, suggestions for further research are presented. Fourth, implications as they pertain to IOR policies are discussed.

Rationale for the Study

In Chapter 1, it was proposed that American higher education is moving into a new phase in which competition among institutions is likely to intensify due to environmental challenges in the higher education marketplace. Small private colleges, which are especially reliant on enrollments and the tuition revenue enrollments generate, are vulnerable to these environmental challenges. This puts these colleges at a competitive disadvantage with more selective private institutions and state-supported institutions (Cobb & Nelson, 1997). Because of their limited resources, the formation of IORs is one possible coping strategy that may be an important factor in the survival and success of more vulnerable colleges (Bridges, 1996).

As stated in Chapter 1, this study is important for several reasons. First, small private colleges are an important sector of American higher education and should be preserved. Second, very little research exists on the subject of IORs
in higher education, especially as it pertains to small private colleges. Most of
the articles surveyed on the subject were descriptive, evaluative, or opinion-
based. Third, this study adds to the literature by researching, developing, and
evaluating a unique, theory-based, integrative model. The conceptual model
presented in Chapter 2 guided this study. A revised model, based on the
findings of this study, is presented later in this chapter.

This study builds on earlier work by developing a comprehensive theory-
based model of interorganizational relationships. The purpose of this study is to
advance the current knowledge of the subject using the conceptual model, while
also evaluating the model's relevance through an examination of (1) the motives
colleges have for engaging in IORs, (2) the social aspects that help maintain the
relationships, and (3) the overall measure of success and the level of satisfaction
in the relationships. Specifically, this study answers the following questions.
First, why do the colleges of the MCC engage in this relationship? Second, how
do they maintain the relationship over time? Third, how do they define the
measure of success in this relationship, and what is their level of satisfaction with
the relationship?

Summary of Principal Findings and Integration with Theory

Six principal findings resulted from the data analysis presented in the
previous chapter. These findings address and answer the research questions,
which are the focus of this study.

(1) Why do these colleges engage in this relationship?
Finding One: The colleges are operating in a highly uncertain environment.

Finding Two: Theories of collective behavior explain why these colleges are members of the MCC.

Finding Three: Organizational interdependence exists among the six colleges.

The six colleges operate in a highly complex and turbulent environment. Membership in the MCC allows each college to cope with environmental uncertainty by sharing and exchanging resources for mutual benefit and survival. According to theory, the formation of IORs is a response to environmental uncertainty (Pfeffer & Salancik, 1978; Williamson, 1985). In order to reduce uncertainty, organizations will try to develop coping strategies to assure organizational survival (Pfeffer & Salancik). Organizations may employ management tactics to restructure and improve internal processes. They may also employ marketing tactics to reposition the organization in the marketplace. One tactic is used to increase operating efficiencies. The other tactic is used to increase market share. However, these tactics may prove only marginally effective, especially for small private colleges which are already financially lean, have narrowly focused curricula, offer basic services, and have small administrative structures. And the ability to increase enrollments may be hindered by the colleges' inability to afford large capital outlays required to support substantial increases in enrollments.
IORs are another coping strategy that colleges can employ to reduce environmental uncertainty if their ability to use management and marketing tactics is hindered because of scarce resources. Environmental uncertainty is the underlying motivation for IOR formation. It is one of several possible coping strategies. For some small private colleges, it may be the only viable coping strategy. As revealed in the previous chapter, the colleges of the MCC face a highly uncertain operating environment and are limited in the strategies they can employ to cope with this uncertainty due to scarce internal resources.

These findings are consistent with the findings of other researchers who studied IORs in higher education. In a case study of a collaboration among business schools attempting to form an accrediting agency, Phillips (1994) found that social, political, and economic forces in the environment lead to the formation of IOR governing structures designed to cope with the environmental pressures. Schmick (1986) used case study methodology to trace the development of a consortium and found that environmental conditions are an important factor in IOR formation among institutions. In a case study of three academic departments, Varecka (1992) found that a decrease in enrollments and institutional funding motivated the departments to form a joint academic program to cope with the environmental conditions that were beyond their control individually.

Partner characteristics are the resource-based aspects of the IOR. This is a function of the theoretical motives organizations have for engaging in IORs,
and the degree of organizational interdependence in terms of the resource needs among partners in an IOR. Environmental uncertainty motivates organizations to seek coping strategies to reduce uncertainty. Motives are revealed in theories of collective behavior. However, some degree of resource interdependence (i.e., the ability to share or exchange resources) must be recognized and acted on to form the IOR.

When IOR coping strategies are employed, theories of collective behavior become relevant. These theories address, from unique perspectives, the specific motives each college has for engaging in this relationship. The theories describe the types of resource exchanges in the relationship, how the relationship is structured, and relative benefits each college realizes as a result of the relationship. Two theories of collective behavior were determined to provide reasons for these colleges to engage in this consortium. According to Transaction Cost Theory (TCT), organizations engage in IORs to develop operating efficiencies, reduce costs, or establish economies of scale. Through joint action to increase efficiency, reduce costs, or increase buying power, these colleges are able to do more with less. TCT discussed in the previous chapters explains why the colleges share and exchange resources to form joint programs like the special education program, the athletic training program, cross registration program, and the joint administrative computing system of the MCC.

These findings are supported by Dorger (1999) who wrote that effective cooperation among higher education institutions includes sharing and
exchanging resources to develop joint purchasing programs and other programs that benefit member institutions. According to Strosnider (1998e), private colleges across the country are collaborating increasingly to cut costs and increase efficiencies. And according to Baus and Ramsbottom (1999), "The opportunity to achieve economies of scale and cost savings through nonduplication of services is another reason colleges have created consortia" (p. 5). In a case study of a faculty development program, Dotolo (1999) wrote that consortia could be successful vehicles through which colleges and universities can work together to promote effective teaching on their campuses.

According to Organizational Ecology (OE), organizations form IORs to share and cooperate for mutual benefit. The focus is on a group of similar organizations, linked by a common purpose, cooperating for mutual benefit. OE explains why members of the MCC value collegiality, mentor, share ideas, share expertise, and jointly seek solutions to problems for mutual benefit. This finding is consistent with Larrance (1999) who described factors that create successful consortial cooperation. Successful cooperation among higher education institutions should be measured not only by the effectiveness of cost savings and other efficiencies, but also by the collegiality and collaboration the relationship fosters among members. Collegiality and collaboration can help reinforce and strengthen the relationship. In a mixed study design, Bogo and Globerman (1999) found that developing good interpersonal relationships are important factors in collaborative efforts.
Organizational interdependence exists among the six colleges. Organizational interdependence is the degree of similarity and compatibility in resources needs among organizations in an IOR. As described in the previous chapter, the colleges share or exchange an array of resources to develop and maintain their joint programs and other ventures sponsored through the MCC. In the absence of some degree of resources interdependence, there would not be much of a reason for the relationship to continue. These findings are supported by Larrance (1999). Recognition of, and the need for, interdependence among small private colleges motivates these institutions to look for opportunities to develop cooperative relationships. In a case study of three inter-university research partnerships, Hoeflich (1994) found that institutional interdependence among partners is vital to successful collaboration. Partnerships in which members are dependent upon one another is an important factor in IOR formation and success. In a case study, Livingston and Rosen (1998) found that institutional interdependence, among other factors, contributes to a successful consortial relationship.

(2) How do these colleges maintain this relationship over time?

Finding Four: Strong relationship characteristics are evident in the MCC. Relationship characteristics are the social factors of an IOR that enable and maintain the relationship beyond the motivation to procure resources. These enablers include partner trust, partner reputation, and organizational similarity. Both trust and reputation have been identified as important factors in the
perceived success of an IOR among member organization (Dollinger, Golden, & Saxton, 1997; Rachman, Friedman, & Ruff, 1996). Lack of trust among partners, or associating with partners of questionable reputation, in theory, should hinder the growth and development of the relationship, making it unsatisfactory for members. Respondents from the colleges of the MCC reported a high level of trust among members of the consortium. This trust has developed over a 35-year-long history of interaction and cooperation among succeeding generations of administrative and academic officers of each college. Trust has been embedded in social norms over time and reinforced through interaction resulting in the reported high level of trust among members. In a case study of inter-institutional cooperation among college and university libraries and municipal libraries, Livingston and Rosen (1998) found that a long history of mutual trust, among other factors, could lead to a successful relationship. And according Baus and Ramsbottom (1999), trust is an important factor in the development of a robust and effective consortium.

Respondents from the six colleges reported that (1) with minor exceptions, members view one another as having positive reputations in administrative and academic effectiveness, as well as in the overall quality of students, faculty, and staff, and (2) constituents view their reputations as being similar and positive.

Organizational similarity is the degree of similarity among organizations in terms of culture, mission, values, and organizational structure. Organizational
similarity describes the degree of fit among organizations which helps maintain the relationship apart from the desire to procure resources. According to research, similarities among partners are predicted to lead to a successful relationship (Saxton, 1997). Many respondents from the six colleges described the colleges as being very similar in culture, mission, values, and administrative structure, and they attribute that level of similarity as one reason for the longevity of the MCC. IORs that have members with dissimilar cultures, values, missions, and structures often fail because the fit among the members is unsatisfactory for developing a strong enough relationship to meet members' goals (Berquist, Betwee, & Meuel, 1995). These findings are supported in part by Thompson (1985), who found that successful college and university alliances and mergers have member institutions with common programs, missions, interests, and goals. Offerman (1985), in a comparative case study of three failed consortia, found that the consortia failed in part because of a lack of compatibility among partners.

The fact that these colleges seem very similar on the surface might have indicated that there would be a higher level of competition among them for students; however, as indicated in the previous chapter, this is not the case. The subtle but important differences among these colleges are a result of how strongly religion is infused throughout each college's academic and social life. These subtle differences are not enough to strain the relationship, but they may hinder more intensive interaction, especially in academic programming.
(3) What is the overall level of satisfaction with this relationship, and what is the measure of success in this relationship?

Finding Five: Each college of the MCC values its autonomy, and rather than moving closer together, each college is seeking ways to differentiate itself to preserve autonomy and institutional identity. Although the value of institutional autonomy was an underlying assumption of this study, it was not part of the conceptual model; therefore, research questions relating to autonomy were not part of the interview guide. Issues of autonomy, differentiation, and identity emerged during interviews. Autonomy is an extension of the earlier finding that although each college seems very similar on the surface, subtle but important differences exist among them. Institutional autonomy is defined as the ability of institutional leaders to pursue courses of action, allocate resources, and operate without control of others (Levine & White, 1961). Although IORs compromise institutional autonomy to some degree, they have several characteristics that make them attractive alternatives to other coping strategies.

The desire for institutional autonomy manifests itself in the way each college attempts to differentiate itself to maintain its identity and culture. Each college does this by promoting its "uniqueness" and seeking niches in the higher education marketplace that best matches its uniqueness. For example, Tolland focuses in its Christian centered mission. Summers emphasizes its social entrepreneurship programs, which train students to assume leadership roles in charitable and related non-profit organizations. Milldale promotes its residential
atmosphere and semester abroad programs. It is also proud of its program in restoration technology, one of the few such programs in the country. Branford cites its liberal arts tradition and programs in the arts, especially music, as its strengths. Bristol's defining characteristic is the reputation of its academic programs, especially its science programs. One respondent said that Bristol probably sends almost as many students to Ph.D. programs as do the Ivy League schools. Kent College, the only urban institution among the six, cites its relationship with the city, and provides the population of the city with educational programming that benefits an urban population.

Autonomy is an important issue for these colleges and, therefore, the concept of autonomy should be considered another important category of understanding in the formation and maintenance of IORs. According to Dill (1997), the threat to autonomy is one of the challenges all organizations face in an IOR. And assurances of autonomy are important factors that organizations consider when they form and IOR (Knoke, 1983). Therefore, maintaining a satisfactory level of autonomy is a factor in the perceived level of satisfaction member institutions would have in the IOR.

These findings are supported by Nicklin (1994), who wrote that although colleges and universities cooperate to save money, obstacles to greater cooperation include the fear of losing institutional autonomy. According to Baus and Ramsbottom (1999), "The culture and traditions of higher education have emphasized strict institutional autonomy" (p. 4). Miller (1995) found that
educational institutions form IORs to fulfill goals of survival and growth, and that institutions avoid partnerships which threaten their autonomy. And Schmick (1986), in a case study of the development of a consortium, found that institutional autonomy was one of the contributing factors to the consortium's long-term success.

Finding Six: Respondents believe that the MCC is a successful relationship and benefits each college by giving each a competitive advantage in the higher education marketplace. It adds value to students' educational experiences by providing choices and opportunities.

As described in Chapter 2, the performance outcome is, in effect, the result of the IOR. It is each college's overall level of satisfaction with the relationship. The performance outcome is a function of (1) partner characteristics: motives for membership in the IOR and some degree of organizational interdependence, (2) relationship characteristics: trust, reputation, and organizational similarity, which are the enabling factors that lead to a satisfactory relationship among members. In other words, for the IOR to be considered successful, motives for membership in the IOR must be fulfilled and goals must be achieved, some degree of resource interdependence must exist, members must consider each other to be trustworthy and reputable, and they must be fairly similar in culture, mission, values, structure, and size. If some or all of these variables are not present, then the IOR probably would not be considered successful.
As discussed in the previous chapter, respondents believe that the MCC is a successful relationship and benefits their colleges. They cited the benefits each college is able to realize from the joint academic and administrative programs sponsored by the MCC. The success of the MCC is a function of members' beliefs that (1) they are receiving tangible benefits from the MCC, and (2) that the MCC is a good and satisfying relationship. Each college is able to realize benefits from the administrative and academic programs of the MCC. However, according to Young (1984), successful higher education partnerships have common elements, including strong administrative commitment and effective mechanisms for communication among members. Both of these elements are present in the MCC. Respondents spoke about the commitment of the college presidents to ensure that the MCC is successful and mutually beneficial. Respondents also spoke about the importance of the regularly scheduled meetings that help foster effective communication among members. According to Larrance (1999), consortia have three primary measures of success: the degree of program effectiveness, the degree of collegiality and collaboration, and the amount of cost savings. Baus and Ramsbottom (1999) would add the ability of each member institution to maintain its independence, identity, and unique mission. As reported in the section on analysis of data, these are all characteristics that describe and define the MCC.

In Chapter 2, it was proposed that the concepts of competitive advantage and transactional value would be two primary measures of success in this
consortium. Competitive advantage is a set of capabilities which allows an organization to compete more effectively. In the higher education marketplace, capabilities are services, facilities, programs, faculty, location, price, and other things that an institution uses to its advantage to compete more effectively against other institutions (Jones, 1997). An organization's perceptions about its competitive advantage gained through an IOR is a measure of its ability to perform effectively relative to its competitors (Hamel & Prahalad, 1994). The greater the perception of competitive advantage, the more successful the members will perceive the IOR to be.

Transactional value is the ability of a product or service to satisfy the needs, demands, and mandates of constituents (Kotler, 1984). IORs create value for constituents when member organizations pool their capabilities to meet the needs, demands, and mandates of constituents. Perceptions about the transactional value they create for constituents are a performance measure by which members judge the IOR (Dunham, Marcus, Stevens, & Barwise, 1993). The greater the transactional value they believe they create through the IOR, the more successful they will perceive the IOR to be.

As reported in the previous chapter, respondents from the six colleges spoke about the competitive advantage and value created by membership in the MCC. Several respondents said that the colleges gain a competitive advantage through membership in the MCC because it allows them to offer programs that one might only find on the larger state-supported institutions in Kansas. Other
respondents said that the MCC adds value to the educational experiences of students because it provides choices and opportunities that those students would not have without the benefit of the MCC.

**The Conceptual Model**

The revised conceptual model, based on the findings of this study, is presented in Figure 5-1 (on the following page). To summarize: Environmental uncertainty motivates these colleges to pursue coping strategies to reduce the uncertainty. This IOR is one strategy that these colleges have employed to cope with the uncertainty that they face. The performance outcome is the overall satisfaction with this relationship. It is a function of (1) Partner Characteristics: fulfilling motives and meeting resource goals, (2) Relationship Characteristics: the enabling social factors that help maintain the relationship over time, and (3) Institutional Autonomy: the ability to maintain institutional independence and identity.

It should be noted that the uniform size of each circle does not indicate that each variable is equally weighted. Further research would be needed to determine the relative importance of each variable to the outcome. And the relative importance of each variable may differ from case to case. Also note that environmental uncertainty is not uniform; that environmental turbulence and environmental complexity increase and decrease in unpredictable cycles.
Suggestions for further Study

This was a case study of six small, private, religiously affiliated liberal arts colleges. They are located within a confined area of about 40 square miles. They have a degree of interactive intensity that was deemed sufficient to yield valuable insights into the operation of this consortium. The level of interactive intensity was also deemed sufficient enough to use this consortium as a case study for purposes of collecting rich data. However, given this case study, other questions need to be asked: (1) How would a different geographical
configuration affect the findings in another study? (2) What would differences in the mix of institutional types, sizes, cultures, and missions mean to the effectiveness of the interorganizational relationship (IOR)? Finally, what variables are most important to the performance outcome of an IOR: partner characteristics or relationship characteristics?

Although not a primary focus of the study, what role does geography play in this relationship? What role does geography play in other consortial arrangements? Would geographic proximity yield greater interaction among institutions? According to Hotchkiss (1995), proximity of campuses is not an essential criterion of a strong consortium; however, in the absence of technology to overcome distance, one can speculate that there is a geographic limit to the ability of institutions to have shared academic programs, cross-registration, and other academically oriented programs. One respondent from the MCC said that he thought it was problematic to have shared faculty commuting between colleges, and that distance was probably a limiting factor in the development of additional programs (R20). A study of consortial relationships of varying geographical distances would help resolve this issue.

How would differences among institutions affect the performance of an IOR? Similarities among organizations in an IOR are predicted to help ensure a satisfactory relationship. IORs can fail when differences in culture, mission, values, size, and status affect the relationship (Berquist, Betwee, & Meuel, 1995). Differences in institutional size and financial strength can play a role in
IORs. In merger scenarios, where two or more institutions become legally affiliated, but attempt to maintain institutional identities, the more dominant institution can subsume the less dominant one (Samels, 1994a). The findings of this study indicate that the similarities among the six colleges of the MCC are close enough that the differences among the six do not affect the relationship. However, what if the mix of partners were to change? For example, would the outcome of an IOR comprised of private and public institutions be different? Would a mix of institutional types (e.g., universities, government agencies, and private corporations) result in a different outcome? Greater degrees of similarities and differences among institutions in an IOR should be examined to determine their impact.

What is the most important variable that determines the success in an IOR? The purpose of this study was to examine IORs and point to variables that contribute to IOR success; however, it does not determine which variables are most important or contribute more to the success of the relationship. Is resource procurement most important? Is a good relationship most important? It may vary from IOR to IOR and among members in an IOR. Assuming the measure of success is on a continuum (i.e., very successful, somewhat successful, not successful), quantitative research using regression analysis could be employed to determine the relative importance of each variable to the outcome, or dependent variable (L. Stapleton, personal communication, November 22, 2002). Quantitative methodology should be utilized to determine the relative importance
of each variable in determining the outcome of an IOR.

**Policy Implications for Colleges**

In the first chapter, it was suggested that the study and its findings could have practical implications for colleges that are already engaged in IORs or are planning to form them. Specifically, it is hoped that this study can have a dual purpose: (1) serve as a diagnostic tool to determine problems in an existing IOR, or (2) serve as a roadmap to help colleges avoid potential problems before they form IORs. Institutions need to look at both partner characteristics and relationship characteristics and ask the following questions.

Partner Characteristics: (1) What is motivating us to pursue this strategy? (2) Are there other coping strategies that we should consider before engaging in an IOR? (3) What are our goals? (4) What do we want to achieve in this relationship? (5) What is the degree of resource interdependence among the colleges in the proposed IOR? (6) Do these colleges have the resources that we need to share or exchange?

Relationship Characteristics: (1) Is there a history of cooperation among the colleges? (2) If so, what level of trust exists among us? (3) Are our potential partners ready, willing, and able to fulfill their obligations to the other member colleges? (4) What are the intentions of our potential partners, and do they conflict with our goals? (5) What kinds of reputations do these colleges have in the higher education marketplace in terms of academic excellence and administrative skill? (6) Will their reputations enhance or tarnish our reputation.
through association, if we form an IOR?

   Autonomy: (1) How will the proposed relationship affect our autonomy?
(2) What can we do to protect our autonomy as much as possible?

   The Performance Outcome: Based on our motives and goals, what is the measure we will use to judge the effectiveness and success of the proposed IOR?

   Thoughtful consideration of these questions should help institutions either enter into IORs that will have a good chance of being successful, or help them avoid a potentially troubling relationship. Finally, it is hoped that others will expand on this case study and pursue some of the suggested avenues of research outlined in this chapter.
Appendices

Appendix A: Case Study Protocol

I. Operationalizing the Study

A. Identifying the Case Study Subject

1. According to Yin (1994), the single case study is an appropriate design when it can help in testing some theory. Yin defines this case as one which meets many, if not all, of the conditions necessary for testing a theory. This perspective is consistent with the purpose of this study, which is to test a unique theory-based model using case study methodology. Cases should be selected because they can be useful in furthering knowledge. In other words, the case study researcher purposefully selects cases that can further his or her own research (Stake, 1995).

B. Research Steps - Interviews

1. A letter of introduction will be sent to the “gatekeeper,” who may be the consortium director or coordinator (See Appendix B). The letter of introduction will describe the purpose and goals of the study, methodology, time frame, and guarantee of anonymity for both the respondents and institutions.
2. Individuals in each member institution will be identified who have relevant perspectives on the consortium. These individuals will be identified in consultation with the gatekeeper.

3. The Human Subjects Form will be completed and submitted to the Human Subjects Committee for review and approval.

4. Letters of introduction will be sent to potential interviewees describing the study, asking for their cooperation, and assuring them of anonymity. A follow up call or e-mail will be used as a reminder for non-respondents.

5. A letter of informed consent will be mailed to each individual who has agreed to cooperate in the study. The letter of informed consent will outline the purpose, format, interview methods (e.g., tape recording and note taking); it will state that the individual has agreed to cooperate in the study and understands the provisions of the study, and can withdraw from the study at any time.

6. One hour-long interview will be scheduled by the researcher with each of the individuals who have agreed to participate in the study. Contact and interview scheduling will be completed using phone or e-mail.

7. All interviews will be conducted at each member institution
over a one week period, if possible. A second site visit may be required if individuals cannot be scheduling during the first week because of scheduling conflicts.

8. To ensure accuracy, follow-up interviews will be conducted over the phone or by e-mail, if necessary, to clear up any ambiguous answers.

9. Respondents will be offered the opportunity to review a transcript of the interview to ensure accuracy.

10. Letters of thanks will be sent to all of the individuals who participated in the study.

C. Research Steps - Document Analysis

1. Documents will be analyzed as a secondary source of data. These documents could include strategic planning reports, marketing and promotional materials, and annual reports of institutions.

D. Interview Questions

1. Context: Environmental Uncertainty
   a. Environmental uncertainty is the degree to which the future state of an organization's operating environment cannot accurately be predicted. Uncertainty increases as the environment becomes more complex and turbulent. Complexity refers to the
number of environmental factors an organization must consider (e.g., competitors, regulations, laws, constituents, resources) when planning for the future.

Turbulence refers to the rate of change in the operating environment. Rapid and unpredictable changes in resource availability, technology, and constituents all increase turbulence.

b. Questions to Determine Environmental Uncertainty

(1) Describe the challenges your institution faces today.

(2) What are the most important opportunities your institution faces? (Follow-up)

(3) What are the most serious threats your institution faces? (Follow-up)

2. Motives for Forming the Interorganizational Relationships

a. Motives are defined in this study as the reasons, based in theory that organizations engage in interorganizational relationships. The theories outlined earlier include Transaction Cost Theory, Resource Dependence Theory, Contingency Theory, and Organizational Ecology. Based on the findings of these theories, organizations are motivated to form
IORs to reduce costs, increase efficiency, manage uncertainty, reduce risk, manage dependency, share resources, or share risk.

b. Questions to Determine Motives for Forming IORs

(1) What are the reasons your institution has for engaging in this relationship?

(2) What do you consider to be the most important reason? (Follow-up)

(3) What do you consider to be the least important reason? (Follow-up)

3. Organizational Interdependence

a. As mentioned earlier in the review of literature, organizational fit is a function of organizational interdependence and organizational similarity (discussed below under Relationship Characteristics).

Organizational interdependence is the degree to which organizations either compete for the same resources (commensal interdependence) or exchange different resources (symbiotic interdependence) for organizational survival.

b. Questions to Determine Organizational Interdependence
(1) Describe the degree to which your institution and your partner institutions compete with each other for students, faculty, grants, and other resources.

(2) Describe the level of interaction among your institution and your partner institutions in terms of sharing faculty, administrative support functions, facilities, and other resources.

4. Relationship Characteristics

   a. Relationship characteristics are the social factors which enable and maintain the relationship beyond the motivation of procuring resources. These factors include partner reputation, partner trustworthiness, and organizational similarity. Partner reputation is a multidimensional construct reflecting one’s perceptions of an organization’s management expertise, product quality, and financial soundness. Partner trustworthiness is a multidimensional construct consisting of several interacting characteristics that reinforce the perception of trustworthiness. These include: 1) Intention: the partner will try to do what is required in the
relationship; 2) Competency: the partner will be able to do what is required in the relationship; and 3) Perspective: the partner has performed satisfactorily in the past. Organizational similarity is the degree to which two organizations are similar in terms of organizational culture, administrative structure, and organizational status.

b. Questions to determine Relationship Characteristics

(1) What are the major differences that exist among the partner institutions in terms of institutional mission, culture, values, and goals?

(2) Describe the reputations of your partner institutions in terms of academic excellence, administrative competency, and financial soundness.

(3) Where would you rank your institution's reputation against your partner institutions?

(4) How do you think the public perceives the reputations of your partner institutions?

(5) Have your partner institutions been able to fulfill satisfactorily their obligations to the
5. Performance Outcome
   
a. The performance outcome is essentially the dependent variable of the study. Performance is each partner’s overall level of satisfaction with the interorganizational relationship. It is a function of 1) Partner Characteristics: motives and organizational interdependence, and 2) Relationship Characteristics: partner reputation, partner trustworthiness, and organizational similarity.

b. Questions to determine the performance outcome
   
   (1) How do you characterize the overall level of success of this relationship?
   (2) What do you think you have been able to achieve though this consortium that benefits your constituents?

E. Interview Guide

1. Describe the Challenges your institutions faces today.

2. What are the reasons your institution has for engaging in this relationship?

3. Describe the degree to which your institution and your partner institutions compete with each other for students,
faculty, grants, and other resources.

4. How would you describe the level of interaction among your partner institutions in terms of sharing faculty, administrative support functions, facilities, and other resources?

5. What are the major differences that exist among the partner institutions in terms of institutional mission, culture, values, and goals?

6. Describe the reputations of your partner institutions in terms of academic excellence, administrative competency, and financial soundness.

7. Where would you rank your institution's reputation against your partner institutions?

8. How do you think the public perceives the reputations of your partner institutions?

9. Have your partner institutions been able to fulfill satisfactorily their obligations to the group?

10. How do you characterize the overall level of success of this relationship?

11. What do you think you have been able to achieve through this relationship that benefits your constituents?
Appendix B.1: Letter of Introduction

"Gatekeeper"

Paul E. Roche
3307 Wyndham Circle, #2168
Alexandria, VA 22302
Work phone: 301-405-8989
Home phone: 703-566-6964
email: proche@deans.umd.edu

{date}
{name}
{position}
{organization}
{address1}
{address2}

{salutation}:

I am a doctoral candidate (Ed.D. ABD) in the higher education program at The College of William and Mary. As part of my degree requirements, I am in the process of working on my doctoral dissertation. I am focusing my research on consortia that form among small, private colleges.

I am interested in the reasons why small, private colleges form consortia; how the relationships are maintained; what problems and issues face consortia; and finally, what member institutions define as the measure of success or desired outcome in the relationships. Once the study is complete, I hope that the results will contribute to an understanding of these unique organizational forms in higher education.

I am particularly interested in small, private colleges and the extent to which these relationships may help member institutions position themselves more competitively in the higher education marketplace. I became interested in the {organization name} after having read an article about it in the Chronicle of Higher Education.

I am writing to ask if you and your member institutions would be willing to consider the possibility of allowing me to use your consortium as a case study to further advance my dissertation research. I plan to use interviews and document analysis as the primary and secondary data collections procedures. In consultation with you, I would seek to identify and interview individuals, including faculty, staff, and administrators, who have relevant perspectives on the consortium and its operations. Interviews would be conducted with individuals from each member institution. I anticipate scheduling one hour-long interview with each individual who has been identified as having unique perspectives on the consortium and who is willing to participate in the study. My time frame for completing the interview process at all of the member institutions would be approximately one week.

Please note that I do not intend to critique, judge, or assess the effectiveness of
the member institutions or your consortium. My goal is to assess the relevance and accuracy of several common assumptions about consortia by comparing and contrasting these assumptions to a real-life arrangement. Changes will be made to the model based on my research in order to accurately reflect and explain the reality of consortia in higher education. Please also note that the names of member institutions, the consortium, and respondents will remain anonymous, known only to me and my dissertation advisors. Pseudonyms will be used to mask the identity of the institutions and respondents. Furthermore, a letter of informed consent will be sent to potential participants, requesting their participation, informing them that participation is voluntary, and informing them that they can choose to stop participation at any point in the study.

If you and your member institutions would be willing to participate in this study, I will present a formalized plan (see attachment), which will outline the steps involved in the data retrieval process, for your review and comment. I hope that you and your member institutions will consider my request, and I thank you for your time and consideration.

Sincerely,

Paul E. Roche
Doctoral Candidate
Higher Education Program
School of Education
The College of William and Mary

If you have any questions, please contact me at your convenience. You may also contact my advisor:

Dr. David W. Leslie
Professor, Higher Education Program
School of Education
The College of William and Mary
Williamsburg, Virginia
757-221-2349
dwlesl@wm.edu
Appendix B.2: Letter of Introduction - Attachment

"Gatekeeper"

Case Study Protocol

II. Operationalizing the Study

A. Identifying the Case Study Subject

1. [name of organization]

B. Research Steps - Interviews

1. A letter of introduction will be sent to the "gatekeeper," who may be the consortium director or coordinator. The letter of introduction will describe the purpose and goals of the study, methodology, time frame, and guarantees of anonymity.

2. Individuals in each member institution will be identified who have relevant perspectives on the consortium. These individuals will be identified in consultation with the gatekeeper.

3. Letters of introduction will be sent to potential interviewees describing the study, asking for their cooperation, and assuring them of anonymity. A follow up call or e-mail will be used as a reminder for non-respondents.

4. A letter of informed consent will be mailed to each individual who has agreed to cooperate in the study. The letter of
informed consent will outline the purpose, format, interview methods (e.g., tape recording and note taking); it will state that the individual has agreed to cooperate in the study and understands the provisions of the study, and can withdraw from the study at any time. A self-addressed, stamped envelope will be included so that the signed letter can be returned to me for record keeping purposes.

5. One hour-long interview will be scheduled by the researcher with each of the individuals who have agreed to participate in the study. Contact and interview scheduling will be completed using phone or e-mail.

6. All interviews will be conducted at each member institution over a one week period, if possible. A second site visit may be required if individuals cannot be scheduled during the first week because of scheduling conflicts.

7. To ensure accuracy, follow-up interviews will be conducted over the phone or by e-mail, if necessary, to clear up any ambiguous answers.

8. Respondents will be offered the opportunity to review a transcript of the interview to ensure accuracy.

9. Letters of thanks will be sent to all of the individuals who participated in the study.
C. Research Steps - Documents

1. Documents will be collected and analyzed as a secondary source of data. These documents could include strategic planning reports, marketing and promotional materials, and annual reports of the member institutions.
<table>
<thead>
<tr>
<th>Category</th>
<th>Branford</th>
<th>Bristol</th>
<th>Kent</th>
<th>Mildale</th>
<th>Summers</th>
<th>Tolland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliation</td>
<td>Evangelical Lutheran Church in America</td>
<td>General Conference Mennonite Church</td>
<td>United Methodist Church</td>
<td>Church of the Brethren</td>
<td>Presbyterian Church, U.S.A.</td>
<td>Mennonite Brethren Church</td>
</tr>
<tr>
<td>Founded</td>
<td>1881</td>
<td>1887</td>
<td>1888</td>
<td>1887</td>
<td>1887</td>
<td>1908</td>
</tr>
<tr>
<td>Enrollment</td>
<td>(FTE, Fall 2000): 620</td>
<td>(FTE, Fall 2000): 506</td>
<td>(FTE, Fall 2000): 563 (Grad., 40)</td>
<td>(FTE, Fall 2000): 449</td>
<td>(FTE, Fall 2000): 421</td>
<td>(FTE, Fall 2000): 510 (Grad., 7)</td>
</tr>
<tr>
<td>Calendar</td>
<td>4-1-4</td>
<td>4-1-4</td>
<td>2-1</td>
<td>4-1-4</td>
<td>4-1-4</td>
<td>4-1-4</td>
</tr>
<tr>
<td>Category</td>
<td>Branford Majors</td>
<td>Bristol Majors</td>
<td>Kent Majors</td>
<td>Milford Majors</td>
<td>Summers Majors</td>
<td>Tolland Majors</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td>----------------</td>
<td>-------------</td>
<td>----------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Art</td>
<td>Accounting</td>
<td>Art Education</td>
<td>Accounting</td>
<td>Art</td>
<td>Religion</td>
<td></td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>Art Education</td>
<td>Art</td>
<td>Agriculture</td>
<td>Behavioral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>Art</td>
<td>Business</td>
<td>Art</td>
<td>Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>Biology</td>
<td>Biology</td>
<td>Sociology</td>
<td>Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications</td>
<td>Economics</td>
<td>Criminal Justice</td>
<td>Chemistry</td>
<td>Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>Communications</td>
<td>Elementary</td>
<td>Computer Science</td>
<td>Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Mathematics</td>
<td>Education</td>
<td>Economics</td>
<td>Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>Computer Science</td>
<td>Education</td>
<td>Christianity</td>
<td>Communications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>Computer Systems</td>
<td>English</td>
<td>Education</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>Administration</td>
<td>Family Ministry</td>
<td>English</td>
<td>Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Work</td>
<td>Education</td>
<td>German</td>
<td>Environmental</td>
<td>Medical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>English</td>
<td>History</td>
<td>History</td>
<td>Physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>Environmental</td>
<td>Physical</td>
<td>Art</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theater</td>
<td>Fine Arts</td>
<td>Mathematics</td>
<td>Mathematics</td>
<td>English</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Majors:</td>
<td>German</td>
<td>History</td>
<td>Modern Languages</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>Peace Studies</td>
<td>Psychology</td>
<td>Music</td>
<td>History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Health Management</td>
<td>Religion</td>
<td>Mathematics</td>
<td>Humanities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education - elementary</td>
<td>History</td>
<td>Psychology</td>
<td>Music</td>
<td>Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education - secondary</td>
<td>Social Science</td>
<td>Religion</td>
<td>Mathematics</td>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology - secondary</td>
<td>Mathematics</td>
<td>Sociology</td>
<td>Music</td>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>Nursing</td>
<td>Spanish</td>
<td>Physical</td>
<td>Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Speech</td>
<td>Physical</td>
<td>Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>Music</td>
<td>Biology</td>
<td>Sciences</td>
<td>Psychology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>Psychology</td>
<td>Computer Science</td>
<td>Speech/Theater</td>
<td>Social Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td>Social Work</td>
<td>Physics</td>
<td>Sociology</td>
<td>Social Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health - elementary</td>
<td>Spanish</td>
<td>Counseling</td>
<td>Business</td>
<td>Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health - secondary</td>
<td>Spanish</td>
<td>Counseling</td>
<td>Business</td>
<td>Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2. Comparison - Majors & Programs**

**Special Programs**
- Contract Majors: 3+2 Engineering Program
- Cooperative Program with Wichita State University

**Contract Degree Programs**
- Contract Professional Program
- Pre-Professional Program

**Pre-Professional Programs**
- Cooperative Engineering Program
- Independent Study

**Study Abroad**
- Independent Major
- Summer Abroad

**Summer Institute**
- Pre-Professional Engineering "2+2" Internship Program

**Adult Degree Completion Programs**
- Wichita Satellite Campus, M S, in Accounting
<table>
<thead>
<tr>
<th>Institution</th>
<th>Mission Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branford</td>
<td>&quot;We believe that a liberal education stimulates intellectual curiosity, identifies vocation, refines the sense of aesthetics, and strengthens religious faith.&quot; Branford College strives to be a community of faith which &quot;fosters Christian faith, witness and worship. seeks to stimulate the students’ desire to know and to understand personal relationships and relationships with God in light of the Gospel of Christ, provides a setting where regular worship is encouraged and where students, faculty and staff members may offer Christian witness through their lives.&quot;</td>
</tr>
<tr>
<td>Bristol</td>
<td>&quot;By tradition and choice, [Bristol College] continues to base its mission on its Anabaptist and academic integrity. [Bristol] seeks to be a diverse community of learners, committed to the search for authentic faith and empirical understanding, and to provide... intellectual cultural and spiritual leaders for the church and society.&quot; [Bristol's] programs are informed by four central values: an ethic of discipleship, that recognizes Jesus Christ as Messiah and model for the Christian life... an ethic of scholarship... an ethic of service... an ethic of integrity...&quot;</td>
</tr>
<tr>
<td>Kent</td>
<td>&quot;The mission of [Kent College] is to promote and integrate academic excellence, spiritual development, personal well-being, and social responsibility.&quot; [Kent College] provides an educational program characterized by excellence, within a caring community, rooted in liberal arts tradition... [Kent College] provides a setting in which faith and learning are integrated, encounter with the Christian proclamation is an integral part of the life of the College...&quot;</td>
</tr>
<tr>
<td>Milldale</td>
<td>&quot;[Milldale College's] mission is to develop whole persons through scholarship, participation service.&quot; To accomplish our mission, [Milldale] embraces the ideals of scholarship, participation, and service. Scholarship: All absolute Truth is God's Truth and humankind must labor diligently in the pursuit of the truth we can know... Participation: Students apply knowledge, practice skills, and deepen and broaden their understanding of themselves and others through active participation in diverse learning experiences... Service: God's love is personified in the life of Jesus who came to serve the world...&quot;</td>
</tr>
<tr>
<td>Summers</td>
<td>&quot;Our Mission: The purpose of [Summers College] is to develop creative and thoughtful leaders who understand a maturing Christian faith. Our Vision: Within a decade, to be recognized as the finest Christ-centered, servant leadership development focused, liberal arts experience in the Great Plains. Our Core Values: Faith, calling, learning, integrity, service, and community. Our Priorities: [Summers College] is committed to an environment of academic excitement in the Reformed tradition of a thorough exploration of all truth in light of God's Word.&quot;</td>
</tr>
<tr>
<td>Tolland</td>
<td>&quot;[Tolland College] offers liberal arts and professional/career education in a Christian context, consistent with what Mennonite Brethren understand to be biblical, to help person achieve their highest potential as servants of Christ and His Church, ministering to the needs of all people.&quot; [Tolland] seeks to be more than just a 'church-related college. Its goal of providing Christ-centered higher education is taken very seriously. [Tolland] requires that its faculty and staff be able to articulate and practice a strong faith in Jesus Christ as Savior and Lord...&quot; [Tolland] seeks to provide a Christian world view, infusing the entire curriculum with important dimensions of meaning and purpose.&quot;</td>
</tr>
</tbody>
</table>

* Mission Statement excerpts from College Catalogs
### Appendix D: Interview List* for Data Analysis Section

<table>
<thead>
<tr>
<th>Code</th>
<th>Position</th>
<th>College</th>
<th>Date</th>
<th>Method</th>
<th>Transcribed</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>President</td>
<td>Milldale</td>
<td>June 18, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Diner</td>
</tr>
<tr>
<td></td>
<td>Assoc. Provost and Dean of Students</td>
<td>Milldale</td>
<td>June 18, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R2</td>
<td>Assoc. Dean of Student Development</td>
<td>Bristol</td>
<td>June 18, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R3</td>
<td>Provost and Dean of Faculty</td>
<td>Milldale</td>
<td>June 18, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R4</td>
<td>Business Manager</td>
<td>Milldale</td>
<td>June 18, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R5</td>
<td>Vice President for Business and Finance</td>
<td>Tolland</td>
<td>June 18, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R6</td>
<td>Acting President &amp; Academic Dean</td>
<td>Branford</td>
<td>June 19, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R7</td>
<td>Dean of Admissions &amp; Financial Aid</td>
<td>Branford</td>
<td>June 19, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R8</td>
<td>Dean for Student Life</td>
<td>Branford</td>
<td>June 19, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R9</td>
<td>Director of Communications</td>
<td>Branford</td>
<td>June 19, 2001</td>
<td>Tape/Notes</td>
<td>No</td>
<td>Office</td>
</tr>
<tr>
<td>R10</td>
<td>Registrar</td>
<td>Branford</td>
<td>June 19, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R11</td>
<td>Dean of Students</td>
<td>Summers</td>
<td>June 20, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R12</td>
<td>President</td>
<td>Summers</td>
<td>June 20, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R13</td>
<td>Vice President for Enrollment Services</td>
<td>Summers</td>
<td>June 20, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R14</td>
<td>Registrar</td>
<td>Summers</td>
<td>June 20, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R15</td>
<td>Executive Director, MCC</td>
<td>MCC</td>
<td>June 20, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R16</td>
<td>Vice President &amp; Dean of Faculty</td>
<td>Kent</td>
<td>June 21, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R17</td>
<td>President</td>
<td>Kent</td>
<td>June 21, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R18</td>
<td>Director of Information Systems</td>
<td>Kent</td>
<td>June 21, 2001</td>
<td>Tape/Notes</td>
<td>No</td>
<td>Office</td>
</tr>
<tr>
<td>R19</td>
<td>Academic Dean</td>
<td>Bristol</td>
<td>June 21, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R20</td>
<td>Controller &amp; Director of Business Affairs</td>
<td>Bristol</td>
<td>June 22, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R21</td>
<td>Vice President for Enrollment Management</td>
<td>Tolland</td>
<td>June 22, 2001</td>
<td>Tape/Notes</td>
<td>Yes</td>
<td>Office</td>
</tr>
<tr>
<td>R22</td>
<td>Registrar</td>
<td>Tolland</td>
<td>June 22, 2001</td>
<td>Tape/Notes</td>
<td>No</td>
<td>Office</td>
</tr>
<tr>
<td>R23</td>
<td>Computing Systems Administrator</td>
<td>Tolland</td>
<td>June 22, 2001</td>
<td>Tape/Notes</td>
<td>No</td>
<td>Office</td>
</tr>
<tr>
<td>R24</td>
<td>President</td>
<td>Tolland</td>
<td>July 20, 2001</td>
<td>Phone</td>
<td>No</td>
<td>Phone</td>
</tr>
</tbody>
</table>

* Interviews with members of the consortium were conducted with the understanding that their name, their college, its location, would be anonymous.
Appendix E: Midwest College Consortium Documents


Author.
Appendix F: Data Coding Scheme

**Environmental Uncertainty (encunc)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Second Level</th>
<th>Third Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>enroll</td>
<td>Enrollment</td>
<td></td>
</tr>
<tr>
<td>compriv</td>
<td>Competitive Rivalry</td>
<td></td>
</tr>
<tr>
<td>constit</td>
<td>Constituents</td>
<td></td>
</tr>
<tr>
<td>cons</td>
<td>Consumerism</td>
<td></td>
</tr>
<tr>
<td>dem</td>
<td>Demographics</td>
<td></td>
</tr>
<tr>
<td>econ</td>
<td>Economy</td>
<td></td>
</tr>
<tr>
<td>new</td>
<td>New Entrants</td>
<td></td>
</tr>
<tr>
<td>dl</td>
<td>Distance Education</td>
<td></td>
</tr>
<tr>
<td>encr</td>
<td>Encroachment</td>
<td></td>
</tr>
</tbody>
</table>

**Partner Characteristics (part)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Second Level</th>
<th>Third Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>mot</td>
<td>Motives</td>
<td></td>
</tr>
<tr>
<td>tct</td>
<td>Transactional Cost</td>
<td></td>
</tr>
<tr>
<td>opeff</td>
<td>Operating Efficiency</td>
<td></td>
</tr>
<tr>
<td>econscale</td>
<td>Economies of Scale</td>
<td></td>
</tr>
<tr>
<td>oe</td>
<td>Organizational Ecology</td>
<td></td>
</tr>
<tr>
<td>coop</td>
<td>Cooperation</td>
<td></td>
</tr>
<tr>
<td>share</td>
<td>Sharing</td>
<td></td>
</tr>
<tr>
<td>ment</td>
<td>Mentoring</td>
<td></td>
</tr>
<tr>
<td>orgind</td>
<td>Organizational Interdependence</td>
<td></td>
</tr>
<tr>
<td>comp</td>
<td>Competition</td>
<td></td>
</tr>
<tr>
<td>inter</td>
<td>Interaction</td>
<td></td>
</tr>
</tbody>
</table>

**Relationship Characteristics (relation)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Second Level</th>
<th>Third Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>rep</td>
<td>Reputation</td>
<td></td>
</tr>
<tr>
<td>vis</td>
<td>Visibility</td>
<td></td>
</tr>
<tr>
<td>qual</td>
<td>Quality</td>
<td></td>
</tr>
<tr>
<td>dis</td>
<td>Distinction</td>
<td></td>
</tr>
<tr>
<td>trst</td>
<td>Trust</td>
<td></td>
</tr>
<tr>
<td>per</td>
<td>Perspective</td>
<td></td>
</tr>
<tr>
<td>coll</td>
<td>Collegiality</td>
<td></td>
</tr>
<tr>
<td>orgsim</td>
<td>Organizational Similarity</td>
<td></td>
</tr>
<tr>
<td>relig</td>
<td>Religion</td>
<td></td>
</tr>
<tr>
<td>cul</td>
<td>Culture</td>
<td></td>
</tr>
<tr>
<td>dc</td>
<td>Domain Consensus</td>
<td></td>
</tr>
<tr>
<td>struc</td>
<td>Structure</td>
<td></td>
</tr>
</tbody>
</table>
### Autonomy (aut)

<table>
<thead>
<tr>
<th>Code</th>
<th>Second Level</th>
<th>Third Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>(diff)</td>
<td>Differentiation</td>
<td></td>
</tr>
<tr>
<td>(ident)</td>
<td>Identity</td>
<td></td>
</tr>
<tr>
<td>(niche)</td>
<td>Niche</td>
<td></td>
</tr>
</tbody>
</table>

### Performance Outcome (po)

<table>
<thead>
<tr>
<th>Code</th>
<th>Second Level</th>
<th>Third Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ben)</td>
<td>Benefits</td>
<td></td>
</tr>
<tr>
<td>(val)</td>
<td>Value</td>
<td></td>
</tr>
<tr>
<td>(compadv)</td>
<td>Competitive Advantage</td>
<td></td>
</tr>
</tbody>
</table>
References


Bridges, D. & Husbands, C. (1996). The education market place and the


Contractor, F. J. & Lorange, P. (1988). Why should firms cooperate? In F. J. Contractor & P. Lorange (Eds.), *Cooperative strategies in international*


Gray, H. (1996). *Theories of association: The social psychology of working*...


Jones, G. R. (1983). Transaction costs, property rights, and organizational...


Klinger, D. & Iwanowski, J. (1997, September). Alter or falter. *NACUBO*
Business Officer, 31, 36-40.


Miles, M. B. & Huberman, A. M. (1994). *Qualitative analysis: An expanded


Offerman, M. J. (1985). Factors leading to the termination of three consortia of


University Press.


A30.


Vita

Paul Edward Roche

Birth Date: December 9, 1957

Birthplace: White Plains, New York

Education:

1995-2002  The College of William and Mary
           Williamsburg, Virginia
           Doctor of Education

1994-1995  The College of William and Mary
           Williamsburg, Virginia
           Educational Specialist

1993-1994  The College of William and Mary
           Williamsburg, Virginia
           Master of Arts in Education

1978-1982  Boston College
           Chestnut Hill, Massachusetts
           Bachelor of Science, Business Administration