The Organizational Structure and Effectiveness of Canadian National Sport Governing Bodies

by

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A thesis presented to the University of Waterloo in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Kinesiology

Waterloo, Ontario, 1983

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ABSTRACT

THE ORGANIZATIONAL STRUCTURE AND EFFECTIVENESS OF CANADIAN NATIONAL SPORT GOVERNING BODIES

In this study, voluntary amateur sport organizations were examined from an organizational perspective using Weber's theory of bureaucracy as a conceptual framework. The first purpose was to examine the relationships between a number of contextual variables and features of bureaucratic structure. Second, the interrelationships among the bureaucratic structural variables were also analyzed. Third, the relationship between structure and measures of both the goal and systems models of organizational effectiveness were investigated. The fourth purpose was to determine the extent to which indices of the goal and systems models of organizational effectiveness are interrelated in voluntary amateur sport organizations. The sources of secondary data were administrative and technical profiles that had been compiled on each sport. In addition, a questionnaire was given to the Executive Directors of twenty-nine National Sport Governing Bodies which manage Olympic sports in Canada. Pearson correlations and partial correlations were computed to examine the relationships among contextual variables, between context and structure, among the structural variables, among
goal and systems effectiveness variables, and between structure and effectiveness. The results indicated that the contextual variables are intercorrelated. Organizational age as well as the degree of financial dependence on other organizations are the contextual variables that are most strongly related to measures of bureaucratic structure. A number of the structural variables were positively intercorrelated including: formalization, specialization, the clerical ratio, the impersonality of work relations, professionalism and career stability. Centralization was negatively related to the other measures of bureaucratic structure. The goal and systems variables of organizational effectiveness were positively correlated with one another. This suggests that organizations that are more successful at acquiring financial resources are also more successful at achieving the goal of performance excellence. In addition, several of the measures of bureaucratic structure were positively associated with both the goal and systems models of effectiveness. It was concluded that several of the patterns of relationships that have been reported in previous research on business organizations also exist in voluntary amateur sport organizations.
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# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>vi</td>
</tr>
<tr>
<td>CHAPTER 1 - STATEMENT OF THE PROBLEM</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>The Problem</td>
<td>18</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>19</td>
</tr>
<tr>
<td>CHAPTER 2 - REVIEW OF LITERATURE</td>
<td>25</td>
</tr>
<tr>
<td>Introduction</td>
<td>25</td>
</tr>
<tr>
<td>Canadian National Sport Governing Bodies</td>
<td>25</td>
</tr>
<tr>
<td>Summary</td>
<td>39</td>
</tr>
<tr>
<td>Voluntary Organizations</td>
<td>40</td>
</tr>
<tr>
<td>Functions</td>
<td>40</td>
</tr>
<tr>
<td>Definitions and Typologies</td>
<td>42</td>
</tr>
<tr>
<td>Research</td>
<td>45</td>
</tr>
<tr>
<td>Sociodemographic Approaches</td>
<td>45</td>
</tr>
<tr>
<td>Social Psychological Approaches</td>
<td>49</td>
</tr>
<tr>
<td>Organizational Approaches</td>
<td>52</td>
</tr>
<tr>
<td>Summary</td>
<td>59</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>60</td>
</tr>
<tr>
<td>Theoretical Approaches</td>
<td>60</td>
</tr>
<tr>
<td>Research</td>
<td>70</td>
</tr>
<tr>
<td>Contextual Variables and Structure</td>
<td>71</td>
</tr>
<tr>
<td>Interrelationships Between Structural Variables</td>
<td>74</td>
</tr>
<tr>
<td>Structure and Organizational</td>
<td>77</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>78</td>
</tr>
<tr>
<td>Literature on Bureaucracy and Sport</td>
<td>78</td>
</tr>
<tr>
<td>Literature on Organizational Effectiveness</td>
<td>85</td>
</tr>
<tr>
<td>Definitions and Models</td>
<td>85</td>
</tr>
<tr>
<td>Effectiveness Criteria</td>
<td>94</td>
</tr>
<tr>
<td>Methodological Issues</td>
<td>97</td>
</tr>
<tr>
<td>Organizational Effectiveness in NSGBs</td>
<td>98</td>
</tr>
<tr>
<td>Research on Bureaucracy and Effectiveness</td>
<td>102</td>
</tr>
<tr>
<td>Rationale for Relationships Between Bureaucracy and Effectiveness</td>
<td>106</td>
</tr>
<tr>
<td>Summary</td>
<td>111</td>
</tr>
<tr>
<td>CHAPTER 3 - PROCEDURES</td>
<td>115</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Selection of the Sample</td>
<td>115</td>
</tr>
<tr>
<td>Data Collection</td>
<td>115</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>116</td>
</tr>
<tr>
<td>Context and Structure Hypotheses</td>
<td>116</td>
</tr>
<tr>
<td>Structural Hypotheses</td>
<td>116</td>
</tr>
<tr>
<td>Effectiveness Hypotheses</td>
<td>116</td>
</tr>
<tr>
<td>Structure and Effectiveness Hypotheses</td>
<td>116</td>
</tr>
<tr>
<td>Theoretical and Operational Definitions</td>
<td>117</td>
</tr>
<tr>
<td>Contextual Variables</td>
<td>117</td>
</tr>
<tr>
<td>Structural Variables</td>
<td>121</td>
</tr>
<tr>
<td>Effectiveness Variables</td>
<td>124</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>124</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER 4 - RESULTS AND DISCUSSION</th>
<th>128</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>128</td>
</tr>
<tr>
<td>Contextual Variables</td>
<td>129</td>
</tr>
<tr>
<td>Organizational Size</td>
<td>136</td>
</tr>
<tr>
<td>Dependence</td>
<td>143</td>
</tr>
<tr>
<td>Technological Expertise</td>
<td>150</td>
</tr>
<tr>
<td>Organizational Age</td>
<td>153</td>
</tr>
<tr>
<td>Summary</td>
<td>154</td>
</tr>
<tr>
<td>Structural Variables</td>
<td>159</td>
</tr>
<tr>
<td>Formalization</td>
<td>159</td>
</tr>
<tr>
<td>Centralization</td>
<td>168</td>
</tr>
<tr>
<td>Impersonality of Work Relations</td>
<td>174</td>
</tr>
<tr>
<td>Specialization</td>
<td>175</td>
</tr>
<tr>
<td>Clerical Ratio</td>
<td>178</td>
</tr>
<tr>
<td>Professionalism</td>
<td>179</td>
</tr>
<tr>
<td>Career Stability</td>
<td>180</td>
</tr>
<tr>
<td>Summary</td>
<td>182</td>
</tr>
<tr>
<td>Goal and Systems Models</td>
<td>187</td>
</tr>
<tr>
<td>Summary</td>
<td>192</td>
</tr>
<tr>
<td>Structure and Effectiveness</td>
<td>193</td>
</tr>
<tr>
<td>Formalization and Effectiveness</td>
<td>193</td>
</tr>
<tr>
<td>Centralization and Effectiveness</td>
<td>199</td>
</tr>
<tr>
<td>Impersonality and Effectiveness</td>
<td>206</td>
</tr>
<tr>
<td>Specialization and Effectiveness</td>
<td>209</td>
</tr>
<tr>
<td>Clerical Ratio and Effectiveness</td>
<td>216</td>
</tr>
<tr>
<td>Professionalism and Effectiveness</td>
<td>218</td>
</tr>
<tr>
<td>Career Stability and Effectiveness</td>
<td>222</td>
</tr>
<tr>
<td>Summary</td>
<td>223</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER 5 - SUMMARY, CONCLUSIONS AND RECOMMENDATIONS</th>
<th>227</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>227</td>
</tr>
<tr>
<td>Contextual Variables</td>
<td>227</td>
</tr>
<tr>
<td>Context and Structure</td>
<td>229</td>
</tr>
<tr>
<td>Structural Variables</td>
<td>233</td>
</tr>
<tr>
<td>Goal and Systems Models</td>
<td>238</td>
</tr>
<tr>
<td>Structure and Effectiveness</td>
<td>239</td>
</tr>
<tr>
<td>Conclusions</td>
<td>243</td>
</tr>
</tbody>
</table>
Recommendations 246

BIBLIOGRAPHY 250

Appendix

<p>| A. SELECTED EMPIRICAL STUDIES OF ORGANIZATIONAL EFFECTIVENESS | 267 |
| B. SAMPLE OF ORGANIZATIONS | 274 |
| C. SPORT CANADA: ORGANIZATIONAL/ADMINISTRATIVE PROFILE | 276 |
| D. SPORT CANADA: TECHNICAL PROFILE | 288 |
| E. SUPPLEMENTARY QUESTIONNAIRE TO THE EXECUTIVE DIRECTORS | 296 |
| F. DESCRIPTIVE STATISTICS FOR THE CONTEXTUAL VARIABLES | 299 |
| G. DESCRIPTIVE STATISTICS FOR THE STRUCTURAL VARIABLES | 300 |
| H. DESCRIPTIVE STATISTICS FOR THE EFFECTIVENESS VARIABLES | 301 |</p>
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pearson Correlation Coefficients for Contextual Variables</td>
<td>130</td>
</tr>
<tr>
<td>2.</td>
<td>Percent of FAS Support Compared to Total Operating Budget</td>
<td>132</td>
</tr>
<tr>
<td>3.</td>
<td>Matrix of Pearson Correlation Coefficients for Contextual and Effectiveness Variables</td>
<td>135</td>
</tr>
<tr>
<td>4.</td>
<td>Matrix of Pearson Correlation Coefficients for the Contextual and Structural Variables</td>
<td>137</td>
</tr>
<tr>
<td>5.</td>
<td>Partial Correlations for Organizational Size and Structure</td>
<td>142</td>
</tr>
<tr>
<td>6.</td>
<td>Partial Correlations for Dependence and Structure</td>
<td>149</td>
</tr>
<tr>
<td>7.</td>
<td>Partial Correlations for Technological Expertise and Structure</td>
<td>152</td>
</tr>
<tr>
<td>8.</td>
<td>Matrix of Pearson Correlation Coefficients for Structural Variables</td>
<td>161</td>
</tr>
<tr>
<td>9.</td>
<td>Matrix of Pearson Correlation Coefficients for Goal &amp; Systems Models of Organizational Effectiveness</td>
<td>188</td>
</tr>
<tr>
<td>10.</td>
<td>Matrix of Pearson Correlation Coefficients for Structural and Effectiveness Variables</td>
<td>195</td>
</tr>
<tr>
<td>11.</td>
<td>Partial Correlations for Publication Formalization and Effectiveness</td>
<td>197</td>
</tr>
<tr>
<td>12.</td>
<td>Partial Correlations for Job Description Formalization and Effectiveness</td>
<td>198</td>
</tr>
<tr>
<td>13.</td>
<td>Partial Correlations for Policy Centralization and Effectiveness</td>
<td>202</td>
</tr>
<tr>
<td>14.</td>
<td>Partial Correlations for Personnel Centralization and Effectiveness</td>
<td>204</td>
</tr>
<tr>
<td>Partial Correlations</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>New Program Centralization and Effectiveness</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>Impersonality of Work Relations and Effectiveness</td>
<td>207</td>
<td></td>
</tr>
<tr>
<td>Salaried Program Staff Specialization and Effectiveness</td>
<td>211</td>
<td></td>
</tr>
<tr>
<td>Committee Specialization and Effectiveness</td>
<td>212</td>
<td></td>
</tr>
<tr>
<td>Clerical Specialization and Effectiveness</td>
<td>214</td>
<td></td>
</tr>
<tr>
<td>Total Specialization and Effectiveness</td>
<td>215</td>
<td></td>
</tr>
<tr>
<td>Clerical Ratio with Effectiveness</td>
<td>217</td>
<td></td>
</tr>
<tr>
<td>Voluntary Professionalism and Effectiveness</td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>Salaried Program Staff Professionalism and Effectiveness</td>
<td>221</td>
<td></td>
</tr>
</tbody>
</table>

**List of Figures**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Sport Governing Bodies Interorganizational Networks</td>
<td>31</td>
</tr>
<tr>
<td>Conceptual Model of Contextual, Structural and Effectiveness Variables</td>
<td>123</td>
</tr>
</tbody>
</table>
CHAPTER 1 - STATEMENT OF THE PROBLEM

Introduction

In Canada, as in many countries throughout the world, national sport governing bodies, which are largely composed of volunteers, play a significant role in the administration of amateur athletics. National sport governing bodies (NSGBs), vertically integrated with their international, provincial and local affiliates, involve thousands of athletes, coaches, parents, administrators and government officials in Canada and throughout most of the modern world.

While voluntary organizations such as NSGBs are often thought to be loosely and informally structured (Smith, 1972), it is becoming increasingly evident that amateur sport organizations, particularly at the national level, are becoming more bureaucratic in nature (Schlagenhauf and Timm 1976; Frey 1978; Kidd 1978). For example, while the administration of Canadian amateur sport was once described as being of the 'kitchen table' variety (Task Force Report, 1969:89), there are now over fifty-four incorporated NSGBs centrally housed in Ottawa's National Sport and Recreation Center. Full-time paid professionals are being hired to carry out the day to day administration of these organizations; formal constitutions, bylaws, job descriptions and
evaluation criteria are being formulated; training and certification systems are being developed for coaches and officials; and a scientific approach to athlete preparation is being advocated. These developments, among others, have occurred for the explicit purpose of improving the effectiveness of national team performance in international sporting events (Regan, 1981).

This trend toward bureaucratization, and the commitment to performance excellence, is a relatively recent development that has been heavily influenced by federal government involvement in amateur sport. Broom and Baka (1978) contend that it was not until 1969, when a Task Force was struck to investigate reasons for Canada's dismal performance in international competition, that the federal government became strongly involved in the organization of amateur sport. Broom and Baka explain that, prior to this time, the federal government believed that it was politically risky to support elitist sport over broad-based fitness programs for the masses. However, in order to gain visibility, respectability and prestige through international sport, a separate government cabinet minister was appointed to Fitness and Amateur Sport. Previous to this time, Fitness and Amateur Sport was under the federal Minister of Health and Welfare. In addition, several 'arms length' organizations such as Sport Canada, the National Sport and Recreation Center and the Coaching Association of Canada emerged to support the growth of
amateur sport. The main purpose of Sport Canada is to provide financial, technical and administrative support to the NSGBs through a number of Sport Canada consultants.

Ironically, although Campagnola (1979), a former Minister of Fitness and Amateur Sport, contends that support organizations such as Sport Canada were developed to encourage "maximum public assistance and minimal government involvement", the NSGBs have become increasingly dependent on the government for financial and other support services. Moreover, because Sport Canada provides up to 90% of NSGB funding, it is able to exert a significant influence on the structure and objectives of these organizations. This controlling influence is most evident in the following policy statement regarding the criteria that NSGBs must meet to be eligible for federal government funding. Regan (1981:10), while serving as Minister of Fitness and Amateur Sport, stipulated that:

Regardless of their participation base, all sports will be required to meet specific criteria and funding guidelines in determining financial support. Priority consideration will be given to both broad-base sports, such as swimming and soccer, and the more limited-base sports, such as skiing and jumping, that have a commitment to excellence and who continually demonstrate technical, administrative and financial maturity.

Thus, NSGBs were encouraged to become more business-like in their pursuit of performance excellence. In addition, the federal government has rationalized its involvement in amateur sport by assuming that voluntary organizations, operat-
ing independently, would not be capable of achieving high 
rankings in international competition. As Campagnola 
(1979:8, a former Minister of Fitness and Amateur Sport, 
reasoned:

Athletic excellence demands funding and technical 
expertise beyond the reach of athletes and most 
voluntary associations. The systematic coordina-
tion of all levels of athletic activity within the 
bound of any sport demands not only funding and 
technical expertise, but also the kind of support 
and planning not generally to be found, for per-
fectly understandable reasons, within most volun-
tary structures....it can best be expediated by a 
central staff well placed on the national and in-
ternational levels.

However, despite the evidence that suggests that these vol-
untary organizations are being strongly influenced by the 
federal government, and are becoming more bureaucratic in 
nature in order to improve their effectiveness in interna-
tional competition, there has been little empirical research 
on the structure and function of these amateur sport deci-
sion-making bodies.

Part of the reason for this lack of research can be 
 traced to the focus of the voluntary association literature. 
That is, very few researchers of voluntary organizations 
have employed organizational theory as a framework for un-
derstanding voluntary social action. Rather, one of the 
main research foci has been to describe socioeconomic and 
demographic characteristics of voluntary association joiners 
(Hyman and Wright 1971; Babchuk and Edwards 1966; Curtis 
1971; and Tomeh 1973). Another popular trend, from a social
psychological perspective, has been to investigate the reasons for voluntary association joining (Jacoby 1965; Smith 1972; Banton and Sills 1972; Tomeh 1973; Frizzel and Zureck 1974). Similarly, the limited research that has been conducted on involvement in voluntary sport organizations has examined the socioeconomic and demographic characteristics of joiners and the reasons for participation (Bratton 1971; Beamish 1975; Gruneau and Hollands 1979; and Theberge 1980a, 1980b).

A second reason for the dearth of research in this area is that the bulk of the research on organizational structure has been conducted on the profit-oriented business organization to the exclusion of the voluntary type of organization. This omission is unfortunate. According to Heydebrand (1973:3), we can only fully understand the dynamics of structural variation and change within an organizational context through comparative research across the range of organizational functional types. By applying an organizational perspective to the study of voluntary organizations, it would be possible to determine whether organizational structures are loosely patterned or are largely indistinguishable from bureaucratic business or government organizations. In addition, as Smith (1972:8-16) acknowledges, an organizational perspective would also add to our understanding of the following features of voluntary organizations:

- the nature and determinants of the incidence, growth, change and dissolution of voluntary groups and organizations;
- the relationships between vol-
untary groups, and other groups and individual affiliates; the effectiveness of voluntary groups and their impact on social processes, social institutions, the larger society and the bio-physical environment; and the internal structure and functioning of voluntary groups, organizations and related collectivities.

With respect to voluntary amateur sport organizations, the application of organizational theory would be an appropriate analytical tool for investigating a number of interesting sociological relationships. These include: the effects that contextual variables such as organizational size, organizational age, the level of technological expertise and the extent of dependence on other organizations have on organizational structure; the interrelationships between structural variables; the interrelationships among variables from both the goal and systems models of effectiveness; and the relationship between structure and organizational effectiveness.

Much of the research on organizational structure, which could provide a framework for investigating the above mentioned relationships, was stimulated by Max Weber's (1922)\(^1\) theory of bureaucracy. Weber placed the emergence of modern bureaucratic structures within an historical and cultural context, explained the reasons why bureaucracy would be linked to organizational efficiency and effectiveness and, at the same time, warned of the negative consequences that

\(^1\) Weber, Max, *Economy and Society* G. Roth and C. Wittich (eds.), New York;Bedminster Press, 1968, was originally published as *Wirtschaft und Gesellschaft* (1922).
bureaucracy would pose for the individual working in a complex organization. Subsequently, some organizational researchers have explored the relationship between contextual factors and organizational structure (Pugh et al. 1968; Binings and Lee 1976; Hsu et al. 1983), while others have been interested in the interrelations among the characteristics of bureaucracy (Pugh et al. 1968, 1976; Hall 1972; Mansfield 1973; Grinyer and Yasai-Arde Kani 1980). An additional research strategy has been to investigate the relationship between structure and organizational effectiveness (Hage 1965; Blau 1974; Glisson and Martin 1980; and Sigelman 1981).

In addition to the concern for organizational structure as a control mechanism, some sociologists, inspired by Weber's work, have emphasized the importance of investigating structure in a wider historical and cultural context (McNeil 1978; Mommensen 1977; and Soloman 1978). Still others have taken a more critical view of Weber's theory. With respect to this view, a considerable amount of research has been generated regarding the informal, unplanned and possibly dysfunctional properties of bureaucracy (Selznick 1949; Werton et al. 1952; Michels 1966).

In the sociology of sport literature, Weber's theory has been utilized to a limited extent. Some research has been done on the emergence of bureaucratic forms of sport in modern society (Riesman and Denny 1972; Luschen 1970; Frey 1978; Schlagenhauf and Timm 1976; and Ingham 1975, 1978,
1979) and on the negative consequences that the trend toward bureaucratization poses for the athlete (Page 1973; Sage 1978; Frey 1978; and Kidd 1979, 1980). These approaches parallel Weber's strategy of analysing the structure of modern society within an historical context while considering the effect that changes in structure will have on the individual. No empirical research has been based on the relationships between context, structure and effectiveness in sport organizations. However, Weber clearly suggested that the structural indices of bureaucracy are highly interrelated and that effectiveness would increase the more a modern organization adopted a bureaucratic form of control. As it is becoming increasingly evident that voluntary sport organizations, such as Canadian NSGBs, are gradually assuming a more bureaucratic structure in order to improve performance in international competition, this line of inquiry needs to be developed.

The most expedient way to develop this line of inquiry is to apply the research which has been done on Weber's theory of bureaucracy and the concept of organizational effectiveness in a business setting to the case of voluntary sport organizations. This approach could prove to be especially useful if, as Sills (1972) argues, voluntary organizations move through the same development patterns and form the same types of social relationships as do other types of organizations. A comparative approach to organizational re-
search has long been advocated by Pugh et al. (1968), who have established a strong tradition of research on organizational structure. The work by Pugh et al. (1968) represents the first of a series of studies carried out at the University of Aston in Birmingham, England since 1960. Pugh et al. examined the relationships between context, structure and other organizational variables across a diverse range of organizations, including manufacturing companies, government departments, retail stores and the transport industry. The rationale for this comparative approach was summarized by Pugh et al. (1976:vii) in the following statement:

an aim of the Aston research was to arrive at statements which would be applicable to as many organizations as possible, given that one of the aims of social science is to discover widespread regularities.

Although Weber's work stimulated a strong research tradition, as illustrated by the Aston group, the voluntary sector has been largely overlooked as an area of inquiry. The application of Weber's ideas to voluntary organizations would help resolve the issue of whether the Aston groups' findings can be generalized across organizational types. This strategy will, at the same time, provide information about the nature of control mechanisms in voluntary amateur sport organizations.

According to Weber's predictions, bureaucracy would become the most effective control mechanism in modern society because administrative functions would be carried out objec-
tively and rationally as opposed to traditional societies in which ascribed status was the basis for authority and power. It is this 'Occidental Weltanschaunng' or scientific achievement-oriented world view which legitimized the rise of bureaucracy. Bureaucracy, with its specialized division of labor, highly qualified officials, reliance on formal rules and procedures, centralized decision-making, a high ratio of clerical staff, and an impersonal work orientation aims for maximum effectiveness and efficiency. Thus, Weber predicted that it would penetrate all types of social institutions. Therefore, traditional forms of authority, characterized by the arbitrary decision-making of notables, would be replaced by the impersonal and rational type of organizational action.

Subsequent to Weber's writing on the superiority of bureaucracy as a control structure, the majority of research has been conducted in two main areas; one, the effects of context on structure and two, the interrelationships among structural variables. The most common variables that have been used to measure bureaucratic structure include: specialization, standardization, formalization, centralization and configuration (Hinings and Lee, 1976). Specialization refers to the division of labor within the organization, while standardization is measured by the extent to which procedures are governed by regulations. Formalization is the extent to which rules, procedures, instructions, and
communications are written down. Centralization is a measure of the locus of decision-making authority in an organization. Configuration, a variable which is an appropriate measure when there are levels of hierarchy within an organization, deals with the shape of the role structure.

Specialization, formalization and standardization have been found to be positively correlated with each other and have been described as being highly related components of the 'structuring of activities' dimension of bureaucracy (Pugh and Binings, 1976). Centralization, which is considered to be a separate "concentration of authority" dimension by the Aston group, has most often been found to be negatively correlated with the variables included in the 'structuring of activities' dimension. Thus, with the increased 'structuring of activities', the locus of authority tends to decentralize throughout the organization. A third structural dimension that has been investigated is the "line control of workflow" and includes variables such as the proportion of clerical staff to decision-making personnel.

However, in Weber's discussion of the ideal type bureaucracy, he also alluded to a fourth dimension which could be labelled "the characteristics of office holders". In his writings on bureaucracy, Weber described several characteristics of the bureaucratic office holder. Three of the most prominent features include: the necessity of professional qualifications for entry into an organization, the tendency
to remain in acquired positions for a long period of time and the development of an impersonal work orientation among coworkers. Thus, one important question is to determine the degree to which the Aston groups' original three dimensions are interrelated within voluntary amateur sport organizations. Another consideration is whether or not the "characteristics of office holders" dimension is interrelated with the other structural dimensions of bureaucracy.

In addition, the relationship between a number of contextual variables, such as organizational size, organizational age, dependence and technology have also been investigated in relation to the structural variables. In the majority of studies, organizational size and the degree of dependence on other organizations have been found to be the best predictors of organizational structure (Pugh et al. 1968; Hsu et al. 1983). Larger organizations tend to be more bureaucratic, probably due to a need for increased control as the number of employees increases. Conversely, the more dependent an organization is on a parent company, the less likely it is to be clearly structured. Replications are required to determine if the same patterns exist in voluntary amateur sport organizations.

In his review of the literature on bureaucracy, Blau (1974) concluded that the structural bureaucratic attributes are interrelated and their effects interact on each other. If these same attributes are found to be present to some de-
gree in Canadian NSGBs then the same interrelations can be expected. It is highly unlikely, however, that these characteristics are present in the NSGBs to the degree outlined by Weber. This is because Weber's ideal types were not meant to represent reality. They were constructed as heuristic devices from which comparative and causal judgements could be made (Rex 1977; Ingham 1979). The interesting question is to determine the extent to which Canadian NSGBs and other voluntary sport organizations approximate the structure of Weber's ideal type. In addition, in order to test Weber's assumption that bureaucracy is an effective form of social structure, the correlations between indices of bureaucracy and organizational effectiveness need to be examined. Because there is evidence that the structural variables are interrelated it will be necessary to control for the effects of structure on effectiveness. Unfortunately, the relationship between structure and organizational effectiveness has been given little attention in the literature to date.

According to Sigelman (1981), two main hypotheses have been examined in the limited research which has been done on this relationship. With the first hypothesis, a positive linear relationship between bureaucratic structure and organizational effectiveness is predicted, a relationship which is consistent with the Weberian tradition. As Sigelman (1981:253-254) explains:
The basic idea here is that division of labor, specialization, achievement orientation, recruitment and promotion on the basis of merit, efficiency-consciousness, clear-cut patterning of responsibility, and other bureaucratic characteristics encourage organizational rationality. Accordingly, as these characteristics diffuse throughout the organization and become institutionalized over the course of time, more effective performance should follow.

In the second instance, a linear relationship between bureaucracy and effectiveness is predicted, but this time, the slope of the relationship is negative. Sigelman (1981:254) reports that some researchers have argued that the explanation for a negative relationship is that, "the increasingly bureaucratic organization becomes progressively more susceptible to performance lapses as its structural arrangements become more elaborate".

To reconcile these contradictory perspectives, Sigelman suggests that an S shaped curve may best explain the relationship between bureaucracy and effectiveness. He (1981:256) explains that effectiveness may suffer when an organization first adopts a more bureaucratic style, but effectiveness can then be facilitated as "rational procedures replace the ad hoc ones". However, after a point bureaucracy may be detrimental to effectiveness because:

Specialization may give way to water-tight compartmentalization, efficiency to goal displacement, impersonality to outright dehumanization and hierarchy to rigidity (Sigelman, 1981:256).

Thus, in this study, organizational age could be an important contextual variable since the relationship between bu-
restructuring and effectiveness may vary according to the stage of growth of the organization. Furthermore, it is important to determine the degree to which the contextual variables are interrelated. If they are found to be highly correlated, it will be necessary to implement control procedures so that the unique effect of each contextual variable on structure can be determined.

Careful consideration must also be given to the indices of organizational effectiveness. Researchers have long been interested in isolating the variables which predict organizational effectiveness. However, several problems regarding the measurement of the concept have hindered progress in this direction (Steers, 1977). Part of this problem stems from the use of alternative theoretical orientations regarding the functioning of organizations. More specifically, some researchers have used the goal model to measure organizational effectiveness (Price, 1968), while others have employed the systems model (Yuchtman and Seashore, 1967). With the goal model, effectiveness is measured according to the ability of an organization to achieve desired objectives, while in the systems model, effectiveness is measured in terms of the organization's ability to acquire scarce resources.

While the issues surrounding the use of the goal and systems models will be discussed in the next chapter, it is important to mention at the outset that the relationship be-
tween indices from both models will be explored in this study. Since performance excellence is an explicit objective of all NSGBs which are responsible for the administration of Olympic sports, the ranking of the sport in international competition will represent a measure from the goal model. In addition, because NSGBs must continually struggle to obtain funding, their ability to acquire funds from the government and other sources will be included as an index of the systems model. The use of both the goal and systems models is intended to examine the controversy existing in the literature on organizational effectiveness. In the literature, the two models are either regarded as alternative views on organizational performance (Campbell, 1976; Molnar and Roger, 1976) or as complementary tools for analysing organizational action (Webb, 1974). With respect to the latter view, it has been suggested that the systems model may be a logical extension of the goal model in that resources are required to achieve desired goals.

Thus, if the two models are assumed to be complementary methods of measuring organizational effectiveness, a positive relationship between the goal and systems measures would be expected. With respect to this study, organizations with teams which rank high in world rankings would be expected to be more successful in acquiring scarce funding resources than are organizations with teams with moderate or low world rankings. This interpretation is consistent with
the assumption underlying the systems model that the ability to acquire resources is a reflection of the organization's success at producing desired outcomes, and thus assumes that the systems and goal models are complementary tools for measuring organizational effectiveness.

However, it has also been argued that the acquisition of inputs into an organizational system does not necessarily guarantee that desired outcomes will be achieved. A number of uncontrollable factors which are external to the organization may prevent inputs from being transformed into outputs. Or, inputs may be mismanaged at various points throughout the system and are therefore not transformed into desired outputs. With this interpretation, a negative relationship or the lack of a significant relationship between the two models of organizational effectiveness would be expected. Thus, besides investigating the relationship between structure and effectiveness, this study will also examine the question of whether the goal and systems models are complementary tools for investigating organizational effectiveness.

In sum, Weber's theory of bureaucracy provides a framework for investigating the structure and meaning of modern amateur sport by: focusing on the historical and cultural context in which organizational structures emerge, examining the effects of structure on the attainment of instrumental objectives and resource acquisition, while considering the
consequences of a shift in power as control is taken out of the hands of the worker, or in this case, the participant. This study will investigate the second portion of this Weberian framework; a portion which has received little attention in the sociology of sport literature. To this end, several relationships will be examined. These include the relationships between selected contextual variables and structure, the interrelationships among structural variables, the interrelationships among the goal and systems models of effectiveness and the relationships between structure and effectiveness.

**The Problem**

The purpose of this study is fourfold. The first purpose is to examine the relationships between the contextual variables of organizational size, organizational age, technological expertise and dependence on other organizations on organizational structure. Second, the interrelationships among the bureaucratic structural variables will be analysed, including: formalization, specialization, centralization, impersonality of work relations, professionalism, career stability, and the proportion of clerical staff to decision-making personnel. Third, the relationship between bureaucratic structure and measures of both the goal and systems models of organizational effectiveness will be investigated. The fourth purpose is to determine the extent
to which indices of the goal and systems models of organizational effectiveness are interrelated in voluntary Canadian national sport governing bodies (NSGBs).

**Significance of the Study**

The examination of the relationship between bureaucracy and effectiveness will provide insights into the present structure and function of amateur sport at the decision-making level. Few studies in the sociology of sport have examined decision-making structures, even though these bodies undoubtedly have a strong influence on the development of amateur sport. Research at this level of analysis is important for a number of reasons. First, by looking at present organizational structure, empirical evidence regarding the extent of bureaucratization will be provided. This will highlight how the administration of amateur sport has changed over time. In the past, the administration of amateur sport at the local, provincial and national levels was much less formal. Many of the administrative duties, including coaching and officiating, were performed by the athletes or parents of athletes who devoted their spare time to the organization of sport in a more spontaneous and informal manner (Task Force Report 1969; Roxborough 1975; Schrodt 1981). However, with the increased bureaucratization of sport, decision-making power and authority, especially at the national level, is becoming more and more concentrated
in the hands of professionally trained executive members and paid professionals.

While this transition may improve organizational effectiveness, as measured by performance and revenue generation indicators, it is also "removing the power from the athletes and volunteers", thus resulting in the loss of "player controlled games to management controlled big time" (Page, 1973). Using Weber's terminology, the athlete may become a mere cog in the bureaucratic machine. According to several sport sociologists, the consequences of such a shift in power from the athletes and volunteers to the professionals and government officials may include: declining personal autonomy on the part of the athletes (Page, 1973), a concentration on producing winners instead of an emphasis upon the personal and emotional growth of the athlete (Sage, 1978), abandonment of expressive values achieved through athletic participation (Frey, 1978), the depersonalization of relationships (Willey, 1977) and the subordination of the athlete to the major decision makers (Sage, 1978). Therefore, a second contribution of this research will be to determine the extent to which voluntary organizations in amateur sport are bureaucratized. This will provide evidence regarding how much these fears associated with the trend toward bureaucratization in sport are warranted.

Third, little research has been completed in the sociology of sport which integrates the concepts of bureaucracy,
organizational effectiveness, and the voluntary organization. This integration is important because it adds an organizational perspective to the study of voluntary organizations and, at the same time, allows one to examine the extent to which findings on business organizations can be generalized across organizational types. In the voluntary association literature, voluntary organizations are seldom characterized as being bureaucratic in nature; a quality that is most often associated with governments, big business and professional sport.

If bureaucracy is found to exist in voluntary organizations such as the Canadian NSGBs, a revision of the present conceptualizations of voluntary organizations may be in order. For example, Smith (1972:1-2) sees the functions of voluntary organizations as being pluralistic; as counteracting the trend toward anomie, personal isolation and alienation that have accompanied the bureaucratization of society; as contributing to innovation and social change; as preserving cultures; and as nurturing personal freedom. Smith's statements seem to imply that voluntary organizations are not bureaucratic; an assumption that may not be accurate in the case of Canadian NSGBs. If it can be established that such organizations are bureaucratic then one could argue that participation results in consequences opposite to those espoused by Smith. Because bureaucracy is associated with impersonality of work relations, involvement may actually
contribute to feelings of anomie, personal isolation and alienation. Pluralism of power bases may be restricted through government intervention, and innovation may not be encouraged when there is a reliance on formal work procedures. In addition, the culture preserving function may be undermined by the pressure for standardization. Finally, personal freedom is difficult to maintain when roles, duties, decision-making procedures and authority channels are clearly designated. By examining the relationships between context, bureaucracy and organizational effectiveness in voluntary amateur sport organizations, the assumptions underlying the nature of voluntary organizations can be examined.

In addition, in keeping with the comparative organizational approach advocated by the Aston group, this study will examine the degree to which the results of past studies can be generalized to the voluntary type of organization. More specifically, the relationships between context and structure, as well as the interrelationships among the structural variables will be examined. Thus, even though some of the operational variables must be modified to account for the uniqueness of the voluntary organizations under examination (see Chapter 3), to an extent, a replication of past research will be attempted.

However, most previous studies have only reported the zero order correlations between context and structure which do not control for the confounding effects of the other contextual variables. Therefore, more sophisticated techniques
will be utilized to further examine the relationships between these variables.

This study will also extend past research by considering a fourth dimension of bureaucracy, "the characteristics of office holders", as well as relating structure to organizational effectiveness. Thus, a more indepth interpretation of Weber's original theory of bureaucracy will be provided. To further clarify these relationships, controls will also be employed to determine the unique relationship that each structural variable has with the measures of organizational effectiveness.

In sum, this investigation will analyse the extent to which features indicative of bureaucracy are interrelated in voluntary amateur sport organizations and how this form of social organization is related to indices of effectiveness. In addition, the relationships between the structural variables of bureaucracy will be examined to determine if, as the Aston group has found, the variables indicative of bureaucracy are highly intercorrelated. The effects that contextual variables have on organizational structure will also be explored to determine if similar relationships, as uncovered in the business type of organization, exist in these voluntary organizations. To determine whether the goal and systems model are separate or complementary models for investigating organizational effectiveness, the relationship between international performance success and financial resource acquisition will also be examined.
In conclusion, the examination of these research problems is intended to serve three functions: one, to examine the extent to which Weber's theory of bureaucracy holds for voluntary sport organizations; two, to extend the literature on voluntary sport organizations from an organizational perspective; and three, to obtain a better understanding of the nature of decision-making structures in amateur sport.
CHAPTER 2 - REVIEW OF LITERATURE

Introduction

This chapter begins by describing the nature of Canadian national sport governing bodies, including a brief explanation of the role the Canadian federal government has played in the historical development of these organizations. Next, a review of the issues and the research regarding the main concepts involved in this study are presented. This review includes the literature on voluntary organizations, bureaucratic structure and organizational effectiveness. The final section of the chapter presents a review of the rationale for the hypothesized relationships between indices of context, bureaucracy and organizational effectiveness in national sport governing bodies.

Canadian National Sport Governing Bodies

According to Guttmann (1978), the first national sport governing bodies emerged in the middle of the 19th century in England; a development which later spread throughout much of the modern industrialized world. In contrast to primitive sport, which was not characterized by bureaucratic decision-making structures, Guttmann (1978:46) contends that:

In the 20th Century almost every modern nation has created a government sports bureaucracy to aid,
Guttmann explains that the rise of bureaucracy in sport is associated with a number of other characteristics of industrialized modern society, including: a movement from the sacred to the secular; an emphasis on equality, specialization, rationalization and quantification; and, a preoccupation with record keeping. An examination of these characteristics helps to illustrate some of the reasons why organized decision-making bodies have emerged to control amateur sport.

One reason for this development was the shift from the religious significance that was associated with sport in primitive societies to a more secular trend in which sport is pursued for its own sake. With an emphasis on the secular, it is likely that administrative structures will emerge to control the sport milieu, a form of control that was once thought to be in the hands of the Gods.

In addition, Guttmann links the concept of equality to the achievement principle; an ideology which Weber associated with the rise of modern society. Given this achievement principle, Guttmann (1978:26) contends that rules have emerged to ensure equality in sport on two levels: one, in terms of equal opportunities to compete, and second, in terms of ensuring that competition conditions are the same for all competitors. Although it can be argued that this ideal is seldom achieved, the goal of equality is pursued
much more in modern sport than it was in primitive societies which were governed by ascriptive rather than achievement principles.

Rationalization is another process associated with the development of bureaucratic sport governing bodies. This process is defined as "thinking in terms of means and ends". If success in sport is viewed as the end, then a number of steps must be taken and rules established to ensure that the end will be reached without dispute. While rules, distances for races, and equipment designs were rarely standardized in more primitive societies, universal rules, standardization and an emphasis on scientific training are all characteristic of modern sport forms. All this preparation is the means of achieving the end of athletic excellence. According to Guttman (1978:44):

It is highly unlikely that the tendency toward increased rationalization will be halted by protests of men and women who cherish the day when sports were avocations.

Specialization is another concept which Guttman links to the process of bureaucractization. Whereas the cultivation of many skills was valued in earlier societies and there was little differentiation of roles, modern sport is characterized by a more highly specialized division of labor, both administratively and on the playing field. This increased division of labor is also linked to professionalism in that those in primary and secondary levels of involvement tend to devote a lot of time to their roles and become very qualified in a particular area of expertise. In
addition, the size of administrative structures have expanded in response to the desire for greater specialization and professionalism.

Quantification and record keeping are additional features associated with the rise of bureaucratic structures in sport. While performances and distances were rarely quantified in ancient societies such as Greece, "modern sports are characterized by the almost inevitable tendency to transform every athletic feat into one that can be quantified and measured" (Guttmann, 1978:47). In addition, the keeping of statistics and records has been enhanced by many significant technological advances (Jobling, 1976), and the emergence of administrative positions which are entrusted with this record-keeping function.

Utilizing the concepts of bureaucracy, secularism, equality, specialization, rationalization, quantification and record keeping, Guttmann has applied a Weberian approach to explain the rise of modern sport bureaucratic structures. However, there is very little empirical evidence regarding the actual historical transformation of voluntary decision-making bodies in amateur sport. Some sport sociologists (Dunning 1973; Ingham 1975, 1976, 1978; Riesman and Denney 1972) have employed similar approaches to that of Guttmann, but have concentrated on the form of the game played rather than on administrative structures. Others have compiled descriptive accounts of the development of selected national
Sports governing bodies (Greaves 1976; the Canadian Gymnastic Federation 1973); some work has been done on the nature of sport organizations in the 1800's and early 1900's (Wet-calf 1976; Morrow 1981); and there is a growing body of literature regarding how government involvement is affecting the organization of amateur sport (Anderson 1974; Broom and Baka 1978; Corran 1980; Kidd 1978, 1980). However, there is very little empirical evidence or descriptive documentation which explains the rise of Canadian NSGBs. These organizations involve thousands of citizens and government officials, and millions of tax dollars in direct donations and support services are provided to them. They also represent national sport policy, evolving from provincial and local associations, at the international level of organization.

At present, Canadian NSGBs appear to possess many of the features which Guttmann contends are the distinguishing characteristics of modern sports. The sport played by athletes belonging to the various sport governing bodies can be described as being secular in nature and there are an abundance of rules and guidelines designed to achieve equality in competition. By looking at statements of purpose in the constitutions of these organizations, it is evident that success in international competition is a major goal and that standardization and preparation is encouraged, to varying degrees, in order to achieve this end. Thus, there is evidence of a rational type of ideology. National boards,
which usually contain representation by provincial associations and some form of an executive board, often have clearly defined and differentiated functions. These boards, along with numerous committees with specific mandates, are representative of specialization at an administrative level of involvement. In addition, since 1970, salaried program staff with educational qualifications have been hired in growing numbers to carry out the day to day administrative and technical tasks, a development, which among others, is evidence of increased professionalization. In addition, an emphasis on quantification and record keeping is clear as numerous records and statistics are kept on domestic Canadian competition as well as international performances in the Commonwealth Games, Pan American Games, Olympic Games and World Championships.

Given these characteristics, the present structure and major affiliations of the Canadian NSGBs are illustrated in Figure 1. As shown in this diagram, a typical sport governing body is composed of a national board, an executive board, and a number of committees. This administrative component is responsible for policies and procedures for their sport at the national level as well as their national team, which is composed of the athletes, coaches, officials and various support staff.

In addition, this group is responsible for paid staff who carry out the day to day administration of the associa-
Canadian National Sport Governing Bodies - including volunteer in the roles of board members, executive board members and committee members

National Executive Director

National Technical Director

Other Salaried Program Positions

Provincial Associations

Local Clubs

Athletes

FEDERAL GOVERNMENT

Minister of Fitness and Amateur Sport

Assistant Under-Secretary of State

Secretary

Director of Sport Canada

Associate Director

Chief Contributions

Administration Officer

Chief, Sport Policy

Sport Policy Officer

Sport Technical Officer

Provincial Ministries of Culture & Recreation

Municipal Sport & Recreation Departments

FIGURE 1: NATIONAL SPORT GOVERNING BODIES INTERORGANIZATIONAL NETWORKS
tion. Although not all sport governing bodies have the same number of paid staff, there is often an executive director, in charge of administrative duties; a technical director, in charge of technical programs such as junior athlete development and coaching certification; as well as some clerical staff. All paid staff are centrally housed in the National Sport and Recreation center in Ottawa, a center which provides a number of support services to the NSGBs. These bodies also represent local as well as provincial associations and are linked through representatives to their international associations.

However, sport governing bodies do not operate autonomously. Rather, Fitness and Amateur Sport, through Sport Canada, contributes up to 90% of NSGB funding. To justify and to prioritize government funding, Sport Canada consultants are responsible for a number of associations and make recommendations, based on Sport Canada funding criteria, regarding the amount of support to be given to each NSGB. Although these criteria are constantly under review, those in effect at the time of this study are as follows (Sport Canada Criteria, 1982):
SPORT CANADA CRITERIA

To be eligible for consideration by Sport Canada for financial support, a national sport governing body shall:

1. Be receiving provincial government financial support for administration programs, such as executive and general meetings as well as technical programs such as provincial competitions and coaching development in at least 6 Provinces or Territories in Canada;

   **Exception:** A sport may be considered for financial support of its national team program (training, competition, athlete assistance, research and support services) if it is entered on the current calendar of the Commonwealth Games and/or Pan Am Games and/or the Olympic Games and meets the following performance standards:

   a) Commonwealth - can win medals
   b) Pan Am - can finish in the top 6
   c) Olympics - can finish in the top one half

2. Have a written statement ratified by the association or an objective in the constitution which clearly states commitment towards developing excellence.

3. Be incorporated under the Canada Corporations Act as a national sport governing body or have equivalent legal protection.

4. Be recognized as a member of their respective international sport federation (this federation must be comprised of countries representing at least 4 continents);

   **Exception:** A sport may be considered for financial support if it has a tradition or heritage in Canadian sport and has received FAS funding for more than 10 years.

5. Have independent annual assets for implementation of a basic national sport development program. The minimum assets shall be equal to at least 10% of the Fitness and Amateur Sport support;

6. Have undertaken the implementation of plans in the areas of:
a) athlete development programs (training and competition)
b) coaching development
c) officials' development

7. Have an identifiable organizational structure with clearly delineated functions, committee structures and job descriptions and have sufficient volunteer depth to fill all national positions;

8. Have submitted a multi-year plan with measurable objectives for the following principle program elements. This plan shall be endorsed by the sport governing body and approved by Sport Canada:
   a) athlete skills development
   b) coaching development
   c) officials' development
   d) rule development and standardization
   e) national competition opportunities
   f) national team competition and training plans
   g) national team support staff development
   h) research and athlete testing programs
   i) Talent Identification and feeder system
   j) promotion

9. Have the capability to meet the needs of the membership in both official languages.

Thus, to be eligible for funding, NSGBs must be committed to performance excellence and must develop business-like organizational structures and planning systems in order to achieve this objective. To achieve technical, administrative and financial maturity, the NSGBs must develop hierarchical authority structures; become more differentiated
with specialized duties, roles and functions; establish rules, procedures and job descriptions to guide decisions and actions; place more emphasis on the qualifications of members; and place a high priority on performance excellence of their teams and athletes. All of these developments are characteristic of Weber's bureaucracy.

Although the federal government is able to exert a considerable influence on the goals and structures of the NSGBs through its control over funding, Broom and Baka (1978) contend that such direct government involvement in sport is a relatively recent development. It was not until 1969, when a Task Force Report on Sport for Canadians, was released to identify reasons for Canada's dismal performance in international sport, that the federal government became openly committed to the goal of athletic excellence. Previous to this time, according to Broom and Baka (1978:70), it was thought to be politically risky to support elite sport programs unless sport for the masses was used as a cover. With the publication of this report, Sport Canada was established to support the growth of competitive sport at the national and international levels. In addition, the Coaching Association of Canada was formed to improve coaching effectiveness through National Coaching Certification Programs, graduate coaching scholarships and coaching apprenticeships. The Task Force Report also recommended that a financial aid program be established to assist student athletes and to en-
courage outstanding athletes to stay in Canada instead of attending school in the United States where scholarships are more readily available. This recommendation resulted in the formation of the Athlete Assistance Program and by 1977-78 approximately $1.6 million was being budgeted for athlete assistance.

The Athlete Assistance Program was related to another program known as Game Plan which was launched in 1972. Through talent identification, expanded competition opportunities, the hiring of national coaches, and the formation of centralized training centers, the aim of Game Plan was to drastically improve Canada's standing in international competition. According to Broom and Baka, $85 million was spent between 1973 and 1976 to launch this program. The program was successful in achieving its goal as the number of A carded athletes (those who are in the top eight in the world), and the number of B carded athletes (those who are ranked from 8th to 16th in the world), totalled 126 in 1976; an increase from 47 in 1972. A further indication of the success of Game Plan was that:


Support to national sport governing bodies from the Minister of Fitness and Amateur Sport (FAS) have continued to increase until, in 1981, total contributions are approaching the 33 million dollar mark. However, NSGBs must compete with each other for funding by demonstrating admin-
istrative maturity and by achieving success through their teams and athletes in international competition. As mentioned previously, one of the purposes of this study will be to examine how the structural characteristics of the NSGBs are related to the ability of the organization to secure funding from the federal government. One question to be investigated is whether NSGBs with more bureaucratic characteristics are able to acquire financial resources more effectively.

In addition to the Task Force Report, another major development which stimulated government involvement in sport, was the passing of Bill C131 in 1961, the Fitness and Amateur Sport Act. Once again, the government was concerned about losing national prestige through poor sport performances. This concern was most evident in the following recollection by Regan (1981:3), a past Minister of Fitness and Amateur Sport:

The following year (1960), at the Summer Olympics in Rome, our national pride was offended again. In one of our poorest performances ever, Canada placed 26th, taking home only one medal, a silver in the rowing eights. It was becoming obvious that something had to be done, both for our top level athletes and our sagging waistlines.

With the appearance of the Fitness and Amateur Sport Act, the National Advisory Council on Fitness and Amateur Sport was established. The function of this council was to advise the Directorate of Fitness and Amateur Sport regarding policy and funding programs.
Prior to 1961, according to Broom and Baka (1978), the federal government had only superficial involvement in amateur sport. The concern over the loss of prestige through international sport was a more recent development, whereas in the past, achieving national security through fitness and sport as rehabilitation for the unemployed were the more prominent reasons for government involvement. However, during the 1920's and 1930's there may have been less need for the federal government to be concerned with performance since our achievements at the Olympic Games during that time have never been equalled (Schrodt, 1981).

While there is some evidence of the growing effect that government involvement has had on the bureaucratization of voluntary organizations such as NSGBs, there has been little research on the changes in the administration of these organizations over time. In Canada, the first evidence of a national sport governing body which operated autonomously from the federal government was the National Lacrosse Association which was formed in 1867. However, Schrodt (1981:7) contends that "these early organizations were often national in name only", as many were formed before their provincial associations were created. However, these so-called national associations did signal the growth of a national identity through international competition. Although little has been written about the actual administration of these organizations, they undoubtedly were the forerunners to the more bu-
reaucratic forms of organization seen today. For example, Morrow (1981) contends that prominent members of the Montreal Amateur Athletic Association, which was formed as a result of an amalgamation of several single sport clubs, were instrumental in the organization of at least ten national sport governing bodies in the late 1800's and early 1900's.

Another important early development was the formation of the Amateur Athletic Union of Canada (A.A.U.) in 1885. This organization claimed national jurisdiction over a number of sports. According to Schrodt (1981), the A.A.U. was formed due to a need to represent Canadian sport collectively in international competition and at the Olympics. By 1919, approximately half of the existing seventeen national governing bodies were AAU affiliates and this body also represented Olympic sports which had not yet developed a sport governing body.

Summary

There is little information which documents how Canadian national sports government bodies have evolved to become bureaucratic in nature; a characteristic which along with secularism, equality, specialization, rationalization, quantification and record keeping are features of modern sport. Although these organizations have their roots in the 1800's, it appears that federal government involvement, mainly since 1970, has been a major influence in the bureaucratization of
the NSGBs. The control that Sport Canada has over NSGB funding is one of the main reasons for governmental influence on the structure and goals being sought by these organizations.

While recognizing the importance of longitudinal research, this study will investigate the present structure and effectiveness of Canadian NSGBs. It is hoped that this study will fill a void that presently exists regarding the organizational nature of sport at the decision-making level and will thus form a base from which longitudinal analyses may be undertaken in the future.

In order to conduct this research, it is necessary to review the literature in a number of related areas such as voluntary organizations, bureaucracy and organizational effectiveness. The next section of this chapter reviews the research that has been conducted on voluntary organizations.

**Voluntary Organizations**

**Functions**

As leisure time has increased in post industrial society, the commitment to voluntary organizations in many areas including religion, science, sport, politics, and education has been on the rise. Smith (1972:1-2) contends that the impact of voluntary organizations on society is widespread:

Volunteer participation in many cases contributes meaningfully to individuals positive mental health, satisfaction, and sense of happiness, thus
counteracting the trend toward anomie, personal isolation, and alienation that in many cases tends to accompany the increasing urbanization, industrialization and bureaucratization of society.

Certain kinds of nonprofit organizations, notably interest groups and pressure groups, are thought to be vital for the maintenance of a democratic society insofar as they facilitate a pluralism of power bases and the participation of a variety of individuals in the political process in ways other than by voting and office holding.

Voluntary organizations and social movements are usually in the vanguard of social change and innovation, having in most cases less to lose and more to gain from such changes than do the more established, profit making organizations or government bureaucracies.

On the other hand, certain voluntary organizations also play a major role in preserving cultures, artifacts, ideologies, values, and symbols of the past, thus contributing to the maintenance of our cultural heritage of diversity, the "many" from which we have become in some sense "one".

Finally, even if none of the foregoing functions of voluntary organizations were currently important in a given society, such organizations should still be worthy of study as vital manifestations of the fundamental freedom of association; a freedom that must be jealously guarded and carefully nurtured in a world where such freedom is by no means universal nor permanent in any sense.

However, Smith's statements seem to imply that voluntary organizations are not bureaucratic in nature; an assumption that may not be accurate, especially in the case of Canadian NSGBs. If it can be established that such organizations are bureaucratic then one could argue that participation results in consequences opposite to those espoused by Smith. Because bureaucracy is associated with impersonality of work relations, involvement may actually contribute to
feelings of anomie, personal isolation and alienation. Pluralism of power bases may be restricted through government intervention, innovation would not be encouraged when strict adherence to formal work procedures is enforced and the culture preserving function may be undermined because of pressure for conformity. Finally, personal freedom is difficult to maintain when roles, duties, decision-making procedures and authority channels are clearly designated. The problems associated with present conceptualizations of voluntary organizations lie in two main areas: the definitions of voluntary organizations and the focus of the research that has been conducted to date.

Definitions and Typologies

The definitions for voluntary organizations have thus far been based on the rewards that individuals receive for participation. That is, involvement has been defined according to whether individuals receive financial remuneration for their efforts or according to the degree of freedom of choice in entering into a voluntary role in an organization. For example, Smith (1966:483) contends that the definitive characteristic is that "the majority of members are neither paid for participation in the organization nor physically coerced into such participation." Banton and Sills (1972:363) classify voluntary organizations according to the following criteria:
First, the major activity of the organization is not related to the business of making a living, that is, to the economic activities of its members. Second, the volunteer (i.e. non-salaried members) constitute a majority of participants.

In addition, Tomeh (1973:92) defines voluntary organizations as "organizations in which membership depends on the free choice of the individual while severance rests at the will of either party." Tomeh further characterizes such organizations as being nonprofit in nature with collective objectives, delegated authority patterns and duties, elected or selected officers and periodic and/or frequent meeting times. Thus, organizational patterns are not viewed by Tomeh as being necessarily loosely structured; a feature which is commonly associated with voluntary organizations.

Tomeh recognizes that the "free choice" element of his definition is problematic because the degree to which "free choice" is valid in religious or labor union involvement remains open to question. In addition, some may argue from a more deterministic perspective that we are largely socialized into various societal roles and affiliations. Or, from a conflict perspective, it could be argued that persons of lower socioeconomic status do not possess the same opportunities as those of higher socioeconomic status. They are therefore excluded from participation. Finally, one could argue that individuals have free choice in determining occupations as well as voluntary involvements.
Researchers have attempted to differentiate between voluntary and other types of organizations on the basis of the types of rewards that members receive for their work, plus the degree of freedom in becoming involved. These definitions do not capture the differences which may or may not exist at an organizational level of inquiry.

Similarly, typologies of organizations, which are useful for systematic comparisons at an exploratory stage of research, have tended to focus on reasons for individual involvement. For example, Gordon and Babchuk (1959) identified three types of organizations according to the functions that they perform for the individual. In an expressive type of organization, including hobby groups, the activities are designed to be immediately gratifying to the participants. In contrast, instrumental associations either provide a service, produce a product or serve to maintain some normative condition. These groups are usually organized to cope with the external organization and include labor unions, political organizations and professional groups. Mixed groups incorporate qualities of both expressive and instrumental organizations, thereby providing for the individual members while attempting to perform some function for the larger society.

Warriner and Prather (1966) developed a typology which classifies voluntary organizations according to the assumed value function of the central activities:

1. pleasure in performance eg. square dancing clubs
2. sociability e.g. the happy hour
3. ideological symbolism e.g. churches
4. production e.g. The Humane Society.

A third typology along these lines, although not designed specifically to classify voluntary organizations, is the scheme by Blau and Scott (1962). Their system is based on the prime beneficiary of the organization which may be the membership, owners, clients or society. The categories which result from this analysis include mutual benefit associations, business concerns, service organizations and commonwealth organizations.

Research

Sociodemographic Approaches.

The preceding definitions and typologies are reflected in the research on voluntary organizations. This area has largely addressed the following two questions: who joins voluntary associations and what are their reasons for involvement? To examine the first question, researchers have assessed the socioeconomic and demographic characteristics of joiners including their education, age, sex, ethnic background, occupation, income and religious affiliation. From the work of Hyman and Wright (1971), Babchuk and Booth (1969) and Curtis (1971), a tentative profile of a joiner has emerged. This person is more likely to be from a high
social class background, a male rather than a female, a parent rather than a non-parent, a voter rather than a non-voter, white rather than black, a non-farm resident rather than a farm resident, and Jews are more likely than Protestants, who are both more likely than Catholics to be joiners.

A similar research strategy has been utilized to study the characteristics of executive members of selected Canadian national sport governing bodies. Bratton (1971) compared executive members of the Canadian Volleyball Association and the Canadian Amateur Swimming Association. He found that the majority of members of both associations tended to be male (74% and 78% respectively), to have a higher education than the national average, to come from higher economic strata than national averages, and to hold high status occupations. Those with a Catholic religious affiliation were underrepresented in both organizations. In addition, swimming executives tended to be older, a higher proportion were of British ethnic origin (70%) and they were primarily parents of the participants.

In a study of twenty-two national amateur sport associations, Beamish (1975) found support for the contention that there is a direct relationship between an advanced socioeconomic position and a high rate of participation in voluntary associations. Executive members were almost exclusively male Anglophones from larger urban centers who had higher socioe-
economic backgrounds than national averages. Beamish (1975) offers three alternative explanations for his findings that higher status individuals tend to participate more in voluntary sport organizations than those with lower status. These include:

1. differences in socialization patterns in the various strata;

2. the inculcation of different values; and

3. differential access to information and skills (1975:3).

Explanations such as these must be examined further in order to draw conclusions as to the reasons why high socioeconomic social positions are related to the propensity to become involved in voluntary organization roles.

Hollands and Gruneau (1979) tested whether there have been changes in patterns of NSGB executive recruitment by sampling executives from 1955, 1965 and 1975. In general, Hollands and Gruneau's findings replicate those of Beamish and Bratton. Most executives were male, were aged 30-50 years, had high occupational status and were Anglophone. In addition, executives have often participated in sport to a high level, belong to more than one voluntary association and report that a long time personal association with their sport is the main reason for involvement. One of the most interesting trends identified during the 1955-1975 time span was that executives reported higher levels of educational
attainment and an increasing number occupy professional occupations. Hollands and Gruneau (1979:3) reason that:

It may be that one of the results of a growing "bureaucratization" in Canadian sport is an emerging tendency for people to put a great emphasis on formal education in the identification of leadership capabilities. Or it may be that one of the features of sport's "bureaucratization" in the 1970's is an increase in the number of "professional" recreationalists, physical educators, and technical specialists in the labor force.

For the purposes of this study, it is important to analyse the data to determine whether educational attainment varies by sport, and whether such variations can be related to indices of organizational effectiveness. As will be discussed later, the concept of professionalism is one of the essential elements of Weber's theory of bureaucracy.

Theberge (1980a) extended earlier studies by surveying sport executives at the provincial level. Theberge chose five sports that are fairly well organized and that have female participants. A simple profile of the sport executives showed that:

they are equally likely to be male or female, typically they are married, Canadian born, well educated and likely already to be in a supervisory role in their own occupations (1980:137).

However, some differences emerged when the data was analysed by sport. For example, in swimming more men than women are executives; men are more likely to hold executive technical positions and 81% of the men hold supervisory jobs compared to 22% percent of the women. Thus, whether or not one holds a supervisory type of job, may be a function of the sex of the executive member.
The works by Bratton, Beamish, Gruneau and Hollands, and Theberge exemplify a popular trend in the sociology of sport research on voluntary organizations. This parallels the major thrust of examining socioeconomic and demographic variables in the voluntary association literature.

Social Psychological Approaches

The functions that voluntary associations perform for the individual have been studied to a limited extent from a social psychological perspective. For example, Babchuk and Edwards (1966) sampled 303 groups according to the extent of individual affiliation, amount of participation, age and stage in the life cycle, and the locus of the organizations. They concluded that most voluntary associations serve integrative functions for the individual.

Jacoby (1965) found support for Gordon and Babchuk's instrumental-expressive typology, while Sills (1972) was concerned with the latent and manifest functions of voluntary associations. Manifest functions are those which are intended and recognized by the participants, such as sociability, recreation, service and political action. Latent functions include those which are neither intended nor recognized by the participants but can be observed by the social scientist. Sills identifies social integration as an example of a latent function, but questions the idea that voluntary associations compensate for the weakening of primary group ties. He suggests an alternative hypothesis that
it is people with primary group ties who are more likely to join voluntary associations. Jacoby (1965) provided some support for this alternative explanation when he found that persons who are living with others are more likely to join expressive associations than are persons living alone. Another latent function of voluntary organization behavior is that members often become trained in organizational skills such as writing minutes and reports, following Robert's Rules of Order and serving as committee members. It is likely that training in such skills is a necessity for effective operations.

At this social psychological level of analysis, Smith (1972:10-15) defines several areas which warrant further research: the nature and determinants of individual voluntary activity and role selection, the impact of voluntary action on the individual participants and the impact of exceptional individuals on voluntary action. Tomeh (1973) agrees that several important variables, such as the motivations, attitudes and personality characteristics of those who join have been inadequately treated to date.

Besides the research regarding the sociodemographic characteristics of volunteers in sport, which often include some data regarding reasons for involvement, there have been very few studies in the sociology of sport literature which have examined social psychological aspects of voluntary organization affiliation. One exception is the work of Rosen-
berg and Chelte (1980) who related voluntary involvement in sport and nonsport organizations to measures of expressed life satisfaction. Rosenberg and Chelte's findings contradict earlier findings in that membership in voluntary-sport associations, as opposed to non-sport associations, does not lead to higher levels of life satisfaction. They did find, however, that people belonging to some type of voluntary association avowed greater happiness than people not belonging to any voluntary associations at all (Rosenberg and Chelte, 1980: 271). Still, these researchers recognize the problem of causal attribution with these findings in the following statement:

One has no way to ascertain whether joining voluntary associations increases one's levels of happiness, satisfaction, and feelings of well being, or whether those with more positive self images are more likely to join voluntary associations (Rosenberg and Chelte, 1980:272).

In addition to this type of research, some studies have examined the role of sport as either a vehicle for assimilation or as a means of preserving minority identities. Caine (1975), in his study of Italian sport communities, concluded that there is little support for the contention that organized sport quickens the pace of assimilation of various ethnic groups. However, McKay (1975) found that Toronto executives of Italian soccer teams encouraged the recruitment of non-Italian players and that the degrees of acculturation and structural assimilation were positively associated with length of residence in Canada.
Organizational Approaches

A third way of approaching the study of voluntary organizations is from an organizational theory perspective. This approach focuses attention upon social structure and function. One of the most useful typologies for examining these topics is one designed by Sills (1972). He classifies associations according to the degree of institutionalization and the professional/layman composition of the membership base. Groups can be placed along a continuum from social movement-like associations to formal organization-like associations. Institutionalization refers to:

the unplanned process that turns a loosely organized group of adherents with an idea or a goal into a formal organization (1972:367).

Sills recognizes the fact that voluntary organizations can potentially be highly institutionalized or bureaucratized with a strongly professional membership base. At this level, then, the formal social patterns of a voluntary organization would largely be indistinguishable from a bureaucratic business or government organization. Previous definitions, typologies and research on voluntary organizations have not captured the essence of the organizational social behavior which occurs in these groups. Perhaps the term "voluntary organization" can only be appropriately applied to the less structured forms of organizations in which people devote their spare time in a "kitchen table fashion".

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2 The administration of Canadian amateur sport was described as being of the "kitchen table" variety in the Task Force
Once organizations become more institutionalized and bureaucratized, their organizational structure (even though the majority of members are nonpaid) falls outside familiar conceptualizations of voluntary arrangements. Thus, as Canadian NSGEs have some paid members and possess bureaucratic characteristics, it is more appropriate to label them "quasi voluntary" organizations as opposed to voluntary organizations.

The irony of this discussion becomes clear when one reconsiders the functions that voluntary organizations are purported to fulfill. Returning to Smith's (1972) views regarding voluntary involvements as being pluralistic, as counteracting personal isolation and anomie, as contributing to innovation and social change, and as preserving cultures and nurturing personal freedom; it may be that these objectives are lost as organizations move from a loose to a formal structure. Perhaps the objectives of profit in a business organization, and performance excellence in a voluntary sport organization, are best served by a bureaucracy. But, in doing so the "voluntary" nature of such involvements tends to disappear. Questions such as these can be addressed by investigating voluntary involvement from an organizational perspective which is one task of this study. The investigation of the structure and functions of voluntary organizations will add significantly to the body of

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literature which is presently mainly concerned with answering: who joins voluntary groups and why?

Besides institutionalization, Sills discusses three other processes which he feels are not only important to the understanding of voluntary organizations but also form a basis for comparative organizational analysis. He developed the first of these from Michel's Iron Law of Oligarchy (1966). This process is also called "minority rule" and refers to: the assumption that members will take an active part in the affairs of an association when, in reality, authority most often takes the form of minority rule or even results in a dictatorship by one individual.

Sills' final two processes are related to Merton's notion of the unanticipated consequences or the informal processes underlying bureaucracy. Goal displacement occurs when organizational members are forced to concentrate on formal rules and procedures, and thus lose sight of original objectives. Goal succession refers to the process in which new goals emerge because the original goals have either been achieved or have become obsolete.

Sills' typology offers a good starting point for research into voluntary association involvement from an organizational perspective. The degree of institutionalization and the professional/layman make up of the membership base are fundamental to Weber's theory of bureaucracy. Thus, they form a basis for comparative analysis across different types
of organizations. In addition, the study of institutionalization from a longitudinal perspective will illustrate transformative changes in organizational structure over time. Second, goal displacement can be examined by measuring whether those in authority positions are more concerned with the means of achieving objectives than with the objectives themselves. In sport, for example, an over emphasis on fund raising and junior development programs, when the main goal is performance excellence, would be evidence of goal displacement. Goal succession would occur when organizational members are found to be pursuing objectives other than those originally devised to guide the organization. The tendency toward minority rule would be another interesting process to investigate, especially given the democratic ideals of community development. With this approach, community groups are encouraged to form their own voluntary groups to encourage equality and freedom from government control. The tendency toward oligarchy would work in opposition to these aims.

Some empirical research has been completed at the organizational level of analysis which relates to the processes discussed by Sills. Tsouderous (1955) analyzed financial membership and service records of ten voluntary associations to determine the extent of institutionalization. He found that membership growth precedes the growth of income, that there is a positive relationship between growth of income
and expenditures, and finally, that property and administrative office workers continue to increase even when membership and total income begins to subside.

Simpson and Gully (1973) were interested in how goals and environmental situations influence the internal characteristics of 211 national voluntary associations. They hypothesized that the degree of centralization, the amount of stress placed on loyal active involvement and the emphasis placed on internal communication would vary according to the number of organizational goals and upon whom the organization has to satisfy. The organizations were categorized as being focused or diffuse (depending on the number of goals) and external or internal (depending on whom the organization was attempting to satisfy). Focused internal organizations were found to be less deeply concerned with recruiting, motivating and communicating with the membership than were diffuse external organizations. In addition, diffuse external organizations tend to have a decentralized authority structure and place a greater emphasis on membership involvement and communication.

Lieberson and Allen (1973) empirically evaluated the proposition that affiliation in voluntary associations is a means of uniting spatially distant groups with some common goal or concern. They expected that the location of national headquarters would be influenced by: external versus internal functions, urban specialization and social characteris-
tics of the members. Of the 6,341 American associations examined, 60% had national headquarters located in the large urban centers of New York, Washington and Chicago. These organizations tended to perform external functions and were probably located in these major centers because it is easier to lobby, because they are closer to important economic activities and because they are central to the spatial distribution of the membership.

The research on voluntary sport organizations from an organizational perspective is also very limited (Price 1977, Schlagenhaufl and Timm 1976, Pearson 1981). In a study of the Ontario Secondary Schools Athletic Association, Price (1977) found evidence of goal succession. When administrators were surveyed as to their operative goals, the resulting statements were found to be significantly different from the original formal goals that were devised in the 1950's to guide high school athletic programs.

Schlagenhaufl and Timm (1976) reported that approximately 14 million Germans are involved in voluntary sport clubs. From a survey of 2794 clubs, the researchers studied the following dimensions of organizational life:

1. the degree of demand for instrumental objective services;
2. the degree of homogeneity of demands of the membership;
3. the internal/external orientation;
4. the degree of orientation toward the individual,
5. the degree of professionalization in the management,
6. the degree of purposeful and rational decision-making (1976:21).

Schlagenhauf and Timm concluded that German voluntary sport clubs are moving away from ideological values and are becoming more rational, objective, professional and heterogeneous. These findings support the contention that voluntary sport organizations are becoming increasingly bureaucratic in nature.

A third study on the organizational characteristics of voluntary sport organizations was conducted by Pearson (1981). Using the Surf Life Saving Association in Australia and New Zealand as an example, Pearson (1981:180) contends that even though this association is highly successful, it has a history of goal displacement, goal succession, multiple goals, and many conflicting goals. Pearson (1981:181) concludes that:

When attention is turned to the goals which are pursued and the manner in which decisions are made in relation to the pursuit of various objectives, tensions, conflicts and power relations among distinguishable groups within the organization become apparent. This, in turn, leads to an examination of organizational processes toward a view of organizations as formal backdrops against which the negotiations of interested parties is played out.

Besides these studies on sport and non-sport voluntary organizations, only two studies have been found which relate characteristics of voluntary organizations to the concept of organizational effectiveness. These studies by Likert
and Webb (1974) will be discussed in the section on organizational effectiveness.

**SUMMARY**

In summary, the definitions, typologies and type of research conducted on voluntary associations has largely been concerned with identifying the types of individuals who become involved and their reasons for involvement. The latter may be a special concern in voluntary organizations because most participants are not paid a salary in return for their services. Only a few studies have been done that focus on the social interactions which occur within an organizational context; a strategy which would add significantly to our understanding of the structure and function of these organizations.

Sport offers an ideal setting for such an analysis as many types of organizations (i.e. business, government, education, and voluntary groups) have a focal interest in sport. By focusing on amateur sport, insights can be gained regarding organizational structure, the impact the external environment has on such structures, and the process by which these structures emerge. Something can also be said about the types of social functions which are or are not served by a bureaucratic form of organization in sport.

Although a void presently exists regarding the organizational nature of voluntary organizations, and specifically
voluntary sport organizations, a number of theoretically im-
portant questions can be explored from this perspective. To
this end, Weber's theory of bureaucracy and the literature
relating this concept to organizational effectiveness will
be discussed next. Although the vast majority of the re-
search on these topics concerns the profit oriented organi-
zation, these concepts can provide a framework for comparing
and investigating the organizational behavior of national
sports governing bodies and other so-called "voluntary or-
ganizations".

**Bureaucracy**

**Theoretical Approaches**

Although Max Weber is credited with producing the most
influential work regarding the effects of large scale bu-
reauratic organizations on modern society, his ideas were
undoubtedly influenced by the writings of Karl Marx. Even
though Weber was a critic of Marx, his early ideas on how
bureaucracy was linked to the more general notion of class
conflict, provided a basis for further thinking in the area.

For Marx, bureaucracy was an instrument by which the
dominant class exercises its domination over the other so-
cial classes (Mouzelis, 1967). Marx contended that the aim
of bureaucracy is to perpetuate class division in capitalist
societies while at the same time legitimizing itself as a
necessary social structure. Thus, bureaucracy, as the
state, represents the interests of the dominant class by maintaining strict control over the divisions and inequalities among groups. The legitimation of bureaucracy is closely linked to another concept central to Marx's thinking; that of alienation. As social forces, such as bureaucracy, become a distant entity outside the control of man, it becomes oppressive and alienating. Thus, the individual, who comes to feel that this entity is beyond his or her control and comprehension, feels helpless and powerless. In addition, according to Mouzelis (1980:10), "this attitude is reinforced by the bureaucrat's creation of special myths and symbols which sanctify and mystify further his position". Secrecy surrounds bureaucracy and the work of the bureaucrat. Through systems of hierarchy, rewards, rules and procedures, the bureaucrat comes to think of his or her job as being indispensable for the general interest. Marx relates this self-illusion on behalf of the bureaucrat to incompetence and self-aggrandisement, notions which reappear in Weber's later writings. Although the bureaucrat thinks of himself or herself as a useful functionary, he or she is a very small part of a much larger process over which he or she has little knowledge or control. Thus, the bureaucrat may lack initiative and imagination and may become preoccupied with "the sordid materialism of bureaucracy: the internal struggle for promotion, careerism, the infantile attachment to trivial symbols, status and prestige" (Mouzelis,
1980:10). As in Marx's general theory of class conflict, the alienating force of bureaucracy can only be overcome in a communist society in which exploitation and class divisions cease to exist. This will occur through the proletarian revolution in which the division of labor along class lines will gradually disappear. Following this revolution, administrative tasks will be simplified and demystified and will be the concern of everyone.

Although bureaucracy was not central to Marx's sociology, his notions regarding domination, alienation, mystification, self-aggrandisement and bureaucratic incompetency reappear in later writings on the topic of bureaucracy. However, Mouzelis (1967), among others, have pointed out a number of weaknesses to the Marxist approach. Mouzelis (1967:14-15) states that:

Being a priori committed to such a theoretical enterprise, they were automatically forced to see no other possibility in the historic evolution of society, except the capitalism-socialism alternative. When he tries to explain these characteristics (of bureaucracy) by linking them to the structure of society as a whole, one feels that his observations are forced and distorted in order to fit within his general theoretical framework.

Rather than studying bureaucracy within the context of class conflict, Weber was primarily interested in bureaucracy as a form of domination in which those with established authority seek to legitimize the exercise of power; both for the leaders and the followers. Weber outlined three types of domination including the traditional, charismatic and ra-
Bureaucracy is the central structure for the rational-legal type. Under this form of domination, which is most characteristic of modern society, people come to believe in the rightness of the rules, procedures and laws developed by the bureaucrat as a means of control. This belief is legitimized in part due to the educational training and qualifications that the bureaucrat must attain to secure a position in the bureaucratic hierarchy. The emergence of an emphasis on scientific training and qualifications was, according to Weber, part of a social levelling process. Therefore, valued positions are determined through ability and training as opposed to the ascribed statuses of more traditional societies. Another characteristic of the rational-legal form of domination is the preoccupation with maximum efficiency and productivity. This preoccupation arose out of the industrial revolution and necessitated scientific specialization, formalized rules and procedures to integrate the expanding division of labor, and the selection of highly trained officials. It is the bureaucratic type of social structure that can best accommodate the rational-legal type of ideology with its emphasis on efficiency and productivity.

In contrast, under the traditional type of domination characteristic of patrimonial societies, power was legitimated according to ascriptive characteristics such as kinship ties and the possession of wealth and property. Yet,
with the increased complexity of society, decision-making in business and government could no longer be left to the arbitrary rule by 'notables'. Traditional authority patterns were thus superseded by a stratum of expertly trained officials who rely on rules and procedures to conduct their daily business. In addition, an impersonal work orientation emerged to eliminate "all the personal, irrational and emotional elements which escape calculation" that existed in more traditional types of social structures (Weber, 1968:975).

Yet while Weber viewed bureaucracy as progressive on the one hand, he was also deeply troubled by its repressive qualities. Weber most graphically verbalizes his fear of bureaucracy in the following excerpt from a speech made to his colleagues:

so much the more terrible is the idea that the world should be filled with nothing but those cogs who cling to a little post and strive for a somewhat greater one -- a condition which, as in the papyri, you rediscover increasingly in the spirit of contemporary officialdom and above all of its next generation, our present students. This passion for bureaucratization, such as we have heard expressed here, is enough to drive one to despair. It is ... as though we knowingly and willingly were supposed to become men who need "order" and nothing but order, who become nervous and cowardly if this order shakes for a moment and helpless when they are torn from their exclusive adaptation to this order. That the world knows nothing more that such men of order -- we are in any case caught up in this development, and the central question is not how we further and accelerate it but what we have to set against this machinery, in order to preserve a remnant of humanity from this parcelling out of the soul, from this exclusive rule of bureaucratic life ideals (cited in Nitzman, 1969:177-178).
Accompanying the logic of rationality, and its "this worldly" ascetism, Weber saw the destruction of essential aspects of human personality: of grace, dignity, personal creativity, spontaneity and ultimate meaningfulness (Mitzman, 1969). Thus, Weber was pessimistic about the future of western civilization. He saw bureaucratisation as a dead end process leading only to "a cage of bondage" in which men would become mere "cogs in a machine". Only the occasional appearance of charisma would restore vitality and provide intrinsic meaning to human existence. Yet, the effects of charisma would only be fleeting because this form of authority eventually becomes routinized and bureaucratized as well. Charisma, the third form of domination outlined by Weber, refers to an exceptional quality possessed by a person which legitimizes his or her right to be a leader. Followers accept the dictates of the charismatic leader, because of a strong belief in the leaders' exceptional capabilities.

The eminent rise of bureaucracy is in part explained through Weber's comparison of the rational-legal, traditional and charismatic forms of domination. He described the bureaucratic structure as an organizational control mechanism which is characterized by a specialized division of labor among highly trained officials, an objective and impersonal work orientation, a centralized and logical means-ends approach to decision-making which is guided by formal rules.
and procedures. Yet, Weber stressed that the predominance of this social structure could only be understood if it is placed in its proper historical and cultural context. Thus, bureaucracy emerged, in part, because increased specialization was one way of coping with the complexities and ever-changing conditions associated with the industrialization and urbanization of society. In addition, Weber had also predicted that with the modernization of society, there would be a revolt against the traditional ways of legitimating authority patterns and "the arbitrary decision-making by notables". Thus, bureaucracy, in which rationality becomes the basis for the legitimation of authority, would replace traditional forms of authority which were based on kinship relations and the possession of wealth and property. The expertly trained official, who reduced uncertainty by making rational decisions according to accepted procedures, would then become elevated to positions of social esteem. Furthermore, the development of a money economy and the desire for greater profits also encouraged the advance of bureaucracy. This desire, according to Marcuse (1971:133), requires the systematic, methodical calculation of probable profit, regulation by a scientific apparatus and the mathematization of experience; all of which can be maximized in a bureaucratic type of organizational structure.

According to Weber, (1968:975) bureaucracy offers "the optimum possibility for carrying through the principle of
specializing administrative functions according to purely objective considerations. In the following statement, he suggests why bureaucracy is the most efficient and effective type of organizational structure:

The decisive reason for the advance of the bureaucratic organization has always been its purely technical superiority over any other form of organization. Precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs; these are raised to the optimum point in the strictly bureaucratic administration (Weber, 1968:973).

While Weber contended that bureaucracy was superior to the rule by notables in traditional types of societies, he was also aware that its growth would result in the exclusion of personal feeling from the management of the modern office. He wrote (1968:975) that "the more complicated and specialized modern culture becomes, the more it demands the personally detached and strictly objective expert in lieu of the lord of older social orders who was moved by personal sympathy and favor, by grace and gratitude." Yet bureaucracy develops more perfectly the more it is dehumanized, or to use Weber's words:

the more completely it succeeds in eliminating from official business love, hatred, and all purely personal, irrational and emotional elements which escape calculation (Weber, 1968:975).

Thus, Weber presented a "double message" in his assessment of the effects of bureaucratic structures upon organizational and individual behavior. On the one hand, Weber viewed bureaucracy to be an effective form of social organi-
zation, but, on the other hand, he was also deeply troubled about the alienating effect that it would have on the individual. Weber's classical theory has generated a large body of research on organizational structure. Researchers have been interested in measuring the degree to which organizational reality matches up with Weber's ideal type bureaucracy.

In the ideal type bureaucracy, administrative functions are carried out with a specialized division of labor of highly trained professional experts. Additional features include: an objective and impersonal work orientation, a clearcut hierarchy of authority, and a logical means-ends approach to decision-making guided by formal rules and regulations. This type of organizational structure is, according to Weber, the most efficient way of conducting business.

In contrast,

'unremunerated honorific service' makes administrative work an avocation. Thus the service is performed more slowly, is less precise, less unified, less continuous, less bound to schemas, more formless and requires more compromises between colliding interests and views (Weber, 1968:974).

What then are the characteristics of a bureaucratic organization? Blau (1974) summarized Weber's ideal type as follows:

1. Organizational tasks are distributed among the various positions as official duties. Implied is a clear cut division of labor among positions which makes possible a high degree of specialization. Specialization in turn promotes expertness among the personnel by narrowing the range of duties of jobs and enabling the organization to hire employees on the basis of their technical qualifications.
2. The positions or offices are organized into a hierarchical authority structure which often takes the form of a pyramid wherein each official is responsible to the superior above him in the pyramid for his subordinate's decisions and actions as well as his own. The scope of authority of superiors over subordinates is clearly circumscribed.

3. A formally established system of rules and regulations governs official decisions and actions. The regulations ensure the uniformity of operations and, together with the authority structure, make possible the coordination of the various activities. They also provide for continuity in operations regardless of changes in personnel, thus promoting a stability lacking in many other types of groups and collectivities.

4. There is a specialized administrative staff whose task it is to maintain the organization and, in particular, the lines of communication in it. The lowest level of this administrative apparatus consists of the clerical staff responsible for keeping the written records and files of the organization, in which all official decisions and actions are embodied. Whereas the production staff contributes directly to the achievement of the organization's objectives, the administrative staff contributes to goal achievement only indirectly by keeping the organization itself going.

5. Officials are expected to assume an impersonal orientation in their contacts with clients and with other officials. Clients are treated as cases, the officials being expected to disregard all personal considerations and to maintain complete emotional detachment; and subordinates are to be treated in a similarly impersonal fashion. The social distance between hierarchical levels and that between officials and their clients is intended to foster such formality. Impersonal detachment is designed to prevent the personal feelings of officials from distorting their rational judgement in carrying out their duties.

6. Employment by the organization constitutes a career for officials. Typically an official is a full time employee and looks forward to a lifelong career. Employment is based on the technical qualifications of the candidate rather than on political, family, or other connections. Usually such qualifications are tested by examination or by certificates that demonstrate the candidates educational attainment (e.g. college degrees). Such educational qualifications
create a certain amount of class homogeneity among officials, since relatively few persons of working class origin have college degrees although their number is increasing. Officials are appointed to positions, not elected, and thus are dependent on superiors in the organization rather than on a body of constituents. After a trial period officials gain tenure of positions and are protected against arbitrary dismissal. Remuneration is in the form of a salary and pensions are provided after retirement. Career advancements are according to seniority or achievement or both (Blau, 1974:30-31).

It is highly unlikely that these characteristics are present in the NSGBs to the degree outlined by Weber. This is because Weber's ideal types were not meant to represent reality. They were constructed as heuristic devices from which comparative and causal judgements could be made (Rex 1977; Ingham 1979). Thus, one purpose of this study is to determine the extent to which Canadian NSGBs approximate the structure of Weber's ideal type. Although this study is not designed to compare NSGBs with other types of organizations, it will be possible to examine the above question by comparing the patterns of relationships among structural characteristics to the results of past studies. In the following section, the research arising from Weber's discussion on the nature of bureaucracy in modern society is reviewed.

Research

Three main research strategies have been used to investigate Weber's ideal type bureaucracy as a control structure. First, some researchers have been interested in how contextual variables are related to indices of organization-
Others have been interested in the interrelationships between the structural variables and, third, some research has been done which relates structure to organizational effectiveness.

Contextual Variables and Structure

In the original work by the Aston group, seven contextual variables were identified and treated as independent variables which influence the degree of organizational bureaucracy. The purpose of this approach was to treat organizations as open systems which are influenced by various forces operating in the external environment. The variables originally included as contextual variables were: origin and history, ownership and control, size, purpose, technology, location, and dependence. Through extensive research, Pugh et al. (1969) concluded that organizational size, the degree of dependence on other organizations, and, to a lesser extent, technology were significant predictors of organizational structure.

Hinings and Lee (1976) conducted a replication of Pugh et al.'s (1969) study by examining context and structure in a different sample of manufacturing firms. As in the original study, the structural characteristics of specialization and formalization were positively related. Furthermore, size was found to be strongly and positively related to these structural characteristics. These findings supported Pugh et al.'s (1969:112) conclusion that "once the number of
positions and people grows beyond control by interaction, the organization must be more explicitly structured." Thus, large organizations will have more specialists, more procedures and will use written means of communication and role definition. Blau (1974) found additional support for this conclusion when he investigated another sample of organizations. He also investigated the relationship between context, structure and one measure of efficiency. He found that small undifferentiated agencies operate at high costs, while an increase in size and differentiation is associated with reduced operating costs. This suggests that bureaucratized organizations manage their financial resources more efficiently.

An additional finding in the original study by the Aston group was that centralization was negatively related to specialization but was positively related to the degree of dependence on other organizations. The researchers concluded that organizations which are dependent on other organizations by virtue of ownership ties or economic integration tend to centralize decision-making control. The explanation for the relationship between centralization and specialization will be discussed in the next section on the structural variables.

Technology, which was measured by the extent of automated machinery and the degree to which workflow processes were integrated, was not found to be significantly related
to structure. However, Weber (1968:972) had predicted that the advance of bureaucracy would be dependent on the acquisition of new technology and scientific information. Hall (1963) had originally interpreted Weber's technology in terms of the technical competence of human resources as opposed to the scientific advancement of equipment and other material resources. Hall's interpretation of technology is more consistent with the use of the concept in the sociology of sport literature. For example, both Wohl (1975) and Ingham (1978, 1979) have commented on the significant role that science and technology plays in modern sport forms. For example, Ingham notes that the bureaucratic nature of modern sport is reflected in the elaborate and calculative system of formal rules; an instrumental, rational profit and performance oriented action system; and, in an "intellectualized strategy" which necessitates growth of technology and the sport sciences (Ingham, 1979:207). The number of sport scientists that are consulted in a given year and the success of technical coaching certification programs, indicates how strong an emphasis NSGBs are placing on science and technology. This measure is also defined in terms of human as opposed to material resources.

In summary, Hingins and Lee (1976:11) suggest that the original predictions made by Pugh et al. (1969) regarding the effects of context on structure are applicable to a wider range of organizations than those originally sampled. In
particular, organizational size, the degree of dependence on other organizations, and to a lesser extent, the level of technological expertise are thought to influence the degree to which an organization adopts a bureaucratic structure. Therefore, these contextual variables will also be included in this study on the structure and effectiveness of Canadian NSGBs.

In addition, to test Sigelman's (1981) assumption that bureaucracy is affected by the stage of growth of the organization, organizational age will be included as a fourth contextual variable. However, as will be outlined in Chapter 3, changes had to be made in the measurement of some of these variables due to differences between voluntary sport organizations and the manufacturing firms sampled in previous studies. Still, the measurable indices developed for this study are intended to reflect the contextual concepts of organizational size, organizational age, dependence on other organizations and the level of technological expertise.

**Interrelationships Between Structural Variables.**

The second main emphasis of the research on bureaucracy has been to examine the relationships among a variety of structural variables. Hall (1963) studied a number of variables indicative of Weber's ideal type bureaucracy and found that these characteristics varied on a continuum depending on the type of organization studied. The variables includ-
ed: the hierarchy of authority, the division of labour, the systems of rules and procedures, the impersonality of work relations and the technical competence of employees.

During the 1960's, Pugh et al. were also conducting the initial Aston studies. Their findings can be summarized as follows:

1. The division of labour (specialization), the existence of procedures (standardization) and the use of written communication and role definition (formalization) are highly related and can be summarized by a single structural dimension called 'structuring of activities'.

2. The locus of authority (centralization) is negatively related to specialization and a number of measures of centralization can be summarized by a single structural dimension called 'concentration of authority'.

3. Various aspects of role structure such as the number of employees in the direct line hierarchy, the span of control of the first-line supervisor, and so on, are related and can be summarized by a single structural dimension called 'line control of workflow' (Pugh and Hinings, 1976:ix-x).

The findings of this initial study have largely been supported in subsequent research (Hinings and Lee 1976; Child 1976; Donaldson and Warner 1976; and Grinyer et al. 1980). For example, Grinyer et al. (1980) set out to conduct a critical replication of research conducted by the Aston group in the 1960's and 1970's. In their replication, Grinyer et al. measured the extent of formalization, functional specialization, professionalism, decentralization, lateral span of control, and clerical employee ratios in 502 manufacturing companies. Formalization, functional specialization, professionalism, vertical span of control and em-
ployee ratios were all found to be significantly and positively intercorrelated aspects of bureaucracy. However, contrary to the Aston group's findings, decentralization was found to be an integral control strategy. This finding supports the work of Child (1976) who has argued that the use of professionally qualified officeholders, which is an additional characteristic of bureaucracy, permits greater decentralization of decision-making. As the number of educationally qualified employees increases, it becomes more efficient to delegate decision making control to those qualified individuals who also tend to occupy specialized positions.

Even though their finding regarding centralization differed, Grinyer et al. (1980) concluded that the methodology used by the Aston group has considerable predictive power and that their work provides support for Weber's bureaucracy as an observable phenomena. However, additional characteristics of bureaucracy, such as professionalism and clerical-employee ratios, appear to be significantly related to the variables initially considered by the Aston group. Furthermore, two additional features of Weber's ideal type have been overlooked in these studies on organization structure.

As discussed previously, Weber described the career of an office holder as being a life long commitment. He also suggested that the work relations among bureaucratic office holders would become more impersonal to ensure that decision
making is conducted on a rational and objective basis. Thus, a fourth dimension of bureaucracy could be included in analyses on organizational structure to capture these additional features of Weber's ideal type of bureaucracy. In this study, this dimension will be labelled the "characteristics of office holders" and will include measures of professionalism, career stability and impersonal work relations. It is expected that variables in this dimension will be positively related to formalization, specialization and the ratio of clerical staff. In keeping with Grinyer et al. (1980) and Child's (1976) findings, it is expected that this dimension will be negatively correlated with centralization. This research design will help to examine whether the features of Weber's ideal type bureaucracy exhibit a similar pattern of interrelationships as has been uncovered in samples of business organizations.

**Structure and Organizational Effectiveness**

A third main research strategy, which has been used to a more limited extent, has been to investigate the relationship between structure and organizational effectiveness. The review will be discussed under a separate heading in the final section of this chapter, once the literature review on the concept of organizational effectiveness has been presented. To conclude this section regarding research on bureaucracy, the research that has been conducted in the sociology of sport literature will now be reviewed.
Research on Bureaucracy and Sport

In the sociology of sport literature, Weber's theory has been utilized to a limited extent. Some research has been done on the emergence of bureaucratic forms of sport in modern society (Riesman and Denny 1972; Luschen 1970; Frey 1978; Schlagenhauf and Timm 1976; and Ingham 1975, 1978, 1979) and on the negative consequences that this transition poses for the athlete (Page 1973; Sage 1978; Frey 1978; and Kidd 1979, 1980). This trend parallels Weber's approach of analysing the structure of modern society in comparison to more traditional patriarchal societies while considering the effect that changes in structure will have on the individual. However, no empirical research has been conducted on the relationship between context and structure, the interrelationships between structural variables and the relationship between bureaucratic structure and organizational effectiveness in sport.

Yet, Weber clearly suggested that effectiveness would increase the more an organization developed a bureaucratic structure. As it is evident that voluntary sport organizations such as Canadian NSGBs are gradually assuming a more bureaucratic structure in order to improve performance in international competition, this line of inquiry needs to be developed. However, before the theoretical arguments regarding the relationship between bureaucracy and effectiveness are discussed, a brief review of the work being done
from a Weberian perspective in the sociology of sport literature will be presented. This review highlights the importance of considering bureaucracy within an historical and cultural context while considering the potentially repres­
sive implications that increased bureaucracy in sport poses for the individual.

Some sport sociologists have examined traditional versus modern sport forms and their findings suggest that sport is becoming increasingly bureaucratized at the playing level. For example, Elias and Dunning (1971) found that in the traditional game of folk football there was little specialization of roles, and limits concerning territory, number of participants and duration of the game were rarely imposed. In addition, folk football reflected the violent and unregulated character of life at that time. In contrast, Dunning (1973) described the modern form of the game as being highly specialized. Furthermore, formal and elaborate rules have been standardized nationally and internationally, games have been limited in terms of territory, duration and number of participants, and there is high structural and role differentiation. Formal control is maintained by trained officials outside the game, players are encouraged to exhibit high emotional control and constraint, and an emphasis is placed on skill as opposed to force. Many of these characterizations of modern football are reminiscent of Weber's descriptions of the emergence of bureaucracy in other spheres of social life.
Along a similar line of inquiry, Ingham (1978) employed a Weberian ideal type approach to analyse premodern and modern forms of American sport within a broad historical, demographic and ideational framework. He compared the structural characteristics of popular and elite sport in premodern and modern times along the following dimensions: locales, organization, regulation, action orientation and technicization. Ingham (1979:209) concludes that the relationship between the industrialization of the capitalist mode of production and the instrumentalization of sport is indirect. That is, the relationship can be understood in terms of the impact that industrialization had on urbanization, transportation and communication, technological innovations, the increase in discretionary time and income, class structure and the ideological legitimations of inequality.

Second, the repressive consequences of bureaucracy in sport have been considered. For example, Page (1973), Sage (1978), Frey (1978) and Kidd (1980) have bemoaned the loss of personal autonomy on the part of the participants and volunteers, the intrusion of the law and government into the arena of sport, and the usurpation of expressive values by instrumental values as sport has become more bureaucratic in nature. Kidd (1980:4) fears that the day to day administration of Canadian amateur athletics will be taken further and further away from the volunteers, and thus further away from the athletes themselves, as the government continues to fi-
mance geographically centralized centers such as the National Sport and Recreation Center and Sport Canada. In addition, because medal counts are becoming the sole criterion for acquiring government grants and assistance, the human quality of the competitive experience is being ignored. Thus, according to Kidd (1979), athletes are being treated like assembly line workers with production quotas; the difference being that the athletes are not paid for their labor.

Page (1973) sees the ever growing rationalization and formalization of sport being accompanied by consistently improving technology and equipment, along with an emphasis on measurement of victories, record breaking and economic profit. Yet this trend is also associated with declining personal autonomy for the athlete who comes under the control of coaches, managers, owners, and athletic departments. Thus, Page sees sport as moving from "player controlled games to management controlled big time". Sage (1978:11) agrees that this trend is prominent and feels that it will be continued through the process of socialization. More specifically, through participation in sport organizations a common consciousness develops which could be described as "the internalization of the bureaucratic ethic". Athletes are taught to subordinate themselves to management to ensure a winning team and coaches must concentrate on producing winners instead of dealing with the personal and emotional growth of the individual athlete.
Similarly, Frey (1978:362) is critical of American amateur sport for abandoning an emphasis on character development, participation and education in favor of productive efficiency. Because amateur sport organizations are overemphasizing instrumental values of entertainment, victory and organizational visibility, Frey feels the general public is becoming more and more disenchanted with the system. This fact, in combination with cartel-like agreements on markets and product distribution, will eventually result in reduced profits and could, according to Frey, lead to the demise of organized amateur sport. Furthermore, Ingham (1976:2) asserts that rationality and bureaucratization are trends in sport that can only lead to the suppression of personal autonomy for the athlete. Willey (1977:27-28) agrees that bureaucracy leads to depersonalization in sport and charges that Weber's bureaucracy appears to function more smoothly than it actually does. In a similar vein, Deegan and Stein (1978:31) concluded that football has become a major sport in the U.S.A. because it is a dramatic enactment of social values of violence, bureaucracy, sexism and commercialism.

Thus, parallels can be drawn between Weber's fear of the effects of rationalization and bureaucratization and the consequences that these developments pose for modern day sport. First, there may be a loss of autonomy on the part of the participant as various forms of management and outside sources take control of the game. In addition, indi-
vidual needs and interests may be suppressed to ensure that
the overall goals of winning and profit making for the team
or organization can be attained. Therefore, although ele-
ments of a bureaucratic structure have been linked to organ-
izational effectiveness, feelings of alienation and a loss
of personal autonomy are also likely to increase the more an
organization is bureaucratized.

The third line of inquiry that could evolve out of Web-
er's discussion on bureaucracy is an examination of whether
or not a bureaucratic type of structure is the most effec-
tive type of structure for sport organizations which are in
pursuit of instrumental goals such as performance excellence
and resource acquisition. In addition, an examination of
the relationships between context and structure as well as
the interrelationships between the structural variables in
voluntary sport organizations will extend earlier research
on the nature of bureaucracy in modern society. These ques-
tions have received little or no attention in the sociology
of sport literature besides the recognition that bureaucracy
is present in both amateur and professional sport organiza-
tions (Schlagenhauf and Timm, 1976; Ingham 1978 and Frey
1978). With respect to structure and effectiveness, Sage
(1978:10) is one of the few to acknowledge the stabilizing
effect of bureaucracy:

Rights, duties, privileges and procedures are
specifed by the organization and its internal
laws. People come and go, policies change, whole
administrations succeed each other, but the well
built bureaucracy stands fast through it all. It
is the harbinger of standardization, mass production, objectivity and impersonality in complex organizations.

Besides the work of Guttman, whose analysis of the bureaucratization of decision-making structures in sport was discussed earlier, Schlagenhauf and Timm (1976) are among the few to examine the structure of sport at an organizational level of inquiry. They examined the German sport club as a social organization. From a survey of 2794 clubs, the researchers studied the following dimensions of organizational life:

1. the degree of demand for instrumental objective services
2. the degree of homogeneity of demands of the membership
3. the internal/external orientation
4. the degree of orientation toward the individual
5. the degree of professionalization in the management
6. the degree of purposeful and rational decision-making (1976:21).

Schlagenhauf and Timm concluded that German voluntary sport clubs are moving away from ideological values and are becoming more rational, objective, professional and heterogeneous. These findings support the contention that voluntary sport organizations are becoming increasingly bureaucratized. What remains to be seen is whether the first side of Weber's "double message" holds for voluntary amateur sport organizations. That is, is a bureaucratic type of structure related to effective and efficient management?
Before this relationship is discussed, the literature on organizational effectiveness will be reviewed.

**Literature on Organizational Effectiveness**

**Definitions and Models**

Several books and articles have been written on the problems of examining organizational effectiveness (Cameron 1978; Campbell 1976; Goodman and Pennings 1977; Hannan and Freeman 1977; Mott 1972; Pfeffer 1977; Price 1972; Scott 1977; Spray 1976; Steers 1975; Yuchtman and Seashore 1967). The difficulties involved in measuring organizational effectiveness include a lack of consensus regarding definitions, theoretical models, choice of criteria, level of analysis and a variety of methodological issues.

The lack of consensus regarding the operational criteria of effectiveness follows from a lack of agreement as to the conceptual definition of the term. Georgopoulos and Tannenbaum (1957) noted that, traditionally, effectiveness was viewed only in terms of profit or productivity. They attempted to expand on this simplistic view with the following definition:

Organizational effectiveness is the extent to which certain resources and means fulfills its objectives without incapacitating its means and resources and without placing undue strain upon its members (1957:535).

Etzioni (1975:133) defines organizational effectiveness not merely as a level of goal realization. He also focuses
on the pattern of relationships among the elements of an organizational system which enhances the service of one or more goals. Perrow (1961:856) makes a distinction between official and operative goals. The former are an organization's publicly espoused goals, while the latter refers to the actual goals being pursued by organizational members. Perrow defines effectiveness in terms of operative goals.

In sport, effectiveness has been most often operationalized in terms of win/loss records. A SIRLS$^2$ search revealed 38 references related to the concept of effectiveness. Nine articles referred to the replacement process and managerial succession in professional sport. For example, Theberge and Loy (1976) found that win/loss records are negatively related to member and managerial replacement rates. McPherson (1976) discussed turnover strategies in the National Hockey League including promotion, demotion, trade and the draft which are commonly thought to be necessary to produce a winning team. However, his findings challenge the commonly held assumption that trades, etc. are related to improved team performance as no significant relationship was found between personnel and managerial changes and group success. Nineteen articles defined effectiveness in terms of specific objectives including the development of park communities, procedures in recreation departments, increased tourism, success at the Olympic Games and fun in children's

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$^2$ SIRLS is an information retrieval system at the University of Waterloo.
play. Five articles related effectiveness to other organizational variables including communication, careers, conflict and leadership. Moriarty et al. published three articles on change agent research; a strategy which attempts to align the behaviors of those involved in amateur sport with the avowed goals of the organization. Two articles dealt with effectiveness in terms of coach/player relations. Finally, Luschen (1978) analysed the organization and policies of National Olympic Committees according to effectiveness, efficiency, responsiveness and fidelity. Effectiveness was measured by the degree of concern for established goals. Performance-oriented National Olympic Committees placed a high priority on fidelity, followed closely by effectiveness and efficiency.

On a more macro level, some work has been done on the factors that account for differential success rates of nations in international sporting events. For example, Colwell (1981) looked at the relationship between a number of economic, political and social variables and measures of relative and overall performance success. She found that a four factor model including the position in the international power hierarchy, the number of scientists and technicians engaged in research, the percent of the population involved in agricultural pursuits and whether or not a country was socialist, explained the most variance in the overall performance measure.
Thus, as in the sociology of sport literature, effectiveness has been defined in several different ways. Most of the literature does however incorporate the goal model of effectiveness whereby the concept is measured in terms of the ability of the organization to achieve desired objectives. The objectives most often measured in a sport context reflect an emphasis on performance outcome which can be operationalized in terms of win/loss records or rankings in comparison to other teams.

Several criticisms, however, have been voiced against the goal model of effectiveness. One of these refers to Perrow's observation that official goals may be generalized statements justifying the existence of an organization which are difficult to empirically measure. Steers (1975), Seashore (1976) and Scott (1977) warn that careful consideration must be given to the source of organizational objectives, which may vary according to hierarchical level and from department to department. Others are critical of the purposive and rational approach that the goal model of effectiveness represents. That is, organizational members caught up in day to day operations may not be able to accurately articulate a global end state or ultimate organizational objective. Furthermore, Steers (1975) contends that some goals are actually contradictory. For example, the organizational goal of productivity may be achieved at the expense of an individual's goal of job satisfaction. Finally,
Webber (1975) and Lawrence and Lorsch (1967) feel that the measurement of goal attainment is problematic as environmental conditions as well as the stage of growth of the organization will dictate the objectives that an organization is pursuing at one particular point in time.

Dissatisfaction with the goal model of effectiveness has lead to new definitions and theoretical models. Lawrence and Lorsch (1967) proposed that effectiveness be conceptualized as:

- the ability of the organization to acquire scarce resources through competition in a social environment.

The organization's bargaining position would then become a criteria of effectiveness. This definition lead to a systems model of effectiveness which is characterized by the following features:

1. The organization itself is the focal frame of reference rather than some external entity or some particular set of people;

2. The relations between the organization and its environment are explicitly treated as central ingredients in the definition of effectiveness;

3. A theoretically general framework capable of encompassing different kinds of complex organizations is provided;

4. It provides some latitude for uniqueness, variability and change with respect to the specific operations for assessing effectiveness applicable to any one organization, while at the same time maintaining the unity of the underlying framework for comparative evaluation;

5. It provides some guide to the identification of performance and action variables relevant to organizational effectiveness and to the choice of variables for empirical use (Yuchtman and Seashore, 1967:89).
This model was abstracted from Katz and Kahn's (1966) conception of how the organization is related to its environment through input and output transactions. Hirsch (1975), Negandhi and Reimann (1973) and Pennings (1975, 1976) are examples of empirical studies of the systems model of effectiveness.

However, Price (1972) suggests that there are problems with the systems model. One of them is the controversy regarding resource optimization versus resource maximization. Price contends that although Yuchtman and Seashore emphasize resource optimization they have not adequately defined the boundaries of this concept. Price also charges that advocates of the systems approach, who criticized the goal model because it has not produced general measures of effectiveness, have fallen prey to this same problem. That is, many researchers have used criteria which are only appropriate for the specific organization under examination. Finally, Price further criticizes Yuchtman and Seashore's system approach because several of their concepts refer to the same phenomena. For example, eight of their criteria were found to relate to efficiency and five referred to organizational size. This has lead to alternative systems definitions such as Molnar and Roger's (1976:404) which was designed to account for the effectiveness of public versus private agencies. In their work:

effectiveness is viewed in terms of the distribution or outflow of resources (the ability to distribute resources or provide services to the envi-
Mott (1972:ix) emphasizes the interaction between the organization and its environment as the major criteria of effectiveness. He states that:

the concept of effectiveness is multidimensional, involving besides productivity, the organization's ability to adapt to changing conditions both internal and external (adaptability), and its ability to cope with temporarily unpredictable emergences (flexibility).

However, it is precisely because researchers have resorted to a variety of definitions that this area of research is in such a state of chaos. Hannan and Freeman (1977) have even argued that the concept of organizational effectiveness should be disregarded as a scientific concept because of theoretical and methodological inadequacies. Others are not as quick to reject the concept. Webb (1974) suggests the combining of the goal and systems model as they may really be a logical extension of each other. Pfeffer (1977) argues against Hannan and Freeman's stand when he suggests that the barriers to the study of effectiveness are the same for all organizational research since variables vary over time. He defends the use of objectives as an analytical tool because they determine organizational action. Campbell (1977:39-41) offers a solution to the dilemma when he suggests that an emphasis should be placed on operative goals instead of formally written goals. He states that:

While people might not be able to state their goals accurately, operative goals can be inferred from the way they behave.
In addition, Campbell calls for some overall hierarchical map of how effectiveness criteria fit together in terms of generality and specificity, and means-ends relationships. For example, sport organizations may cite fund raising and developmental programs as their organizational goals, when in fact, these may be the means of achieving a further end such as performance excellence in international sport.

An interesting study which compared the goal and system resource approaches was undertaken by Molnar and Rogers (1976). They hypothesized that if measures from both approaches converged, both models should be used for a more complete understanding of effectiveness. The goal approach was measured by ratings of effectiveness by the top administrators within the organizations as well as outside experts. Administrative orientation, resource differential, resource inflow and resource outflow were indices of the system model. These variables were related to four organizational decision-making variables: formalization, autonomy, accountability, and goal clarity. Molnar and Rogers concluded that the two approaches measure separate but related dimensions of effectiveness because very few of the decision making variables were correlated with effectiveness indicators across the goal and system measures. In addition, there was no significant relationship between the two goal measures, and the system resource measures did not demonstrate convergent validity.
Only two studies could be found which directly measured the effectiveness of voluntary organizations. Both of these (Webb 1974; Likert 1961) utilized the goal model. Although some could question whether Webb's study on churches falls into the realm of voluntary association research, Webb found support for the assertion that it is faulty to attempt to develop general measures of effectiveness. He concluded that the same development programs used for business organizations and government organizations will not necessarily be effective in religious organizations. Conversely, Likert (1961:140-161) concluded that the same principles of organization found in industry and government were operating in the voluntary League of Women Voters in the U.S.A. Likert's findings are summarized below:

1. In the more effective leagues, greater motivational forces to be active in League affairs are generated in both leaders and members.

2. Presidents in the more effective leagues have no more influence on the average than do the presidents in the less effective leagues.

3. In the more effective leagues members feel that they are kept better informed by all sources of information than do the members in the less effective leagues.

4. There is a tendency for leagues, as they increase in size, to increase in effectiveness up to a particular point. At a membership size of about 400, that tendency disappears. The larger the league, the more use is made of general meetings with less face-to-face interaction. Therefore, structure is related to size.

Since no consistent findings have emerged regarding the nature of effectiveness, criticism of existing definitions
and theoretical models continues. Kuhn (1970) would argue that such criticism is healthy and can lead to paradigmatic revision. In fact, it is this dissatisfaction with existing paradigms which forces scientists to be more articulate and specific. The current state of the area can be described as being in "crisis" and in need of a scientific revolution. However, this does not necessitate that all previous work be disregarded. Instead this work can be rethought and expanded upon. This will be the task of the section on indices of organizational effectiveness in Canadian NSGB. Before proceeding, additional problems with the effectiveness research are discussed, including the problems of selecting effectiveness criteria and methodological issues.

Effectiveness Criteria

As mentioned previously, one of the most striking flaws in organizational effectiveness research is the lack of consistency regarding the choice of effectiveness criteria. This lack of consistency makes comparative and cumulative research difficult, if not impossible.

Steers (1975) reviewed seventeen studies of effectiveness and found that the most common univariate measures are:

1. overall performance measured by employee or supervisory methods;
2. productivity typically measured by output data;
3. employee satisfaction measured with self report questionnaires;
4. profit measures based on accounting data;
5. personnel withdrawal based on archival turnover and absenteeism data.

Furthermore, Steers (1975:547) notes that it is difficult to defend the use of one variable as an adequate measure of effectiveness. He even goes so far as to suggest that:

Several of the criteria that have been used (for instance, job satisfaction) appear to represent more an expression of the researcher's value premises instead of objective measures of the effectiveness of an organization in attaining its goals.

However, even though multivariate models of effectiveness have been constructed to integrate the diverse conceptualizations of effectiveness, Campbell (1976) found that a total of thirty different criteria and combinations of criteria have been utilized. This lack of consistency has made it difficult to summarize and draw conclusions from the research done to date.

The universality versus specificity of effectiveness criteria has been another topic of debate. Mott (1972) suggests that the same criteria should apply across all organizations, while Webb (1974), Scott (1977) and Cameron (1978) contend that each organization requires its own definitions of effectiveness. Mott (1972:17) argues that organizational effectiveness should be evaluated according to productivity measures (quantity, quality and efficiency), behavioral adaptability (the proportion of relevant members who accept the changes and the rapidity with which they accept them), symbolic adaptation (anticipating problems in advance, de-
veloping solutions to them and staying abreast of new technologies and methods) and flexibility (the ability of organizational centers of power to cope with temporarily unpredictable conditions). Proponents of the goal model of effectiveness contend that measures must be specific as objectives being sought vary from organization to organization.

The final problem with the criteria deals with the source of effectiveness criteria. Should the major decision makers, the organizational members or groups outside the organization, be consulted regarding effectiveness information? This is an important consideration as Scott (1977) found that effectiveness criteria vary depending upon the information source used. This question also relates to the question of the appropriate unit of analysis for organizational effectiveness studies. Once again, a review of the literature illustrates that researchers have employed many levels of analysis. These have ranged from the supersystem or external environment (Hirsch 1975; Nott 1972), the organization itself (Webb 1974; Scott 1977; Steer 1977; Weick 1977), the organizational subunits (Hitt and Middlemist 1978) and finally to the individual members (Argyris 1962).

In summary, the criteria used as indices of organizational effectiveness have varied along the following dimensions: univariate versus multivariate criteria, universality versus specificity of criteria and according to the level
of analysis or source of information. Before studies can be replicated to build a cumulative body of knowledge regarding organizational effectiveness, more consistent treatment of the effectiveness criteria must be made.

**Methodological Issues**

An additional reason for the equivocal findings on organizational effectiveness deals with the choice of methodology employed to measure the concept. For example, Yuchtman and Seashore (1969) relied totally on organizational records in their analysis of the systems model; a strategy which, according to Campbell (1977), is a biased source of information. Survey techniques including both the interview and the questionnaire have also been extensively utilized. However, variation in the application of these techniques can result in different indicators of effectiveness. For example, Penning (1975) found that there was low convergence between objective and subjective measures. Data from company records, census information, financial information, investment patterns and accounting information were defined as being objective data. Subjective data included questionnaire results from various groups involved with the organization under investigation. Penning concluded that the two types of measures may be testing different aspects of the effectiveness concept.
Future studies should incorporate a number of research strategies such as the content analysis of various records, interviews and questionnaires of external organizational members, the major decision makers and other members, and participant observation to check that verbal responses match actual behavior. Price (1977) employed a combination of methods in her analysis of the formal and operative objectives of the Secondary Schools Athletic Association in Ontario. Although participant observation was not directly used in this study, respondents were asked to present behavioral examples of how objectives were being pursued.

In summary, research on organizations has invariably been concerned with the issue of effectiveness. However, advancement in the area has been hindered for a variety of reasons. These include the variety of definitions, models, criteria and methods which have been utilized in the research to date. Careful consideration must be given to each of these areas so that research can proceed in a logical and systematic manner.

Organizational Effectiveness in NSCBs

Kanter and Brinkeroff (1981:327) has summarized the problems with the goal model of effectiveness as follows: "goals can be inconsistent, contradictory, or incoherent; and it is often unclear at what level or with respect to what units the attainment of goals should be measured".
However, in voluntary amateur sport organizations, such as the Canadian NSGBs, practitioners have given a considerable amount of attention to the process of goal formulation in recent years. For example, several volunteers have attended workshops to identify short and long range objectives for their sport (Wiele, 1980). In addition, as a prerequisite for funding support, Sport Canada requires the NSGBs to be committed to the main goal of performance excellence and to write subgoals in a number of program areas. Thus, volunteers are being encouraged to plan in terms of goals, and one goal that is common to all NSGBs involved in Olympic team and individual sports, is performance excellence.

However, the fact that performance excellence is a goal that is common to all these organizations, and thus forms a standardized basis for comparison, is not the only rationale for its inclusion as an index of effectiveness. Weber closely linked achievement and the pursuit of instrumental goals to his theory of bureaucracy. This is most evident in his writings in *The Protestant Ethic and the Spirit of Capitalism* (1958). Similarly, in sport, Luschen (1970) and Seppanen (1981) have reported that unequal success levels around the world cannot only be explained by the material basis of the economy, but is also related to the ascetism, achievement orientation and inner worldly tradition commonly associated with Protestantism. In addition, Riesman and Denney (1972) suggest that the emphasis placed on winning in
modern sport is related to the social struggle for success. This struggle in turn evokes a more scientific and technological approach to sport. Wohl (1975) predicts that modern sport will continue to become more intellectual, rationalized and will place an increasingly greater emphasis on success. Thus, the selection of performance excellence as one indicator of organizational effectiveness is in line with the assumption that the goals of modern sport will continue to become more instrumental in nature. Because NSGBs must continually struggle to obtain funding, their ability to acquire funds from the government and other sources could be a second measure of effectiveness.

The use of the goal and systems model in this study on voluntary sport organizations is intended to examine the controversy existing in the literature on organizational effectiveness. These two models are either regarded as alternative views on organizational performance (Campbell 1976; Molnar and Rogers 1976) or as complementary tools for analyzing organizational action (Webb 1974). With respect to the latter view, it has been suggested that the systems model may be a logical extension of the goal model in that resources are required to achieve desired goals. Thus, a positive relationship between these two measures of effectiveness would be expected. With respect to this study, organizations with teams which rank high in world rankings would be expected to be more successful in acquir-
ing scarce funding resources than are organizations with teams with moderate or low world rankings. This interpretation is consistent with the assumption underlying the systems model that the ability to acquire resources is a reflection of the organization's success at producing desired outcomes, and thus assumes that the systems and goal models are complementary tools for measuring organizational effectiveness. However, an alternative argument that also deserves consideration is that the acquisition of required inputs such as financial resources does not necessarily lead to the attainment of desired outputs or objectives. Due to the need for other resources, the effect of the external environment, and the transformative processes mediating between inputs and outputs, acquired resources may not be converted into desired outputs. The use of variables from both models will help to clarify the relationship between these indicators of organizational effectiveness in Canadian NSGBs.

In the following section, the relationship between bureaucratic characteristics and the organizational effectiveness of voluntary NSGBs will be discussed.
Research on Bureaucracy and Effectiveness

Although Weber explicitly linked the characteristics of bureaucracy to organizational efficiency and effectiveness, very few empirical studies have investigated the relationship between these concepts. By referring to Appendix A, Selected Empirical Studies of Organizational Effectiveness, one finds that the studies have focused entirely on the dependent variable of effectiveness, or have utilized independent measures which do not relate directly to Weber's theory. Even more striking is the lack of consistent use of independent and dependent measures. This makes it extremely difficult to draw any conclusions about possible relationships. Furthermore, some studies have uncovered positive relationships between some bureaucratic characteristics and various effectiveness criteria (Pennings 1976; Rushing 1974; Webb 1974; Negandhi and Reimann 1973; March and Mannari 1976; Likert 1961; and Price 1968), while no direct relationship has been found in other studies (Pennings 1975; Molnar and Rogers 1976; Price 1976; Mahoney and Weitzel 1968). According to Sigelman (1981), two main hypotheses have been tested in the limited research conducted on the relationship between bureaucracy and organizational effectiveness. In the first approach, a positive linear relationship has been predicted, a relationship which is consistent with the Weberian tradition. As Sigelman (1981:253-254) explains:
The basic idea here is that division of labor, specialization, achievement orientation, recruitment and promotion on the basis of merit, efficiency-consciousness, clear-cut patterning of responsibility, and other bureaucratic characteristics encourage organizational rationality. Accordingly, as these characteristics diffuse throughout the organization and become institutionalized over the course of time, more effective organizational performance should follow.

In the second instance, a linear relationship between bureaucracy and effectiveness is predicted, but this time, the slope of the relationship is negative. Sigelman (1981:254) reports that some researchers have argued that the explanation for a negative relationship is that, "the increasingly bureaucratic organization becomes progressively more susceptible to performance lapses as its structural arrangements become more elaborate". To reconcile these contradictory perspectives, Sigelman suggests that an S shaped curve may best explain the relationship between bureaucracy and effectiveness. He (1981:256) explains that effectiveness may suffer at first as an organization adopts a more bureaucratic style, but effectiveness can then be facilitated as "rational procedures replace the ad hoc ones". However, after a point, bureaucracy may be detrimental to effectiveness because:

Specialization may give way to water-tight compartmentalization, efficiency to goal displacement, impersonality to outright dehumanization and hierarchy to rigidity (Sigelman, 1981:256).

As mentioned previously, little research has been done on bureaucracy, organizational effectiveness and voluntary
sport organizations. From a SIRLS search under the descriptor of "voluntary organizations" only one of the over two hundred listings could be cross referenced with organizational effectiveness (Moriarty and Duthie 1976). Only sixteen articles made reference to the societal functions of sport, while fifteen studies made mention of the internal dynamics of sport organizations. Other articles could be broadly categorized under the following headings: sociodemographic characteristics of joiners, social psychological dimensions of involvement and historical descriptions of the development of various voluntary organizations.

Of the thirty-eight references which were located under the descriptor "organizational effectiveness", nine referred to the replacement process and managerial succession in sport. Other articles were related to practical organizational concerns, the Olympic Games, social psychological dimensions and selected organizational theory topics. Similarly, only twenty-one articles were found which dealt with bureaucracy and sport. Most of these articles were nonempirical discussions of the dysfunctional consequences of organized sport which are thought to accompany the rise of bureaucracy in modern society.

It is evident that little research integrates the three concepts: bureaucracy, effectiveness and voluntary sport organizations. As mentioned previously, one possible reason for this is that voluntary organizations have seldom been
analysed from an organizational perspective. Thus, the concepts of bureaucracy and effectiveness have rarely been investigated. In addition, the relationship between bureaucracy and effectiveness may have been overlooked because, "the problem is extremely complex as a vast number of influences on performance are at work" (Child, 1976:139). However, the analysis of sport as a formal organization easily falls into the subject area of sociology of sport. Loy, McPherson and Kenyon (1978:15) classify organizational properties of sport under their notion of sport as a social institution. They argue that:

The sport order is composed of all organizations in society that organize, facilitate and regulate human actions in sport situations. Organizations at the corporate level are characterized by bureaucracy; they have centralized authority, a hierarchy of personnel, protocol, and procedural emphases; and they stress the rationalization of operations and impersonal relationships. A number of the major national and international governing bodies of amateur and professional sport illustrate sport organizations of the corporate type.

If we accept the definition of sociology as being "the scientific study of the structure and composition, functioning and change of social systems and their relation to human behavior" (Loy, McPherson and Kenyon, 1978:27), then we must be concerned with the topics of bureaucracy and organizational effectiveness in sport.
Rationale for Relationships Between Bureaucracy and Effectiveness

In this study the variables investigated as indices of bureaucracy include formalization, centralization, impersonality of work relations, professionalism, specialization, and the proportion of clerical staff. Below is a review of the literature concerning these variables and their relationship to organizational effectiveness measures.

Formalization refers to the extent to which work activities are guided by written rules and procedures (Hall, 1972). Thus, in sport organizations, the greater the proliferation of written documents (e.g., in publications, constitutions, and job descriptions), the greater the formalization. White (1980) contends that the aim of increased formalization is to achieve social order and stability through the patterned regulation of human behavior. Glisson and Martin (1980) add that although formalization is often associated with red tape, it assures a minimum of fairness and consistency in treatment and may also reduce work uncertainty. In addition, a formally established system of procedures and rules is thought to ensure continuity, even with frequent changes in personnel; a common occurrence in voluntary organizations.

Although Weber (1968:980) stipulates that bureaucracy coincides with the concentration of the material means of management in the hands of the master, empirical research has most often demonstrated a positive relationship between
a decentralized structure and effectiveness. For example, Hage and Aiken (1967) reported a positive relationship between decentralization and program innovation while Negandhi and Reimann (1973) found that decentralized business firms experienced greater employee retention and profitability. A decentralized authority structure is associated with participative decision-making; a process which is designed to involve and clarify members responsibilities in contributing to goal attainment. In national sport governing bodies this variable can be operationalized according to the degree to which decision-making is concentrated with the board of directors versus being distributed to other committees and salaried program staff within the organization.

An impersonal work orientation is important to the bureaucratic organization because, according to Weber, it helps to prevent personal feelings from distorting rational decision-making. Weber contrasted the impersonal approach with the ways of the old order in which those in power were moved by "personal sympathy and favor, by grace and gratitude" (Weber, 1968:975). Along with formalization, impersonal work relations are designed to:

eliminate from official business all purely personal, irrational and emotional elements which escape calculation (Weber, 1968:975).

Hall (1963) was one of the few who included impersonality as a characteristic of bureaucracy. However, the measure used by Hall, which was the degree to which employees felt
compelled to be courteous and reserved, did not capture Weber's notion of the concept. Instead, it is likely that the establishment of procedures to evaluate the performance of employees is a more adequate measure of impersonal relations. Evaluation procedures are designed to be objective and to remove emotional elements from decision making. These procedures are also designed to improve the performance of employees which, in turn, is designed to lead to increased organizational effectiveness. Therefore, it is expected that the more an NSGB relies on formal evaluation procedures, the more impersonal the work relations between the volunteer and paid staff will be. Weber would also suggest that impersonal work relations leads to rational decision making which in turn leads to organizational effectiveness.

For Weber, the evolution of bureaucratization was an inevitable response to the patriarchal society in which authority was based on kinship ties and the possession of property. Instead, in a bureaucracy, important social roles are allocated according to knowledge and the possession of educational qualifications. Blau (1974) found that the degree of professionalism is inversely related to the degree of centralization. He explains that because professional qualifications allow one to see the implication of one's work, and makes a person more self-directing, decision making can be more dispersed throughout the organization. Conversely, in the absence of a professionally trained staff,
coordination can more likely be achieved through a centralized hierarchy of authority. Thus, to investigate the relationship between professionalism and effectiveness careful consideration must be given to the interaction effect between professionalism and the type of decision-making structures. The level of educational attainment of salaried program staff and volunteers would be indicative of the degree of professionalism in amateur sport organizations.

Specialization implies a high division of labor in which work responsibilities are divided into more narrow areas for each individual. According to Weber (1968), a high degree of specialization promotes expertise among personnel by narrowing the range of duties on the job. Specialization is thought to lead to increased effectiveness because it allows each member to maximize his or her contribution to goal directed activities (Steer, 1977:64). The number of board positions, paid staff and clerical positions, executive board positions and committees with specific responsibilities would be indicative of the degree of specialization.

Although the formalized work procedures are designed to offset continual changes in personnel, career stability is an important variable to consider in voluntary associations in which positions are often elected for one or two year terms. In contrast, Weber's bureaucracy is characterized by formal employment, salaries, pensions, promotions, elected
rather than appointed officials, and positions are often held for life. Consistency may be difficult to achieve with a large turnover rate because new incoming members require training and socialization in their new positions. Therefore, it is expected that the more careers approximate Weber's description of the official in bureaucracy, the more effective the organization will be.

Blau (1966) found a positive relationship between the proportion of clerical staff among the total staff and reduced operating costs. Clerical staff maintain channels of communication which is important as the differentiation of roles increases. Furthermore, clerical staff help to reduce the work load of major decision makers so that they can concentrate on matters affecting the organization's effectiveness. For Weber, a larger proportion of clerical staff is required in an effective bureaucracy to maintain the all important files, and to coordinate the many specialized decision-making positions.

In summary, based on Weber's writing, and subsequent research on bureaucracy and effectiveness, a positive correlation between a number of structural variables and measures of organizational effectiveness can be expected. More specifically, formalization, an impersonal work orientation, professionalism, specialization, career stability and the clerical staff ratio are expected to be positively correlated with the degree of goal attainment and resource acquisi-
Only centralization, which has most often been found to be inversely related to effectiveness indicators, is expected to exhibit a negative correlation with the degree of goal attainment and resource acquisition.

**Summary**

The purpose of this chapter has been to review the literature and develop a rationale for investigating the relationships between contextual, structural and organizational effectiveness variables in voluntary amateur sport organizations. To this end, the first section included a discussion of the historical development of the organizations to be studied. In this section, the prominent role of the government in the bureaucratization of Canadian NSGBs, especially since 1970, was noted. It was also pointed out that even though these voluntary organizations have a major influence on the administration of amateur sport throughout the world, little research has been conducted on this type of organization from an organizational perspective.

One reason for this dearth of research is that the research which has been completed on voluntary organizations has largely been from a sociodemographic or a social psychological perspective. While these approaches undoubtedly add to our knowledge, an organizational approach would be particularly useful in uncovering both structural and performance dimensions of voluntary organizations. In addition,
the replication of existing organizational studies, which have largely sampled the profit-oriented business type of organization, would illustrate the degree to which findings can be generalized across organizational types.

According to Blau (1974), an analysis of formal structure is a good starting point for organizational research because formal structure largely influences emerging informal structure. The most expedient way of examining structure and function in voluntary organizations, such as Canadian NSGBs, is to apply research that has been conducted on other types of organizations.

Most of the research conducted on the formal structure and function of the business type of organization has been stimulated by Weber's theory of bureaucracy. By contrasting modern society with traditional patriarchal societies, Weber envisioned the growth of bureaucratic order as a form of control and domination. He characterized his ideal type bureaucracy by the following features. Bureaucratic officials would use science as a base of knowledge and would become more professional and specialized and would occupy their positions for a lengthy period of time. An impersonal work orientation would arise to remove emotional entanglements from official business and decision-making would be guided by the rules and regulations contained in the all important written documents. In addition, a large clerical staff would emerge in the modern office to help coordinate
specialized positions and to free the bureaucrat from routine tasks. Weber also predicted that if an organization adopted this bureaucratic type of structure, it would become more effective.

Subsequently, a number of different research strategies have been developed to examine Weber's ideal type. One approach has been to examine the relationship between contextual variables, such as organizational size, organizational age, dependence, and technology with the various structural variables. A second approach has been to examine the relationship between structural variables, to determine the degree to which variables indicative of Weber's ideal type vary together. A third approach, although less common than the first two, has been to associate structure with measures of organizational effectiveness. Difficulties in defining the concept of organizational effectiveness and the difficulties in accounting for the variety of factors which, beside structure, affect it may have hindered progress in this area. However, the degree of influence that organizational structure has on organizational effectiveness is still an interesting sociological question.

This study proposes to apply an organizational perspective to the study of voluntary organizations by examining the structure and effectiveness of Canadian NSGBs. More specifically, four of the lines of inquiry, which were largely stimulated by Weber's theory of bureaucracy, will be
employed. First, the relationship between contextual variables and organizational structure will be examined. Second, the intercorrelations between variables indicative of bureaucracy will be investigated. Third, the relationship between organizational structure and organizational effectiveness will be measured. Fourth, in order to further examine the controversy in the organizational effectiveness literature regarding the goal and systems models of effectiveness, the relationships between indices from both models will be examined in this study. In this way, the relationship between the dependent measures can also be investigated. The following chapter outlines the procedures used to examine these four lines of inquiry.
CHAPTER 3 - PROCEDURES

Selection of the Sample

The population for this study was comprised of all Canadian national sport governing bodies for Olympic sports which are housed in the National Sport and Recreation Center in Ottawa. Data was collected on all of the organizations in the population (see Appendix B).

Data Collection

The data was derived from the 1981-82 administrative and technical profiles of all NSGBs. These profiles were compiled by Sport Canada consultants in conjunction with the Executive Directors and Technical Directors of each sport (see Appendices C and D). Additional information was obtained in a questionnaire that was sent to the Executive Directors (see Appendix E). Twenty-two of the twenty-nine Executive Directors returned completed questionnaires for a 76% return rate. To obtain the missing data from the seven organizations, the Executive Directors or Sport Canada consultants were interviewed by telephone. In this way, data were obtained for the entire population of organizations. Below is a list of how the context, structure and effectiveness variables were theoretically and operationally defined, as well as the hypotheses examined in this study.

- 115 -
Hypotheses

Context and Structure Hypotheses

1. The greater the organizational size, the greater the bureaucratization.
2. The greater the organizational age, the greater the bureaucratization.
3. The greater the dependence on the federal government for financial support, the greater the bureaucratization.
4. The greater the technological expertise, the greater the bureaucratization.

Structural Hypotheses

1. Formalization, the impersonality of work relations, professionalism, specialization, the clerical ratio and career stability are all positively associated with each other.
2. Centralization is negatively associated with the other structural variables.

Effectiveness Hypotheses

1. The measures of the goal model and systems models of effectiveness are positively correlated.

Structure and Effectiveness Hypotheses

1. The greater the extent of formalization, the greater the degree of goal attainment and resource acquisition.
2. The greater the decentralization in authority and decision making, the greater the degree of goal attainment and resource acquisition.
3. The greater the impersonality of work relations, the greater the degree of goal attainment and resource acquisition.
4. The greater the professionalism of major decision makers, the greater the degree of goal attainment and resource acquisition.

5. The greater the specialization, the greater the degree of goal attainment and resource acquisition.

6. The greater the career stability of the organizations, the greater the degree of goal attainment and resource acquisition.

7. The greater the proportion of clerical staff, the greater the degree of goal attainment and resource acquisition.

Theoretical and Operational Definitions

Contextual Variables

1. Organizational Size:

Theoretical Definition
Organizational size is the total membership of the organization.

Operational Definition
The total number of nationally registered members.

2. Dependence on other organizations:

Theoretical Definition
Dependence is the relationship to a parent organization or owning group or to other organizations (Pugh et al. 1969).

Operational Definition
Dependence is measured by the percentage of the 1982 NSGB total operating budgets which was financed by Fitness and Amateur Sport (F.A.S.).

3. Organization Age:

Theoretical Definition
Organizational age refers to the amount of time that an organization has been in existence.

Operational Definition
Organizational age is measured by the number of years that an NSGB has been incorporated.
4. Technological Expertise:

**Theoretical Definition**
The extent to which knowledge is sought from outside the national sport governing body to upgrade training and coaching programs.

**Operational Definition**
The emphasis placed on technology is measured in two ways. The first measure is the total number of sport scientists that an NSGB has consulted in the past year. The second measure was the total number of coaches in the organization who had completed at least Level One of the technical Coaching Certification program for that sport.

**Structural Variables**

1. Formalization:

**Theoretical Definition**
Formalization is the degree of work standardization contained in role definition documents, information passing documents and role performance records (Hall, 1972).

**Operational Definition**
Formalization is defined by three different measures. The first, known as publication formalization, is the total number of publications produced by an NSGB in the last year. The second measure, labelled constitution formalization, is the estimated total number of words in the most recent NSGB constitution. Job description formalization is the estimated total number of words in volunteer as well as salaried program staff job descriptions. Word estimates were made by calculating the average number of words per line, multiplying this by the average number of lines per page and then multiplying by the total number of pages.

2. Centralization:

**Theoretical Definition**
Centralization is the degree to which decision making is concentrated in the organization; the greater the concentration of decision making, the greater the centralization (Hage and Aiken, 1967).
Operational Definition
Four hierarchical levels in the NSGBs were identified and assigned a value ranging from one to four depending on the level of centralization. The Board of Directors were defined as being the most centralized, and thus received a value of 4, followed by the Executive Board alone, the Executive Board in consultation with the salaried program staff, and the salaried program staff alone being the least centralized level. Using Knoke's (1981) taxonomy of decision making areas, five areas were identified including: budget decisions, personnel decisions, policy and goal decisions, new program decision and promotion decisions. Executive directors were asked to identify which of the four levels had final say in each of the decision making areas. In this way, a value from one to four was given to each decision making area and a total index of centralization was constructed from the sum of values.

3. Impersonal Work Relations:

Theoretical Definition
Impersonal work relations refer to the extent to which individuals are dealt with on an objective rather than on a personal basis.

Operational Definition
Impersonality of work relations was measured according to the degree of formality in the procedures for evaluating the performance of salaried personnel. An NSGB received a score of 1 if no evaluation procedures were in existence. A 2 was assigned if there was some form of evaluation done on an informal basis, such as through casual interviews. If an NSGB had a standard evaluation form used to evaluate salaried program staff, it was assigned a score of 3.

4. Professionalism:

Theoretical Definition
Professionalism is represented by the educational qualifications of the volunteers and paid staff.

Operational Definition
The highest level of educational attainment for both volunteers and salaried program staff:

a) Less Than A High School Diploma

b) High School Diploma

c) Post Secondary Degree
d) Graduate Degree

5. Specialization:

**Theoretical Definition**
Specialization is the extent to which work responsibilities within an organization are divided (Steers, 1977).

**Operational Definition**

a) Board members specialization: the total number of board member roles.

b) Executive board specialization: the total number of executive board member roles.

c) Salaried program staff specialization: the total number of salaried program staff positions (e.g., executive director, technical director, program coordinators, national coach).

d) Committee specialization: the total number of national board committees.

e) Clerical support staff specialization: the total number of clerical support staff positions.

f) Total specialization: the sum of board member roles, executive board member roles, salaried program staff positions, committees and clerical support staff positions.

6. Career Stability:

**Theoretical Definition**
Career stability refers to the length of time that individuals have occupied positions within an organization (Weber, 1968).

**Operational Definition**

a) Paid staff turnover rate: the mean number of years that Executive and Technical Director positions have been in existence, divided by the number of incumbents in each of these positions.

b) Voluntary involvement: the mean number of years that executive board members have been involved in national board roles.
7. Proportion of Clerical Staff:

**Theoretical Definition**
The proportion of clerical staff to other organizational members (Blau, 1973).

**Operational Definition**
The ratio of clerical staff to all voluntary and other paid staff positions.

**Effectiveness Variables**

1. The Goal Model of Effectiveness:

**Theoretical Definition**
In the goal model, organizational effectiveness is defined as the organization's ability to achieve desired objectives. The main objective of all the NSGBs in this sample is to have their teams rank as highly as possible in international competition.

**Operational Definition**

a) The world ranking of each Canadian National Olympic Team in 1982 (or the average ranking if an NSGB has more than one Olympic team). This variable was originally coded in a reverse direction to all the other variables, because the team with the highest world ranking received the lowest score (e.g. 1). Therefore, it was necessary to recode the variable so that a team with the lowest world ranking (e.g. 54) received the lowest value (e.g. 1). Similarly, the team with the highest world ranking (e.g. 1) received the highest value (e.g. 54).

b) The effectiveness ranking of each Canadian National Olympic Team in 1982 (or the average effectiveness ranking if an NSGB has more than one Olympic team). This measure controls for the number of competing countries. An NSGB receives a score of 4 if the national team(s) is in the top 25% of competing countries, a 3 if it is in the 26-50% range, a 2 if it is in the 51-75% range, and a 1 if it is in the bottom 75-100% of competing countries.

c) The changes in effectiveness ranking of each NSGB since the most recent world championships.
2. The Systems Model of Effectiveness:

**Theoretical Definition**
In the systems model, organization effectiveness is defined as the organization's ability to secure scarce resources. Therefore, NSGB effectiveness is measured by the ability of the organization to acquire financial resources from Fitness and Amateur Sport and other sources.

**Operational Definition**

a) The 1982 Total Operating Budget of each NSGB

b) The increase in dollars received from Fitness and Amateur Sport from 1970 to 1982.

In summary, Figure 2 represents a model of the context, structure and effectiveness variables that were examined in this study.
FIGURE 2: CONCEPTUAL MODEL OF THE CONTEXTUAL, STRUCTURAL AND EFFECTIVENESS VARIABLES
Data Analysis

Data collected from the administrative and technical profiles, as well as from the questionnaires, were coded according to the above operational measures. Descriptive statistics were computed, using the SPSS computer program, to determine frequency distributions, mean values and the range of responses. The frequency distributions were also used to check for coding or key punch errors. Pearson correlation matrices were then produced to examine the strength and direction of the relationships among the variables.

In addition to measuring the strength and direction of relationships, the Pearson correlation is also a valuable statistic for determining the degree to which a linear relationship exists between variables. That is, an r value that is close to zero indicates the absence of a linear relationship. To determine whether a low correlation was due to a non-systematic relationship or a curvilinear relationship, scattergrams were produced for each set of variables. Besides printing a visual plot of the data, the SPSS subprogram scattergram produces a number of statistics, including an r^2 value. This value, which ranges from 0 to +1, was used to measure the proportion of variance that one variable explains in another variable. The r^2 will be close to zero when the data is relatively homogeneous and when the cases cluster close to the mean.
In addition to these bivariate analyses, the multivariate technique of partial correlation (pr) was used to further clarify the relationships between variables. The partial correlation describes the relationship between two variables while controlling for the effects of one or more additional variables. Thus, partials were computed for each correlation between the contextual and structural variables while controlling for all other contextual variables. Similarly, because past research has shown that the structural variables are intercorrelated, controls were introduced for the relationships between structure and organizational effectiveness.

According to Cohen (1975), one of the most commonly encountered pattern of correlations in the behavioral sciences is when two independent variables are correlated with each other, as well as with a dependent variable. Because the partial correlation is based on the simple correlation between the residuals of an independent and dependent variable, once the effects of the second independent variable have been controlled, it can be used to clarify the relationships between intercorrelated variables. This technique can be used to uncover spurious relationships, intervening variables and suppressor effects.

With the first set of partials, the relationship between context and structure was examined, while controlling for all other contextual variables. However, because of the
multitude of possible combinations of relationships between structure and effectiveness, while controlling for all the other structural variables, a decision was made to limit the number of partial correlations that were reported. Therefore, for each significant bivariate relationship between structure and effectiveness, only those structural variables that were significantly correlated with the structural variable in question were controlled. In this way the unique association between each structural variable and effectiveness variable, as well as the issue of multicollinearity, could be examined. All of the partial correlations were also examined to ensure that suppressor effects were not being encountered. Thus, non-significant zero order correlations were examined after all controls were introduced to determine if values reached the .05 level of significance. In addition, the $r^2$ value was used to examine the proportion of explained variance when controlling for the effects of the additional variables.

For the scattergram, pearson correlation and partial correlation procedures, two-tailed tests of statistical significance were employed. These tests should be used when the researcher does not have an explicit hypothesis concerning the expected direction of a coefficient. As both positive and negative relationships have been reported in previous studies, the two-tailed test was warranted.
Although this study includes the entire population of NSGBs which govern Olympic sports through the National Sport and Recreation Center in Ottawa, the small sample size (N=29) affects statistical power. For example, a correlation value of .300 may be statistically significant at the .05 level for a large sample but not for a small sample. Although the .05 level of significance was selected for this study to reduce the possibilities of capitalizing on chance, moderate correlations not reaching the .05 level were noted. This was done to ensure that relationships between variables were not overlooked due to the small sample size.

Missing data, for both the Pearson correlation and partial correlation procedures, were handled through pairwise deletion. With this procedure, a case is omitted from the computation of a given coefficient if the value of either of the two variables being considered is missing. The major advantage of pairwise deletion is that as much data as possible is used in the computation of each coefficient. It has the disadvantage of producing coefficients which may be based on a different number of cases. Although this disadvantage is difficult to avoid, a decision was made not to report r or pr values that were based on less than 20 organizations.
CHAPTER 4 - RESULTS AND DISCUSSION

Introduction

The findings of this study are presented in five major sections. In the first section, the intercorrelations between the contextual variables (e.g., organizational size, organizational age, technological expertise and dependence on other organizations) and the organizational structure variables will be presented. The findings regarding context and effectiveness are also discussed. Second, the relationships among the various organizational structural variables (e.g., formalization, centralization, specialization, impersonality of work relations, professionalism and the clerical ratio) are examined. To determine whether the goal and systems models of effectiveness are related, the intercorrelations among the performance and resource acquisition variables are presented in the third section. The fourth section contains the findings regarding the relationships between the organizational structure and organizational effectiveness indices. A summary of the findings of the relationships between the contextual variables and organizational structure, the structural variables, the goal and systems variables of organizational effectiveness, and structure in relation to effectiveness are presented in the final section of the chapter.
Contextual Variables

The descriptive statistics for the contextual variables, including the mean, standard deviation and range, are contained in Appendix F. In addition, the results in Table 1 illustrate that there are some significant relationships among the contextual variables. While intercorrelations have seldom been reported in previous studies, the degree to which the contextual variables are intercorrelated has important implications for the interpretation of r values between contextual and structural variables. When significant intercorrelations were obtained, the partial correlation technique was employed to partial out the separate effects of each contextual variable. First, however, the intercorrelations among the contextual variables are described.

As revealed in Table 1, organizational size is negatively associated with dependence on other organizations ($r = -.697$, $p = .000$) and positively associated with the total number of technically certified coaches ($r = .634$, $p = .001$). There is also a tendency for size to be positively correlated with organizational age ($r = .371$, $p = .074$), although this value did not reach the .05 level of significance. These findings suggest that larger organizations are more likely to have greater numbers of technically certified coaches and they also tend to have been incorporated longer than smaller organizations.
Table 1

MATRIX OF PEARSON CORRELATION COEFFICIENTS
FOR THE CONTEXTUAL VARIABLES

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<tr>
<td>DEPENDENCE ON OTHER ORGANIZATIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) % Government Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.697***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORGANIZATIONAL AGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Years of Incorporation</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>.371</td>
<td></td>
<td>.481**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TECHNOLOGICAL EXPERTISE</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4) Number of Sport Scientists Consulted</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>-.173</td>
<td></td>
<td>.171</td>
<td>-.070</td>
<td></td>
</tr>
<tr>
<td>5) Total Number of Technically Certified Coaches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.634***</td>
<td>-.398*</td>
<td>.118</td>
<td>.112</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level
This interpretation makes sense intuitively, as the longer an organization has been in existence, the more time it will have had to generate support through memberships. In addition, the larger the organizational membership, the larger the grassroots base from which volunteers with an aptitude for coaching can be recruited. Moreover, as organizational size increases, the dependence of the NSGBs on Fitness and Amateur Sport (FAS) for funding support tends to decrease. To illustrate, the results in Table 2 show that some NSGBs are dependent on FAS for as much as 95% of their funding while others have reduced their dependency to as little as 17%. As memberships increase, the sport may become more visible and is thus more able to attract corporate sponsorship in order to reduce dependency on the government for support. An alternative explanation is that with an increase in size, an NSGB has more manpower to initiate fund raising activities; a strategy which will also result in decreased governmental dependence.

Interestingly, this contextual variable is also strongly associated with one dependent measure of organizational effectiveness; the total operating budget as shown in Table 3. As organizational size increases, so does the total operating budget ($r=.665, p=.000$). In addition, as dependency on governmental support decreases, the total operating budget increases ($r=-.781, p=.000$). Thus, while an increase in size is associated with an organization's becoming less de-
### Table 2

**THE % OF FAS SUPPORT COMPARED TO THE TOTAL OPERATING BUDGET**

<table>
<thead>
<tr>
<th>% FAS SUPPORT</th>
<th>ABSOLUTE FREQ. (NO. OF N.S.G.B.'s)</th>
<th>RELATIVE FREQ. (PCT)</th>
<th>ADJUSTED FREQ. (PCT)</th>
<th>CUM FREQ. (PCT)</th>
</tr>
</thead>
<tbody>
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<td>17</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>44</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>7.1</td>
</tr>
<tr>
<td>45</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>10.7</td>
</tr>
<tr>
<td>49</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>14.3</td>
</tr>
<tr>
<td>57</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>17.9</td>
</tr>
<tr>
<td>59</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>21.4</td>
</tr>
<tr>
<td>64</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>25.0</td>
</tr>
<tr>
<td>65</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>28.6</td>
</tr>
<tr>
<td>67</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>32.1</td>
</tr>
<tr>
<td>68</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>35.7</td>
</tr>
<tr>
<td>71</td>
<td>2</td>
<td>6.9</td>
<td>7.1</td>
<td>42.9</td>
</tr>
<tr>
<td>72</td>
<td>1</td>
<td>3.4</td>
<td>7.1</td>
<td>53.6</td>
</tr>
<tr>
<td>73</td>
<td>2</td>
<td>6.9</td>
<td>7.1</td>
<td>53.6</td>
</tr>
<tr>
<td>75</td>
<td>3</td>
<td>10.3</td>
<td>10.7</td>
<td>64.3</td>
</tr>
<tr>
<td>77</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>67.9</td>
</tr>
<tr>
<td>80</td>
<td>2</td>
<td>6.9</td>
<td>7.1</td>
<td>75.0</td>
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<td>82</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>78.6</td>
</tr>
<tr>
<td>83</td>
<td>2</td>
<td>6.9</td>
<td>7.1</td>
<td>85.7</td>
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<tr>
<td>88</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>89.3</td>
</tr>
<tr>
<td>89</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>92.9</td>
</tr>
<tr>
<td>90</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>96.4</td>
</tr>
<tr>
<td>95</td>
<td>1</td>
<td>3.4</td>
<td>3.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>3.4</td>
<td>Missing</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**TOTAL** 29 100.0 100.0

<table>
<thead>
<tr>
<th>STATISTIC</th>
<th>VALUE</th>
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<tbody>
<tr>
<td><strong>MEAN</strong></td>
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<tr>
<td><strong>STD ERR</strong></td>
<td>3.140</td>
</tr>
<tr>
<td><strong>MEDIAN</strong></td>
<td>73.000</td>
</tr>
<tr>
<td><strong>MODE</strong></td>
<td>75.000</td>
</tr>
<tr>
<td><strong>STD DEV</strong></td>
<td>16.615</td>
</tr>
<tr>
<td><strong>VARIANCE</strong></td>
<td>276.046</td>
</tr>
<tr>
<td><strong>KURTOSIS</strong></td>
<td>2.719</td>
</tr>
<tr>
<td><strong>SKEWNESS</strong></td>
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</tr>
<tr>
<td><strong>RANGE</strong></td>
<td>78.000</td>
</tr>
<tr>
<td><strong>MINIMUM</strong></td>
<td>17.000</td>
</tr>
<tr>
<td><strong>MAXIMUM</strong></td>
<td>95.000</td>
</tr>
<tr>
<td><strong>VALID CASES</strong></td>
<td>28</td>
</tr>
<tr>
<td><strong>MISSING CASES</strong></td>
<td>1</td>
</tr>
</tbody>
</table>
dependent on one source of funding, it is also related to having a larger total budget from which to operate. Therefore, NSGBs must raise additional funds through corporate sponsorship and other fund raising ventures. A third contextual variable, the number of technically certified coaches was also significantly correlated with the total operating budget \( (r=0.442, \ p=0.024) \). This suggests that the improvement of technical expertise on the coaching level requires a larger operating budget.

Returning to Table 1, the results show that the level of coaching expertise is also negatively related to the amount of dependence that the NSGBs have on the federal government for financial support \( (r=-0.398, \ p=0.044) \). Similarly, organizational age is negatively correlated with dependence \( (r=-0.481, \ p=0.017) \). Thus, organizations that are less dependent on the government have been incorporated longer and have been able to technically certify more coaches across the country. It appears that younger NSGBs are less able to attract outside sources of funding and have not had the time or ability to launch successful technical coaching programs. Perhaps because the older NSGBs are also larger, they are able to raise additional funds through memberships and also have more manpower with which to develop coaching certification programs. Because the results of the pearson correlation matrix revealed a pattern of intercorrelations among the contextual variables, it was necessary to use the par-
tial correlation technique when examining the relationship between each contextual variable and the measures of organizational structure. These results are discussed below.
Table 3

MATRIX OF PEARSON CORRELATION COEFFICIENTS
FOR THE CONTEXTUAL AND EFFECTIVENESS VARIABLES

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLES</th>
<th>1 (Size)</th>
<th>2 (Dependence)</th>
<th>3 (Age)</th>
<th>4 (Technology) (a)</th>
<th>5 (Technology) (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOAL MODEL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. 1982 World Ranking</td>
<td>.150</td>
<td>-.227</td>
<td>-.124</td>
<td>.081</td>
<td>.131</td>
</tr>
<tr>
<td>2. 1982 Effectiveness</td>
<td>-.036</td>
<td>-.222</td>
<td>.010</td>
<td>.124</td>
<td>-.066</td>
</tr>
<tr>
<td>3. Changes in Effectiveness</td>
<td>.162</td>
<td>.201</td>
<td>.063</td>
<td>-.227</td>
<td>.191</td>
</tr>
<tr>
<td>4. Total Operating Budget</td>
<td>.665***</td>
<td>-.781***</td>
<td>.124</td>
<td>-.015</td>
<td>.442*</td>
</tr>
<tr>
<td>5. $ Increase in FAS Support 1970-82</td>
<td>.283</td>
<td>-.232</td>
<td>-.187</td>
<td>.212</td>
<td>.404*</td>
</tr>
</tbody>
</table>

* Significant at .05 level
*** Significant at .001 level
Organizational Size

As can be seen in Table 4, the contextual variables of size and dependence show the most numerous and strongest relationships with the structural variables. Organizational size is positively related to the formalization measure of total job descriptions ($r=.551$, $p=.008$), to the specialization indicators of the number of salaried program staff ($r=.484$, $p=.016$) and the number of clerical positions ($r=.574$, $p=.004$), as well as to the clerical ratio ($r=.527$, $p=.008$). Although size was not significantly associated with all of the structural variables, there is a tendency for the results to support Pugh et al. (1969) and Hinings et al. (1976) who found that size was a good predictor of structure. Because size was positively related to indices of formalization, specialization and the clerical ratio, there is support for Hinings et al.'s (1976) conclusion that an increased division of labor and regulation through role definition documents is required to coordinate activities as organizational size increases. These changes also require increased clerical support as revealed through the clerical ratio.

These relationships tend to hold even though the operational definition of size was altered in this study to accommodate the nature of voluntary organizations. That is, while organizational size has usually been defined as the total number of employees (Pugh et al. 1968; Inkson et al.)
Table 4
MATRIX OF PEARSON CORRELATION COEFFICIENTS
FOR THE CONTEXT AND STRUCTURAL VARIABLES

<table>
<thead>
<tr>
<th>STRUCTURAL VARIABLES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(size) (Dependence)</td>
<td>(Age)</td>
<td>(Tech1)</td>
<td>(Tech2)</td>
<td>(Tech3)</td>
<td></td>
</tr>
<tr>
<td>FORMALIZATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Publications</td>
<td>.058</td>
<td>-0.089</td>
<td>-0.068</td>
<td>0.375</td>
<td>0.054</td>
</tr>
<tr>
<td>2. Constitutions</td>
<td>.341</td>
<td>-0.107</td>
<td>0.013</td>
<td>0.145</td>
<td>0.272</td>
</tr>
<tr>
<td>3. Job Descriptions</td>
<td>.551**</td>
<td>-0.623***</td>
<td>0.008</td>
<td>-0.163</td>
<td>0.217</td>
</tr>
<tr>
<td>CENTRALIZATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Budget Decisions</td>
<td>.139</td>
<td>0.161</td>
<td>0.080</td>
<td>0.193</td>
<td>0.054</td>
</tr>
<tr>
<td>5. Policy Decisions</td>
<td>0.084</td>
<td>0.252</td>
<td>-0.024</td>
<td>0.199</td>
<td>0.101</td>
</tr>
<tr>
<td>6. Personnel Decisions</td>
<td>-0.089</td>
<td>0.117</td>
<td>-0.128</td>
<td>0.083</td>
<td>-0.002</td>
</tr>
<tr>
<td>7. New Program Decisions</td>
<td>-0.026</td>
<td>0.230</td>
<td>-0.282</td>
<td>-0.121</td>
<td>-0.011</td>
</tr>
<tr>
<td>8. Promotion Decisions</td>
<td>-0.158</td>
<td>0.180</td>
<td>0.060</td>
<td>-0.012</td>
<td>-0.182</td>
</tr>
<tr>
<td>9. Total Centralization</td>
<td>-0.163</td>
<td>0.031</td>
<td>-0.130</td>
<td>0.157</td>
<td>-0.034</td>
</tr>
<tr>
<td>IMPERSONALITY OF WORK RELATIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Formality of Evaluation Procedures</td>
<td>.284</td>
<td>-0.333</td>
<td>0.388</td>
<td>0.141</td>
<td>0.344</td>
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<tr>
<td>SPECIALIZATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Board Member Roles</td>
<td>0.042</td>
<td>-0.038</td>
<td>0.120</td>
<td>-0.068</td>
<td>-0.063</td>
</tr>
<tr>
<td>12. Executive Board Roles</td>
<td>0.086</td>
<td>0.023</td>
<td>0.150</td>
<td>-0.114</td>
<td>-0.012</td>
</tr>
<tr>
<td>13. Salaried Program Staff Roles</td>
<td>.484**</td>
<td>-0.667***</td>
<td>-0.072</td>
<td>0.020</td>
<td>0.310</td>
</tr>
<tr>
<td>14. Number of Committees</td>
<td>0.280</td>
<td>-0.325</td>
<td>-0.056</td>
<td>-0.056</td>
<td>0.116</td>
</tr>
<tr>
<td>15. Number of Clerical Support Staff</td>
<td>0.574**</td>
<td>-0.561*</td>
<td>0.163</td>
<td>-0.057</td>
<td>0.333</td>
</tr>
<tr>
<td>16. Total Specialization</td>
<td>0.274</td>
<td>-0.313</td>
<td>0.070</td>
<td>-0.073</td>
<td>0.095</td>
</tr>
<tr>
<td>CLERICAL RATIO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Ratio of Clerical to Other Positions</td>
<td>0.527**</td>
<td>-0.480**</td>
<td>0.288</td>
<td>0.190</td>
<td>0.495**</td>
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<td>PROFESSIONALISM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Voluntary Member Education</td>
<td>0.019</td>
<td>-0.373</td>
<td>-0.016</td>
<td>0.001</td>
<td>-0.017</td>
</tr>
<tr>
<td>19. Paid Staff Education</td>
<td>-0.163</td>
<td>0.031</td>
<td>-0.170</td>
<td>0.036</td>
<td>-0.123</td>
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<tr>
<td>CAREER STABILITY</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>20. Paid Turnover Rate</td>
<td>0.294</td>
<td>-0.203</td>
<td>0.047</td>
<td>-0.261</td>
<td>0.147</td>
</tr>
<tr>
<td>21. Mean Years Voluntary Involvement</td>
<td>-0.023</td>
<td>0.0331</td>
<td>-0.113</td>
<td>-0.208</td>
<td>0.145</td>
</tr>
</tbody>
</table>

* Significant at .05 level
** Significant at .01 level
*** Significant at .001 level
1976), size was defined here in terms of total membership in the national association. In this way, the unique feature of holding a membership, which is not common in most business organizations, could be captured. In addition, the number of paid employees is not a good indicator of size in voluntary organizations since most administrative positions are filled by non-paid volunteers.

Organizational size was not, however, significantly correlated with the measures of centralization (see Table 4). This contradicts the findings of Pugh et al. (1969) and Hinings et al. (1976) who found that as an organization becomes larger, it tends to decentralize decision-making structure. The findings reported here suggest that organizational size does not necessarily dictate the locus of decision-making authority. As none of the other contextual variables are significantly correlated with centralization, it seems that additional contextual variables influence whether an organization centralizes decision-making authority or not. One factor, which may account for the difference between voluntary sport organizations and the business organization studied in previous research, is the geographic location of the board of directors. Even though this body is the most centralized with respect to decision-making authority, it is the least centralized geographically. That is, members of the board of directors often represent their provincial affiliates and reside in the province that they represent.
Also, they only meet as a group a few times a year. In contrast, the executive committees and subcommittees are more frequently in contact with one another and the salaried program staff work together on a daily basis at the National Sport and Recreation Center in Ottawa. Thus, an important contextual variable which deserves further attention is the degree to which board, executive committee and other committee members are geographically dispersed across the country. It is likely that the more dispersed the various members are, the more difficult it will be to communicate on decision making issues, and thus, it is more likely that decision-making responsibility will be decentralized. Therefore, it is also more likely that salaried program staff who are geographically centralized in Ottawa near government and other support services will have greater decision-making authority.

That organization size, and the other contextual variables, did not demonstrate a significant correlation with the variables in the "characteristics of office holders" dimension of bureaucracy (e.g. impersonality of work relations, professionalism or career stability) also suggests that additional contextual variables need to be considered to explain variations in structure. Perhaps past experience, as revealed through a career path analysis of both the volunteers and salaried program staff, would indicate some important factors that could be considered. For example, expe-
riences at the local and provincial levels may influence the "characteristics of office holders" at the national level.

Returning to the significant relationships between organizational size and structure, the relationships can be further clarified through the use of the scattergram and partial correlation procedures. No obvious curvilinear relationships were observed in the scattergrams for organizational size and the structural variables. However, the scattergram program does produce $r^2$ values and those reaching the .05 level of significance are displayed in Table 5. From the $r^2$ values, it is apparent that organizational size accounts for approximately 30% of the variance in job description formalization, 23% of the variance in salaried program staff specialization, 33% of the variance in clerical support staff specialization and 28% of the variance in the clerical ratio.

However, to determine the portion of the variance explained by organizational size alone, partial correlations were also computed (see Table 5). When organizational age and the technological expertise measures are controlled for, organizational size remains significantly correlated with job description formalization ($pr=.589, .536, .548$ respectively). However, when dependence is controlled the $pr$ value drops to .208. Moreover, as revealed in the discussion on dependence in the following section (see Table 6), controlling for size also lowers the strength of the negative rela-
relationship between dependence and organizational size. These findings suggest that the relationship between the dependence variable and formalization is dependent on variations in organizational size. Thus, the partials are lower than the zero order Pearson correlations (which have no controls).

One possible explanation for this finding is that membership size increases the membership fee portion of the total operating budget, which in turn reduces the dependence of the organization on the government. Because the financial records of the NSGBs were prepared according to a number of different accounting procedures, it was not possible to isolate the amount of membership fee revenue to provide support for this argument. However, partial correlations have been useful in further examining the relationships between size and structure. They also indicate that more sophisticated explanatory models are needed since controlling for dependence reduces the strength of the relationship between size and structure. As revealed in Table 5, controlling for dependence also substantially reduces the interdependence between organizational size and the other selected structural variables, in addition to job description formalization. In contrast, the relationships between organizational size and the structural variables appear to be relatively independent of the remaining contextual variables. Furthermore, no suppressor effects were uncovered, as none of the non-signifi-
Table 5
PARTIAL CORRELATIONS FOR ORGANIZATIONAL SIZE AND STRUCTURE

<table>
<thead>
<tr>
<th>STRUCTURAL VARIABLES</th>
<th>ORGANIZATIONAL SIZE WITH CONTROLS² FOR:</th>
<th>DEPENDENCE</th>
<th>ORGANIZATIONAL AGE</th>
<th># SPORT SCIENTISTS</th>
<th># TECHNICALLY CERTIFIED COACHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOB DESCRIPTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FORMALIZATION</td>
<td></td>
<td>.208</td>
<td>.589**</td>
<td>.536**</td>
<td>.548**</td>
</tr>
<tr>
<td>(r = .551**) pr</td>
<td></td>
<td>.043</td>
<td>.346**</td>
<td>.287**</td>
<td>.300**</td>
</tr>
<tr>
<td>(r² = .303**) pr²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SALARIED PROGRAM</td>
<td></td>
<td>.036</td>
<td>.552**</td>
<td>.495**</td>
<td>.390</td>
</tr>
<tr>
<td>STAFF SPECIALIZATION</td>
<td></td>
<td>.001</td>
<td>.304**</td>
<td>.245**</td>
<td>.152</td>
</tr>
<tr>
<td>(r = .484**) pr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(r² = .234**) pr²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLERICAL SUPPORT</td>
<td></td>
<td>.308</td>
<td>.561**</td>
<td>.544**</td>
<td>.500**</td>
</tr>
<tr>
<td>STAFF SPECIALIZATION</td>
<td></td>
<td>.094</td>
<td>.315</td>
<td>.296**</td>
<td>.250**</td>
</tr>
<tr>
<td>(r = .574**) pr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(r² = .330**) pr²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLERICAL RATIO</td>
<td></td>
<td>.306</td>
<td>.472*</td>
<td>.579**</td>
<td>.314</td>
</tr>
<tr>
<td>(r = .527**) pr</td>
<td></td>
<td>.094</td>
<td>.223*</td>
<td>.335**</td>
<td>.099</td>
</tr>
<tr>
<td>(r² = .277**) pr²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

¹ Only the variables significantly correlated with organizational size included.
cant zero order correlations reported in Table 4 reached the .05 of significance level once controls were introduced.

Furthermore, organizational size does not appear to have a direct effect on the dependent measures of effectiveness, except for its relationship with total operating budget (see Table 3). None of the other correlations between size and the goal or the systems models of effectiveness were statistically significant when the pearson correlations or partial correlation procedures were applied.

**Dependence**

The context variable of dependence on other organizations showed a relationship with structure that was similar to that of organizational size (see Table 4). Dependence, which was measured by the degree to which NSGBs rely on FAS for financial support, was strongly associated with four of the organizational structure variables. However, in contrast to organizational size, most of these relationships were negative. These relationships included dependence with total job descriptions (r=-.623, p=.001), with salaried program staff specialization (r=-.667, p=.000), with clerical staff specialization (r=-.561, p=.003), and with clerical ratio (r=-.480, p=.013). The inverse relationships indicate that organizations that are more dependent on government funding are less bureaucratic in terms of formalization, specialization, and the clerical ratio.
This finding contradicts the findings of Pugh et al. (1969). They contend that the more dependent an organization becomes on other organizations, the more centralized and standardized it tends to become. Furthermore, they have found that increased dependence has no apparent effect on either the formalization of procedures or the specialization of activities. However, later work by Hinings and Lee (1976) and Hsu et al. (1983) also failed to support the findings of Pugh et al.

While Hinings and Lee (1976) uncovered a significant positive relationship between dependence and centralization in a replication of Pugh et al.'s work, they reported a negative relationship between dependence and the "structuring of activities." Formalization and specialization were included by the Aston group in the broader "structuring of activities" dimension. Hinings and Lee (1976:10) concluded that: "the more dependent an organization is, the less likely it is to be clearly structured." With one exception, this conclusion tends to hold for the voluntary amateur sport organizations examined in this study. The exception is that although dependence was positively related to the measures of centralization, none of the correlations reached the .05 level of significance.

In a more recent study, Hsu et al. (1983) distinguished between internal dependence (dependence on the parent company) and external dependence (dependence on suppliers and
customers) in fifty Japanese manufacturing plants. The measure of dependence employed in this study is more closely associated with internal as opposed to external dependence. Hsu et al. found that internal dependence was only significantly related to vertical differentiation (the number of levels of hierarchy) and formalization. This finding is similar to the results reported here. However, unlike this study and that of Hinings and Lee (1976), the direction of Hsu et al.'s findings were positive. The authors (1983:987) concluded that internally dependent organizations will need to increase levels of hierarchy and to formalize procedures to meet the demands of the parent company. However, this conclusion may only be warranted for business organizations adopting a Japanese style of management.

The reasons for these equivocal findings may, in part, be explained by differences in the nature of the dependent relationship between government and voluntary sport organizations in comparison to the parent and subsidiary business companies sampled in previous studies. FAS, through Sport Canada, has encouraged NSGBs to become administratively and financially mature (Sport Canada Criteria, 1982). Thus, these organizations are required to become more bureaucratic in structure through increased formalization and specialization, and less financially dependent on FAS. The inverse findings in this study may be explained by the fact that the more dependent NSGBs are also the smaller, younger and less
technically sophisticated organizations. This explanation is supported by the findings in Table 1 which indicated that dependence is negatively associated with organizational size ($r = -0.671, p = 0.000$), with organizational age ($r = -0.481, p = 0.017$), and with the number of technically certified coaches ($r = -0.398, p = 0.044$). Thus, the less dependent organizations are those which are more bureaucratically mature and which have been able to secure funding sources in addition to government support.

Most of the other zero order correlations between dependency and organizational structure were not significant, and the majority of them were negative. Therefore, the relationship between dependence and organizational structure warrants further study, especially because the small sample size in this study affects the power of the significance levels. It may be that Pugh et al.'s (1976) statement that dependence is an important variable in determining organizational structure is valid, but only in an inverse direction in the case of voluntary amateur sport organizations. It also appears that dependence has little direct effect on organizational effectiveness since there are no significant relationships between these variables, except for the previously discussed relationship between dependence and total operating budget which was illustrated in Table 3.

To further examine the relationship between dependence and structure, the scattergram and partial correlation pro-
cedures were utilized. With the scattergrams, no apparent curvilinear relationships were detected. However, some interesting patterns emerged when first order partials were computed to control for the effects of the additional contextual variables. By comparing the \( r \) and \( p_r \) values in Table 6, it appears that a portion of the correlation between organizational size and dependence is redundant with respect to the selected structural variables. The \( p_r \) and \( p_r^2 \) values are substantially lower than the \( r \) and \( r^2 \) values when organizational size is controlled. As discussed in the previous section, a new variable needs to be defined which explains the interdependent affect of organizational size and dependence. One suggestion is that membership fees may be an intervening variable which is causing the interdependence. Thus, an increase in organizational size leads to an increase in membership fees which, in turn, may make an organization less dependent on government financial support.

An interesting finding is that organizational age appears to have a suppressing effect on the relationship between dependence and job description formalization, as well as between dependence and salaried program staff specialization. By comparing the \( r^2 \) values with the \( p_r^2 \) values in Table 6, it can be seen that dependence explains an increase of 11\% and 19.3\% of the variance, respectively, when organizational age is controlled. Given this finding and the fact that the additional \( p_r^2 \) values are significant regardless of
whether organizational age or the measures of technological expertise are controlled, it appears that the degree of dependence on other organizations is strongly associated with selected structural variables.
### Table 6
PARTIAL CORRELATIONS FOR DEPENDENCE AND STRUCTURE

<table>
<thead>
<tr>
<th>STRUCTURAL VARIABLES</th>
<th>DEPENDENCE ON OTHER ORGANIZATIONS WITH CONTROLS¹ FOR:</th>
<th>ORGANIZATIONAL SIZE</th>
<th>ORGANIZATIONAL AGE</th>
<th># SPORT SCIENTISTS CONSULTED</th>
<th># TECHNICALLY CERTIFIED COACHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOB DESCRIPTION FORMALIZATION</td>
<td>(r = -.623***) pr</td>
<td>-.400</td>
<td>-.706***</td>
<td>-.611**</td>
<td>-.599**</td>
</tr>
<tr>
<td></td>
<td>(r² = .388***) pr²</td>
<td>.160</td>
<td>.498***</td>
<td>.373*</td>
<td>.359**</td>
</tr>
<tr>
<td>SALARIED PROGRAM STAFF SPECIALIZATION</td>
<td>(r = -.667***) pr</td>
<td>-.526**</td>
<td>-.802***</td>
<td>-.681**</td>
<td>-.623***</td>
</tr>
<tr>
<td></td>
<td>(r² = .445***) pr²</td>
<td>.277**</td>
<td>.643***</td>
<td>.464**</td>
<td>.388***</td>
</tr>
<tr>
<td>CLERICAL SUPPORT STAFF SPECIALIZATION</td>
<td>(r = -.561**) pr</td>
<td>-.275</td>
<td>-.559**</td>
<td>-.561**</td>
<td>-.496**</td>
</tr>
<tr>
<td></td>
<td>(r² = .314**) pr²</td>
<td>.076</td>
<td>.313**</td>
<td>.314**</td>
<td>.246**</td>
</tr>
<tr>
<td>CLERICAL RATIO</td>
<td>(r = -.480***) pr</td>
<td>-.186</td>
<td>-.407*</td>
<td>-.530**</td>
<td>-.355</td>
</tr>
<tr>
<td></td>
<td>(r² = .230**) pr²</td>
<td>.035</td>
<td>.166*</td>
<td>.281**</td>
<td>.126</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

¹ Only those variables significantly correlated with dependence were included.
Technological Expertise

Although Woodward (1965) and Thompson (1967) have argued that technology alone is a prime determinant of organizational structure, there has been little empirical support for this argument in the literature (Pugh et al., 1969; Khandwalla, 1974). Technology, defined differently in this study from that commonly found in the literature, refers to technology as a human as opposed to a material resource. However, even with this modification, only one of the technology indicators was associated with the structural variables. The number of technically certified coaches was related to the clerical ratio (r = .495, p = .010). There was also a tendency for this technological measure to be related to the impersonality of work relations (r = .344, p = .00) and to clerical specialization (r = .333, p = .087), although neither of these values reached the .05 level of significance. Thus, organizations with more technically certified coaches have more clerical support and tend to use more formal evaluation procedures. Both of these findings are indicative of increased bureaucracy, although strong conclusions cannot be drawn as most of the other relationships between structure and this technology indicator are weak and nonsignificant. In addition, the second technology measure, the number of sport scientists consulted in the past year, was only moderately associated with one structural variable, publication formalization (r = .375, p = .059).
As was shown in Table 1, the level of technological coaching expertise was significantly intercorrelated with the contextual variables of organizational size ($r=0.638$, $p=0.001$) and dependence ($r=-0.398$, $p=0.044$). When the effects of these two variables are controlled, the partial correlations between technological and selected structural variables are substantially reduced from the zero order values (see Table 7). Thus Hsu et al.'s (1983:985) contention that "the technological variables have very little explanatory power in the variation in structural variables", may also be warranted in the case of voluntary amateur sport organizations.

The technological measure of coaching certification did show a direct association with the system's effectiveness measures as illustrated in Table 3. Like size and dependence, this technology measure was correlated with the total operating budget ($r=0.442$, $p=0.024$). It was also positively associated with monetary increases in support from FAS from 1970 to 1982 ($r=0.404$, $p=0.024$). However, the issue of causality remains problematic. Although there is justification for viewing technology as an exogenous variable, one could also argue that budget and FAS contribution increases make it possible for the NSGBs to launch and promote certification programs. On the other hand, using Sport Canada criteria, it could conversely be argued that NSGBs must demonstrate technical competence through coaching programs in
Table 7

ZERO ORDER AND PARTIAL CORRELATIONS FOR TECHNOLOGICAL EXPERTISE AND STRUCTURE

<table>
<thead>
<tr>
<th>STRUCTURAL VARIABLES</th>
<th># OF SPORT SCIENTISTS CONSULTED CONTROLLING FOR:</th>
<th>ORGANIZATIONAL SIZE</th>
<th>ORGANIZATIONAL AGE</th>
<th>DEPENDENCE</th>
<th># TECHNICALLY CERTIFIED COACHES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PUBLICATION FORMALIZATION</strong>&lt;br&gt;($r = .375^*$) Pr</td>
<td></td>
<td>.220</td>
<td>.146</td>
<td>.166</td>
<td>.120</td>
</tr>
<tr>
<td>Pr²</td>
<td></td>
<td>.048</td>
<td>.021</td>
<td>.028</td>
<td>.014</td>
</tr>
<tr>
<td><strong>IMPERSONALITY OF WORK RELATIONS</strong>&lt;br&gt;($r = .344$) Pr</td>
<td></td>
<td>.220</td>
<td>.326</td>
<td>.245</td>
<td>.334</td>
</tr>
<tr>
<td>Pr²</td>
<td></td>
<td>.048</td>
<td>.106</td>
<td>.060</td>
<td>.112</td>
</tr>
<tr>
<td><strong>CLERICAL RATIO</strong>&lt;br&gt;($r = .495^{**}$) pr</td>
<td></td>
<td>.245</td>
<td>.486**</td>
<td>.378*</td>
<td>.486**</td>
</tr>
<tr>
<td>Pr²</td>
<td></td>
<td>.060</td>
<td>.236**</td>
<td>.143*</td>
<td>.236**</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

¹ Only those variables significantly correlated with technological expertise were included.
order to obtain FAS funding and outside sponsorship. Future studies need to be initiated in order to further investigate the issue of causality.

**Organizational Age**

This variable, with one exception, was not significantly correlated with the structural variables. Organizational age was only moderately associated with impersonality of work relations \( r = 0.388, \ p = 0.067 \). Thus, the longer an NSGB has been incorporated, the more likely it will have devised formal staff evaluation procedures.

That organizational age was not significantly correlated with the structural variables tends to refute Sigelman's (1981) contention that the development of a bureaucratic structure is a function of the stage of growth of the organization. However, one must remember that this sample contains a relatively homogeneous set of organizations. It may be that most of the NSGBs are in relatively early stages of growth and will become more bureaucratic with time. The descriptive statistics contained in Appendix G support this explanation since the average age of the NSGBs is only twenty one years. In addition, the \( r^2 \) values indicated that there was a lack of variability in organizational age when it is correlated with other variables. Therefore, the partial correlations were not reported.
The above argument has some support in the literature. For example, Broom and Baka (1978) contend that government intervention has only recently had a major impact on the bureaucratization of amateur sport organizations. Kidd (1978, 1980) has also noted this trend and has warned of the consequences if it is to continue. Thus, organizational age should not be ignored as an important contextual variable until longitudinal research has been conducted to examine the process of bureaucratization over time. In addition, other measures of the concept, in addition to the number of years since incorporation, should be examined. For example, the stage of growth of the organization could be an important contextual variable.

Summary

As shown in previous research, organizational size and organizational dependence are the contextual variables which are most highly correlated with bureaucratic structure. Both size and dependence were related to some of the indices of formalization and specialization, as well as to the clerical ratio. The direction of these relationships differed however. While increased size appears to be related to an increase in a number of bureaucratic features, the less dependent the NSGBs are on FAS for financial support, the more bureaucratic they are likely to be. It also appears that an intervening variable, such as the size of membership fees,
may be causing the interdependence between these two variables when they are correlated with the structural variables. Thus, a more complex model is needed to clarify these relationships.

The findings regarding size support Hsu et al.'s (1983) conclusions that organizational size is a determinant of the "structuring of activities" dimension of bureaucracy. This dimension, devised by Pugh et al. (1968), includes indices of formalization and specialization. Thus, according to Hsu et al. (1983:983), as the number of organizational members increases, the organization will use documents and paperwork as a means of control. Furthermore, work responsibilities will be divided into more specialized roles.

Although there was a tendency for size to be negatively correlated with centralization, the results were not significant. This is in contrast to the findings of Hinings and Lee (1976). However, it is possible that as the size of the NSGBs continues to increase, the decision-making authority will become more and more decentralized. This strategy of more participative decision-making is thought to motivate organizational members to stay involved in organizational affairs. Although decentralized decision-making is more time consuming, it is also thought to improve decision-making because more input from a variety of sources is obtained.
In this study, three additional variables which are rarely included in studies on context and structure, but which do reflect Weber's ideal bureaucracy, were included. These variables, which include the impersonality of work relations, professionalism and career stability all reflect "characteristics of the office holder" as described by Weber. While organizational size and dependence are related to some aspects of structure, they are not necessarily good predictors of the characteristics of bureaucratic officials. Therefore, additional contextual variables need to be considered to capture this dimension of bureaucracy. Geographic centralization and the occupational experience of the volunteers as well as the salaried program staff are additional variables which could be considered.

The degree of dependence on government financial support exhibited a similar pattern of relationships with structure as did organizational size, except that the direction of the relationships were negative. These results fail to support Pugh et al.'s (1969) or Hsu et al.'s (1983) findings and conclusions. They do, however, support Hinings and Lee's (1976) conclusion that the more dependent organizations are less structured. It would appear that the dependent relationship between government and voluntary sport organizations is different from that of parent and subsidiary business companies. That is, the government has policies which encourage NSGBs to become more structured on the one
hand, but to become less dependent on them for financial support on the other. Thus, strong negative associations between the dependence measure and some structural variables was observed, even when the effects of the other contextual variables were controlled.

One measure of technology, the total number of technically certified coaches, was moderately correlated with the impersonality of work relations, with clerical specialization, and with the clerical ratio. However, only the relationship with the clerical ratio remained significant when the effects of the other contextual variables were controlled. This finding supports the conclusions of Khandwalla (1974) that the level of technology fails to predict variation in organizational structure even though some investigators (e.g. Woodward 1965) have predicted that it should.

Neither of the additional contextual variables of organizational age or the other technology measure, the number of research personnel consulted in the last year, were strongly correlated with the structural variables. With respect to organizational age, the NSGBs appear to be a relatively homogeneous group with respect to this variable as most of them have been incorporated only recently. Longitudinal research is required to more closely examine the relationship between age and bureaucracy. The stage of growth of the organization is also an additional contextual variable which should be considered.
Organizational size, dependence and technology in terms of coaching certification were directly correlated with the systems effectiveness measure, total operating budget. More specifically, the larger the organizational size, the less dependent the organization is on government financial support, and, the larger the number of technically certified coaches, the larger is the total operating budget. Technology was also correlated with another system's variable, the increase in FAS financial support from 1970 to 1982. None of the contextual variables were significantly related to the indices of goal model effectiveness.

The issue of causality between the contextual and system effectiveness variables warrants further investigation. It may be that increases in the contextual areas are required before financial support is given, or that financial support leads to an increase in size and technology as well as to a decrease in dependence. This issue could be examined through longitudinal research.

In summary, organizational size and dependence appear to be the best predictors of the "structuring of activities" dimension of bureaucracy which includes the variables of formalization and specialization. These contextual variables were also related to the clerical ratio which constitutes the "line of workflow" dimension. However, none of the contextual variables are strongly associated with the "concentration of authority" or "characteristics of bureau-
cratic officials' dimensions. This suggests that an expanded model of contextual variables is needed to better predict the structure of voluntary sport organizations. In the next section, the interrelationships among the structural variables are examined in more detail.

**Structural Variables**

**Formalization**

In Table 8, formalization is represented by three measures. These include the total number of publications produced by NSGBs in the last year, an estimate of the total number of words contained in the most recent constitutions of each NSGB, and an estimate of the total number of words contained in volunteer and salaried program staff job descriptions. These three measures indicate the degree to which informational, procedural and role definition documents are written down and they are moderately intercorrelated. The correlation between publication formalization and constitution formalization was $r=0.530$ ($p=0.004$) and was $r=0.380$ ($p=0.061$) between publication formalization and job description formalization. The correlation between constitution and job description formalization was not significant. Therefore, NSGBs do not appear to be as equally concerned with formalizing their constitutions as with writing volunteer and salaried program staff job descriptions.
In addition, publication formalization, job description formalization, and to a lesser extent, constitution formalization, were moderately associated with a number of other structural variables. The total number of publications was moderately correlated with three measures of specialization. These included the number of executive volunteers roles \((r=0.373, p=0.051)\), the number of salaried program staff roles \((r=0.372, p=0.056)\), and the number of clerical support staff \((r=0.359, p=0.066)\). The measure of job description formalization was more strongly correlated with the specialization indicators. A strong correlation was found with the number of salaried program staff roles \((r=0.866, p=0.000)\), the number of committees \((r=0.655, p=0.000)\), the number of clerical support staff roles \((r=0.738, p=0.000)\) and with total specialization \((r=0.636, p=0.000)\).

These findings are consistent with Grinyer's et al. (1980) replication study on organizational structure. Grinyer et al. reported correlations ranging from 0.57 to 0.86 \((p=0.001)\) between formalization and specialization. These values include the findings from their replication, as well as the values reported in the original studies by the Aston group (1968) and by Child (1972). Grinyer et al. concluded that these strong correlations support Weber's (1968) proposition that formalization and specialization are interrelated dimensions of bureaucracy.
|                                | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  |
|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FORMALIZATION                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 1) Public Health              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Formalization                 | .55 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2) Constitution              |     | .35 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Formalization                 | .38 | .20 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| CENTRALIZATION                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 4) Budget Centralization     | .05 | .15 | .033|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 5) Policy Centralization      | .01 | .10 | .337|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 6) Personnel Centralization  | .60 | .25 | .30 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 7) New Program                | .14 | .09 | .319|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Centralization                | .32 | .26 | .36 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 8) Promotion Centralization   | .83 | .30 | .18 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 9) Total Centralization       | .18 | .24 | .36 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| IMPERSONALITY OF WORK RELATIONS|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 10) Formality of Evaluation Procedures | .26 | .10 | .20 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 11) Specialization            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| SPECIALIZATION                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 11) Board Member specialization| -.16 | -.07 | .31 | -.27 | -.04 | .29 | -.29 | -.37 | -.31 | -.28 |-.26 |-.23 |-.21 |-.18 |-.16 |-.13 |-.10 |-.06 |-.03 |-.01 |-.00 |
| 12) Executive specialization  | -.35 | -.12 | .20 | -.17 | -.02 | .47 | -.34 | -.30 | -.30 | -.29 |-.26 |-.24 |-.22 |-.20 |-.18 |-.16 |-.14 |-.12 |-.10 |-.08 |-.06 |-.04 |
| BOARD Membership              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 13) Paid Staff specialization | -.33 | -.26 | -.20 | -.11 | -.02 | .26 | -.21 | -.26 | -.31 | -.18 | -.09 | -.05 | -.03 | -.02 | -.01 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 |
| 14) Committee specialization  | -.01 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 | -.00 |
| 15) Clerical Specialization   | -.29 | -.20 | -.13 | -.22 | -.20 | -.21 | -.17 | -.46 | -.49 | -.29 | -.21 | -.24 | -.21 | -.19 | -.16 | -.13 | -.10 | -.07 | -.04 | -.01 | -.00 |
| 16) Total Specialization      | .01 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| CLERICAL RATIO                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 17) Ratio of Clerical to Other Positions | .28 | .37 | .47 | .02 | .23 | .04 | .06 | .06 | .06 | .06 | .06 | .06 | .06 | .06 | .06 | .06 | .06 | .06 | .06 | .06 | .06 |
| PROFESSIONALISM               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 18) Voluntary Member Education | .17 | .21 | .20 | .20 | .20 | .19 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 |
| 19) Paid Staff Education      | .17 | .08 | .15 | .08 | .18 | .08 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 | .18 |
| CAREER STABILITY              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 20) Mean Years of Voluntary Involvement | -.05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 | .05 |
|                                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

* Significant at .05 level
** Significant at .01 level
*** Significant at .001 level
It follows that as specialization increases, role definition documents, including volunteer and salaried program staff job descriptions, are required to coordinate the expanding number of roles. In voluntary organizations, it is likely that job descriptions are not as necessary in unspecialized organizations because a small number of people perform a variety of tasks. However, as specialization increases it becomes more necessary to clearly define roles and responsibilities, as well as the hierarchy of authority, in documents such as job descriptions and committee mandates. It is also more likely that increased specialization will result in specialized positions in which the preparation and circulation of publication documents is a major responsibility. Third, with an increase in the number of organizational roles there is a greater need to coordinate the work of the various positions. Communication through written documents, such as journals, job descriptions and constitutions is designed to improve the coordination of expanding numbers of positions.

All of the formalization measures were also associated with the clerical ratio. The correlation of clerical ratio with publication formalization was $r=0.684\ (p=0.000)$, with constitution formalization was $r=0.379\ (p=0.051)$ and with job description formalization was $r=0.471\ (p=0.020)$. Again, these findings were expected since the amount of written material in information passing and role definition documents will
undoubtedly increase with the number of clerical staff who are responsible for the preparation of such written documents. These results also confirm earlier findings by Pugh et al. (1968) and Grinyer et al. (1980).

The total job description documentation was also moderately correlated with new program centralization ($r = -0.433$, $p = 0.034$) and with promotion centralization ($r = -0.374$, $p = 0.050$). Constitution formalization was also related to promotion centralization, although the direction of the relationship was positive ($r = 0.371$, $p = 0.050$).

In the literature there is contrary evidence regarding the relationship between formalization and centralization. Pugh et al. (1968) found no significant relationships between these measures, whereas both Child (1972) and Grinyer et al. (1980) found a significant negative relationship between them. The difficulties in constructing comparable operational definitions for centralization across organizational types warrants more consideration.

In this study, decision-making by the board of directors was defined as being the most centralized level. The next level of decision-making authority is the committees, followed by the executive board, with the salaried program staff being the least centralized level. These authority levels are not directly comparable to those found in business, manufacturing and service organizations which have been examined in previous studies. Business organizations
are more clearly hierarchical in nature with top, middle and lower levels of management. In addition, there are various subunits and departments which are responsible for budget, policy, personnel, new program and promotion decisions. Furthermore, all those involved in decision-making in the typical business company are paid employees.

While board members in a business company may represent the highest level of the hierarchy, they represent a majority national vote in voluntary NSGBs. There is often one volunteer representative from each province on an NSGB board. Due to difficulties in getting board members together, these boards typically get together at Annual General Meetings and leave the day to day decision-making to their executive committees and salaried program staff. Thus, due to the nature of these organizations, centralization was defined somewhat differently than it has been in business organizations.

However, the direction of the significant relationships in this study is consistent with that reported by Child (1972) and by Grinyer et al. (1980). Again, since board members are typically elected from across the country, it would be very time-consuming to have board members involved in every matter concerning budget, personnel, policy, program initiatives and promotions. It may be more efficient to have smaller more decentralized groups such as committees or salaried program staff make such decisions. In addition,
these smaller volunteer groups and the paid personnel are often appointed due to some knowledge or expertise that they are thought to possess. This explanation is consistent with Child's (1972) argument that decentralization is a knowledge-based control mechanism in bureaucratic business organizations. That is, by delegating decision-making responsibility to key experts within an organization, more effective decision-making will result.

The formalization measures were not found to be significantly correlated with the impersonality of work relations or the measures of volunteer and salaried program staff professionalism. Although the impersonality of work relations is characteristic of Weber's bureaucracy, it has rarely been included in previous studies on organizational structure. Thus, comparisons between the results of this study and others is difficult. The correlations between the impersonality of work relations, as measured by the formality of salaried program staff evaluations, and the measures of formalization were relatively weak and were not significant. However, the fact that this variable has received little attention in the literature, in combination with the small sample size in this study and the fact that evaluation of salaried program staff is a major issue for several NSGBs, suggests that these relationships should not be ignored. Additional and more sophisticated measures of the impersonality of work relations variable may help clarify relationships between this and other features of bureaucracy.
That the formalization indicators were not positively associated with any of the professionalism variables, except for job description formalization and voluntary member education ($r = .421, p = .020$), contradicts earlier findings by Child (1976). He found that one measure of bureaucratic control, overall documentation, increased with higher levels of specialist qualifications. He reasoned that greater formalization and professionalism was a response to an increase in organizational size. This increase requires a greater base of professional knowledge, as well as a proliferation of written documents so that knowledge can be transmitted across specialized positions. While several of the relationships were not significant, the positive association between job description formalization and voluntary member education indicates that NSGBs with more highly educated volunteers place more emphasis on the development of written job descriptions.

Finally, the formalization measures were not significantly related to the career stability measures. Even so, a negative association between the measures was indicated. Although one would expect that paid and volunteer career stability would be positively associated with the extent of formalization, there may be a logical explanation for this finding. That is, volunteer and salaried program staff who have been involved in NSGB management for a long period of time may be less likely to rely on written procedures than
new incoming personnel. Perhaps when they began their involvements, the NSGBs were not very specialized and did not have the clerical support necessary for the time-consuming exercises of writing procedures, etc. Thus, the volunteers and paid people may have had a diverse range of responsibilities, with little time to formally document their activities. Perhaps the weak negative correlations illustrate that those with longer involvements still rely on old ways and are thus less likely to formalize materials in the three ways measured here.

In summary, the findings regarding the association between formalization and the other bureaucratic structural variables tend to support previous research. One particular measure, job description formalization, was strongly associated with many of the specialization measures. All of the formalization measures were correlated with the clerical ratio. These findings support Pugh et al.'s (1968) contention that there is an underlying dimension of bureaucracy called the 'structuring of activities'.

Similar to Child (1976), formalization tended to be negatively associated with centralization of decision-making. The Aston group had argued that centralization represents a separate dimension of bureaucracy, known as the 'concentration of authority', which is not necessarily associated with the structuring of activities dimension. From the results of this study, however, there does appear to be
a significant negative relationship between job description formalization and some of the centralization measures. This would suggest that increased job description formalization is required when decision making authority is decentralized.

Contrary to past findings, the formalization measures were not significantly related to the measures of salaried program staff professionalism. Job description formalization was, however, related to volunteer professionalism. This suggests that the greater the level of educational attainment of volunteers within an NSGE, the greater will be the emphasis placed on the formulation of written job descriptions. In addition, formalization was not related to volunteer or paid staff career stability or the impersonality of work relations.

Centralization

In addition to the previously discussed relationships between formalization and centralization, the locus of decision-making authority was also associated with a number of other structural variables. Correlations were produced for each decision area, including budgets, policy, personnel, new programs and promotions, as well as a total centralization measure. As shown in Table 8, most of these measures were highly intercorrelated. This suggests that if decision-making is highly centralized in one decision area, it will most likely be highly centralized in other decision areas.
As the total centralization measure is strongly associated with each decision area measure, one can assume that total centralization on its own adequately reflects the locus of authority concept.

Total centralization was found to be moderately associated with some of the specialization indicators, including executive board specialization ($r = -0.476$, $p = 0.012$), and total specialization ($r = -0.335$, $p = 0.095$). Personnel centralization ($r = -0.457$, $p = 0.016$), new program centralization ($r = -0.364$, $p = 0.062$) and promotion centralization ($r = -0.545$, $p = 0.003$) were also positively correlated with executive board specialization. All of the centralization measures, except budget and policy centralization were significantly associated with total specialization. The remaining significant relationships included: promotion centralization with board member specialization ($r = -0.373$, $p = 0.055$), policy centralization with salaried program staff specialization ($r = -0.344$, $p = 0.085$) and new program centralization with clerical specialization ($r = -0.361$, $p = 0.070$).

The other important consideration regarding the relationship between centralization and specialization was that the sign of these relationships was negative. In their review of the literature on organizational structure, Grinyer et al. (1980) reported that centralization has been repeatedly found to be inversely associated with specialization (Pugh et al. 1968, Hinings and Lee 1976, Child 1976).
The results suggest that decision-making in NSGBs tends to become more decentralized as the organizations become more specialized. Thus, as an organization forms more committees and hires more salaried program staff, it also tends to delegate decision-making responsibility to these new positions. This may be due to the unwieldy nature of conducting business through a national board with representatives from all across the country. Moreover, to justify the hiring of salaried program staff in voluntary organizations, the boards must be able to demonstrate that responsibility for some decision-making is granted to these positions. It is interesting, however, that only one NSGB reported that the responsibility for a decision area was left totally to salaried program staff. This one case was for the promotion decision area only. This implies that although NSGBs have decentralized to some degree, they, or their representatives, through an executive board, retain control over decision-making. The results may also be due to Weber's notion that qualified office holders would occupy specialized positions in modern bureaucracies. If this is the case, there is support for Grinyer et al.'s (1980: 414) conclusion that "bureaucracy is a strategy of knowledge based control that permits decentralization".

Returning to Table 8, it can be seen that there is some limited support for Grinyer et al.'s (1980) observation that centralization and professionalism are negatively related to
each other. Thus, the greater the education of voluntary members and salaried program staff, the more likely it is that some decisions, especially in the policy and new program areas, will be decentralized. However, it should also be noted that strong conclusions in this regard are not warranted as the total centralization measure was not significantly related to any of the professionalism measures. Due to the relatively young age of many of these organizations, it may be that the NSGBs are just beginning to become more decentralized, and that this process will continue to become more strongly associated with the other dimensions of bureaucracy over time.

The other significant relationship between decentralization and structure was the negative association between the impersonality of work relations and personnel centralization (r = -.397, p = .050). The impersonality measure was also associated with promotion centralization (r = -.335, p = .100) although this did not reach the .05 level of significance. Based on these findings, decentralized decision-making does appear to be another interrelated aspect of bureaucracy. It appears to be associated, to some extent, with both the "structuring of activities" and the "characteristics of bureaucratic officials" dimensions.

Pugh et al. (1968) had also hypothesized that centralization would be negatively associated with the ratio of administrative to production personnel (the A/P ratio), which
is a measure of the "line control of workflow" dimension of bureaucracy. In this study, a ratio of clerical staff to other positions was used in place of the A/P ratio and none of the correlations with it and the centralization measures were found to be significant. Non-significant relationships were also found in studies by Hinings and Lee (1976), Child (1976) and Grinyer et al. (1980) who set out to test Pugh et al.'s original hypothesis. This indicates that the delegation of decision-making authority does not necessarily require a corresponding increase in the proportion of clerical staff. In addition, the locus of decision-making authority does not seem to vary significantly with either the career stability of the salaried program staff or the volunteers.

To summarize, there was a tendency for the centralization measures to be negatively correlated with formalization, specialization, and, to a lesser extent, with professionalism. This suggests that a decentralized locus of decision-making authority is more likely to occur as an organization becomes more bureaucratic along other dimensions. While Pugh et al. (1968) viewed centralization as an isolated dimension of bureaucracy, the findings reported here support the later work of Child (1976) and Grinyer et al. (1980). These investigators postulated that decentralization is an integral aspect of a bureaucratic control structure. Thus, as an organization comes to rely on formalized procedures, an impersonal work orientation, and on profes-
sional experts occupying specialized positions, it will be more able to delegate decision-making responsibility throughout the organization. However, this locus of authority variable was not found to be significantly related to other features of bureaucracy, including the clerical ratio and career stability.

If NSGBs continue to become more bureaucratized, it is likely that decision-making control will be further delegated to salaried program staff. The issue of decision-making control emerged several times in discussions with Sport Canada consultants and with Executive Directors. That is, although NSGB boards have power over decision making, as outlined in their constitutions, they are not geographically centralized and do not work on NSGB business full-time. In contrast, the salaried program staff are geographically centralized in Ottawa and work for the NSGBs on a full-time basis. However, in many cases, the salaried program staff are expected to provide only a support service to the board of directors. This lack of control may to be a major reason for salaried program staff turnover. That is, even though the staff must possess a number of professional qualifications and they work full time on association business, there are few areas in which they are given decision-making authority. It will be interesting to see how this type of structure evolves over time and the effect it has on the various groups within the structure.
Impersonality of Work Relations

Although Weber identified impersonal work relations as an essential characteristic of bureaucracy, this variable has seldom been included in research on organizational structure. In this study, the variable was defined as the extent of formalized evaluation procedures for salaried program staff. As mentioned in the previous section, impersonality of work relations was moderately but negatively correlated with two of the centralization measures.

In addition, it demonstrated a moderate positive association with some of the specialization measures, including executive board specialization ($r=0.358$, $p=0.079$), committee specialization ($r=0.327$, $p=0.089$), clerical specialization ($r=0.480$, $p=0.018$), and total specialization ($r=0.426$, $p=0.038$). These findings suggest that as voluntary amateur sport organizations become more specialized, they will adopt a more impersonal work orientation as indicated by the formality of evaluation procedures. This is consistent with Weber's prediction that modern bureaucracies would have to replace the more emotional and subjective work orientation of traditional forms of social order with more rational and objective procedures. Since the salaried program staff in voluntary organizations may, in some cases, have been former athletes, coaches or volunteers within their sport, evaluation procedures are required to make work more businesslike and less personnel if an NSGB is to adopt a more bureaucratic form of control.
Impersonality was also positively associated with the clerical ratio \( (r = 0.426, p = 0.028) \) and volunteer career stability \( (r = 0.366, p = 0.056) \). This suggests that clerical staff are required to process written evaluation procedures. Furthermore, NSGBs that have greater volunteer career stability are more likely to have formal evaluation procedures. This variable was not, however, significantly correlated with the other dimensions of bureaucracy, including formalization and professionalism. That it was associated with some of the measures justifies its inclusion in future studies. In addition to the degree of formality of evaluation procedures, it would be important to consider additional measures, such as friendship networking, to further examine the concept.

**Specialization**

The specialization measures have been shown, to some extent, to be positively correlated with formalization and the impersonality of work relations, and to be negatively correlated with the measures of centralization. In addition, as illustrated in Table 8, the specialization measures tend to be highly intercorrelated. Board member specialization was highly intercorrelated with executive board specialization \( (r = 0.684, p = 0.000) \), committee specialization \( (r = 0.607, p = 0.002) \), clerical specialization \( (r = 0.607, p = 0.000) \), and total specialization \( (r = 0.907, p = 0.000) \). Thus, as the number of national board roles increases, so does the number of
roles in a variety of areas. As total specialization is strongly correlated with the other specialization measures it alone could be used to measure this dimension of bureaucracy. For the purposes of this study, however, it is still useful to provide a more detailed examination of the relationships among variables.

Salaried program staff specialization ($r=.579$, $p=.002$) and clerical specialization ($r=.719$, $p=.000$) were strongly correlated with the clerical ratio. The latter finding is not surprising as both variables take the number of clerical staff into account. In addition, with an increase in the number of salaried program staff, increased support positions in the form of clerical expertise will also likely be necessary.

Contrary to Weber's original prediction, the specialization indicators tended to exhibit a weak negative relationship with the measures of professionalism. Only executive board specialization was significantly associated with the amount of salaried program staff education ($r=-.380$, $p=.056$). Perhaps in the absence of qualified salaried program staff, increased specialization occurs at the board level. Several of the other correlations, although not statistically significant, were also in the negative direction.

It may be that other characteristics than educational attainment are operating when volunteers and salaried program staff are appointed to various NSGB roles. For the
volunteers, experience and knowledge in the sport from playing, coaching and administrative roles at the local and provincial levels may be key factors leading to involvement at the national level. Another factor may be the amount of encouragement one is given at one's place of work to be involved with amateur sport. For example, community involvement is encouraged for many physical educators in the school and university systems. A third factor for election to volunteer roles may be special management skills that the individual is thought to possess. Thus, individuals with good communication or financial management skills would be favoured. A final alternative explanation for this finding may be that election to voluntary roles is more a function of rotation by region rather than by professional qualities.

The inclusion of other variables particular to the type of professionalism required in voluntary roles should be included to help examine the criteria which are used to select positions. With respect to salaried program staff specialization, it may be that hiring based on educational qualifications is a relatively recent development. Due to the cross-sectional nature of this study, it is difficult to uncover trends with respect to this variable. However, one would expect that if these organizations continue to become more bureaucratized, the emphasis placed on educational qualifications will continue to increase.
Board member specialization ($r = 0.469$, $p = 0.014$) and total specialization ($r = 0.362$, $p = 0.053$) were also associated with volunteer career stability. This suggests that the longer individuals occupy volunteer roles, the more specialized the board of directors will become. It may be that volunteer continuity is necessary to effectively manage the increasing number of board roles.

**Clerical Ratio**

The relationship between the clerical ratio and formalization, centralization, the impersonality of work relations and specialization have been discussed in the previous sections. The clerical ratio was positively correlated with all of the formalization measures, the impersonality of work relations, in addition to salaried program staff specialization and clerical specialization. However, as revealed in Table 8, this variable was not significantly related to the remaining structural variables including centralization, professionalism or career stability. Thus, the clerical ratio is related more to the structuring of activities dimension of bureaucracy than to the locus of control or characteristics of office holders dimensions. Increases in clerical staff are required to support increases in structure. However, this does not necessarily affect decision-making authority or the degree of professionalism in other roles. Thus, these findings are not surprising. The cleri-
The professionalism variables, which measured educational attainment, were intercorrelated since voluntary member education was correlated with salaried program staff education ($r = .419$, $p = .050$). Thus, volunteers with higher levels of educational attainment are more likely to value this attribute and are thus more likely to hire educationally qualified salaried program staff.

In addition to the previously discussed relationships between bureaucracy and the other structural variables, the level of salaried program staff educational attainment was negatively associated with volunteer member career stability ($r = -.381$, $p = .091$) and salaried program staff career stability ($r = -.538$, $p = .042$). Thus, the longer members have been involved in their positions, the less education their salaried program staff are likely to have. This finding tends to support Gruneau and Hollands' (1978) conclusion that the emphasis on educational qualifications for entry into amateur sport decision-making roles is a relatively recent development. Previous to this time, experience in other roles such as player or coach, may have been considered to be more important. This finding also suggests that salaried program staff with higher levels of education turnover in their po-
sitions more quickly. This may be because their qualifications make them more marketable for other types of jobs. Or, it may be that the salaried program staff do not have enough decision making control and thus move to positions in which they have more autonomy. Finally, there is little for upward mobility for those in paid positions in Canadian NSGBs which may further explain the high turnover rate.

Career Stability

Since the results in this chapter have been discussed in relation to the Pearson correlation matrix in Table 8, the relationship between career stability and the other variables have already been discussed. To summarize, volunteer career stability was positively related to the impersonality of work relations, board member specialization and total specialization. Salaried program staff career stability was found to be negatively related to the degree of salaried program staff professionalism. These measures were not, however, significantly related to the remaining measures of bureaucratic structure.

Perhaps the degree of career stability is a major difference between voluntary and business organizations. Constantly bringing in new people to voluntary roles may be a means of ensuring more grass roots and regional involvement, which may be essential to the development of many sports. This strategy may also be a counteracting influence on the
development of bureaucracy. That is, new ideas and approaches that will accompany the infusion of new decision makers may counteract the stifling effect that bureaucracy is thought to have on creativity. However, this explanation suggests that the lack of career stability may be an effective control strategy when it may in fact be having an opposite effect.

Volunteers and salaried program staff occupy their positions for an average of 5 years (see Appendix G). This finding does not coincide with Weber's discussion of what the bureaucratic office holder's career would be like. Thus, the lack of career stability may be hindering organizations from developing a more bureaucratic structure which, in turn, may be more effective. Thus, while the organizations in this sample do possess many of the essential features of bureaucracy, the relationships between these features do not appear to be as strong as in the type of business firms examined in previous studies. Perhaps the seemingly rapid turnover rate of salaried program staff and volunteer members generates a lack of consistency in organizational structure. It is likely that if these positions were filled by qualified professionals for an extended period of time, bureaucracy would increase and the intercorrelations among variables would likely be stronger.
**Summary**

Although some of the intercorrelations among the structural variables were not as strong as reported in the literature, there were many similarities in the pattern of relationships. For example, several of the formalization, specialization and clerical ratio measures were positively intercorrelated. The association between formalization and specialization supports the contention of Pugh et al. that these two variables form an underlying "structuring of activities" dimension in the modern bureaucracy. The clerical ratio has usually been considered to be part of a separate "line control of workflow" dimension. However, as reported by Pugh et al. (1968) and Grinyer et al. (1980), both formalization and specialization have been found to be positively related to the clerical ratio. Clerical staff are an essential aspect of Weber's bureaucracy as they are thought to provide an important communication link between the number of increasingly specialized decision-making roles. Thus, the higher the clerical ratio, the more coordination there is between the various roles.

Furthermore, part of this coordination occurs through publication, constitution and job description formalization. From the results of this study, job description formalization was found to be the variable that was most strongly related the additional features of bureaucracy. As organizations become more specialized, job descriptions are
increasingly required to coordinate role responsibilities. In addition, clerical staff are required to process the formalization of such documents. For Weber, clerical staff are an essential feature of bureaucracy because they are thought to relieve the decision makers from these time consuming processing tasks. This time factor is magnified even further in voluntary organizations because volunteers usually commit less time to their involvements than those with full time occupations. In addition, they are not geographically centralized in Ottawa as are the salaried program staff and clerical support staff.

Although the Aston group suggested that the locus of decision-making control is a separate dimension of bureaucracy, Child (1976) and Grinyer et al. (1980) have reported that centralization is negatively related to the other dimensions of bureaucracy. The results of this study support the latter view since centralization tended to be negatively associated with some of the measures of formalization, specialization, the impersonality of work relations, and professionalism. Thus, NSGBs will tend to decentralize decision-making power to executive boards and salaried program staff as the organization becomes more bureaucratized. This supports Grinyer et al. 's (1980: 414) explanation that "bureaucracy is a strategy of knowledge based control that permits decentralization." Centralization was not significantly related to the clerical ratio or career stability.
The impersonality of work relations variable was correlated with some of the specialization measures. This suggests that as NSGBs become more highly specialized, they will also develop more formalized evaluation procedures for their salaried program staff. Although this variable has seldom been included in previous research, it is an integral part of Weber's theory of bureaucracy, and thus deserves further attention.

The professionalism measures were moderately correlated with some of the variables within the "concentration of authority" dimension (e.g. centralization). This suggests that this variable should be included along with the impersonality and career stability as part of a "characteristics of office holders" dimension of bureaucracy. In fact, it can be conceptualized as an important intervening variable. That is, it is unlikely that decision making authority will be delegated unless qualified people are available to take on the responsibility. Volunteer professionalism was also associated with job description formalization and paid staff professionalism was negatively associated with the measures of career stability.

There are two possible explanations for the finding that professionalism is not significantly correlated with the other dimensions of bureaucracy. The volunteers and salaried program staff are relatively homogeneous with respect to this variable, and thus there may not be enough
variability to show significant relationships with the other dimensions of structure. This is consistent with Weber’s argument that the possession of educational qualifications would create a certain amount of class homogeneity among officials. Or, it may be that volunteers and salaried program staff are selected to positions for reasons other than their educational qualifications. Previous experience, whether as volunteers or as salaried program staff, in other national or provincial level roles may be another key element of professionalism.

Volunteer career stability was intercorrelated with measures of specialization and the impersonality of work relations. It therefore deserves further consideration as an interrelated aspect of bureaucracy. However, the lack of career stability on the part of volunteers and salaried program staff in most NSGBs may be a response to the value of constantly involving new people to maintain grassroots support. Or, it may be a function of the nature of the administrative roles in NSGBs. That is, in some organizations, volunteers can only stay elected for a certain term. Salaried program staff are often in a difficult situation as they must deal with volunteers on the one hand, and with government officials on the other. Often times they have little decision making control within the organization. In addition, because there are few possibilities for career mobility, salaried program staff may tend to turn over quickly. An
additional argument that warrants further investigation is whether the lack of career stability hinders the development of a bureaucratic system of control, a topic which will be discussed in the next section.

The findings reported here tend to support Weber's prediction that bureaucracy would invade all sectors of modern life. However, the dimensions of bureaucracy were not as highly intercorrelated as in previous studies which have mostly sampled the business type of organization. This would tend to support Hall's (1963) work in which he suggests that bureaucracy exists on a continuum that depends on the type of organization studied. In addition, much of the previous research has focused on three dimensions of bureaucracy that were developed by Pugh et al. (1968). These include: the structuring of activities dimension, including formalization and specialization; the concentration of authority dimension, including centralization; and the line control of workflow dimension, which includes the clerical ratio. However, Weber also described a number of characteristics of the officer holder in his ideal type bureaucracy. The three variables that were included in this study to capture this dimension, namely the impersonality of work relations, professionalism and career stability, were intercorrelated with the other structural variables to some degree. This suggests that this fourth dimension should be given more attention as an integral feature of modern day bureaucracy.
In the next sections of this chapter, the intercorrelations among the goal and systems models of effectiveness, as well as the relationships between structure and effectiveness, are discussed. Because of the intercorrelations among the structural variables, as discussed in this section, partial correlations were computed to control for the effects of the intercorrelated structural variables on organizational effectiveness. First, however, the relationships between the goal and systems models are examined.

**Goal and Systems Models**

From the results presented in Table 9, it is apparent that most of the correlations between the goal and systems measures of effectiveness are positive but weak. The only relationship that was close to being significant was between the 1982 effectiveness ranking and total operating budget ($r = .379$, $p = .062$).

Although the moderately strong relationship between the 1982 effectiveness ranking and the total operating budget did not reach the .05 level of significance, this finding should not be disregarded. Due to the small sample size in this study, which affects statistical power, it may be that a moderate association exists which is not capitalizing on chance. This finding supports Webb's (1974) assertion that the goal and systems models should be viewed as complementary models. He suggested that organizations which are suc-
TABLE 9
MATRIX OF PEARSON CORRELATION COEFFICIENTS
FOR THE GOAL AND SYSTEMS MODELS OF
ORGANIZATIONAL EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLES</th>
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<th>2</th>
<th>3</th>
<th>4</th>
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<td>GOAL MODEL</td>
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<td>1. 1982 World Ranking</td>
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<td>2. 1982 Effectiveness Ranking</td>
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<td></td>
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<tr>
<td>SYSTEMS MODEL</td>
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<td></td>
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<tr>
<td>4. Total Operating Budget</td>
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<td>.379*</td>
<td>.195</td>
<td></td>
</tr>
<tr>
<td>5. $ Increase in FAS Support 1970-1982</td>
<td>.133</td>
<td>.245</td>
<td>.185</td>
<td>.690***</td>
</tr>
</tbody>
</table>

* Significant at .05 level
** Significant at .01 level
*** Significant at .001 level
cessful in obtaining inputs, such as financial resources, will more likely achieve desired goals.

NSGBs which have been able to develop larger operating budgets tend to be somewhat more successful in international competition, as measured by the 1982 effectiveness measure which takes into account the number of competing countries. This finding is compelling as several factors, both internal and external to the organization, could prevent an NSGB from converting its financial resources into performance success. For example, the NSGBs that have the largest operating budgets in relation to other Canadian NSGBs may not have the largest operating budgets with respect to competing organizations in that sport from other countries. Thus, NSGBs could, in fact, be competing against countries which have larger financial resources with which to develop their national teams. However, even with this possible confounding factor, there was a positive relationship between the effectiveness ranking variable and one of the resource acquisition variables. In addition to comparing different sports in one country along these indicators, organizations governing one particular sport across a number of different countries also need to be considered.

On an internal level, a number of transformative processes affect the conversion of input resources into performance success. For example, decisions must be made regarding how resources are to be allocated. In sport,
performances cannot be 'manufactured' like products in business organizations. There are numerous alternative courses of action that may be taken, and the development of a number of athletes into successful teams is not a clear-cut process. Although there are so many uncontrollable forces in sport that make it very difficult to guarantee that the acquisition of inputs will lead to desired outputs, NSGBs with larger operating budgets were more successful in their respective World Championships in 1982, while accounting for the number of competing countries.

While this finding lends support to Webb's assumption that the acquisition of inputs leads to desired outputs, the issue of causality remains problematic. With respect to Sport Canada funding criteria, NSGBs must demonstrate performance excellence in order to receive program funds as well as financial support for national team athletes. Thus, it could be argued that NSGBs which achieve performance goals are granted more funds from government sources. It is also more likely that they will be able to attract corporate sponsorship which will also increase the total operating budget. Furthermore, with this increased funding, an NSGB will have greater resources to direct toward performance success in future years. Conversely, it could be argued that financial resources are required before performance excellence can occur. To further clarify the relationship between the goal and systems models of effectiveness, this issue
could be addressed in future studies. However, due to the constantly changing nature of government policies and the competitive environment in which the NSGBs exist, it would be difficult to analyse this question in voluntary amateur sport organizations.

Additional variables which could be considered with respect to these effectiveness measures include: financial need (e.g. program size and competitive schedules), international performances in addition to World Championships, changes in performance over a longer span of time, differences between men's and women's teams within a sport and differences in performance between team and individual sports.

In addition, there are several other inputs, other than financial resource acquisition, that may be necessary to ensure success. Some of these include talented athletes, effective local and provincial associations, coaching effectiveness and the degree to which the sport is culturally assimilated in the country. The investigation of these variables would provide further evidence as to whether or not the goal and systems models of effectiveness are complementary tools for measuring organizational effectiveness.

Contrary to the findings of Molnar and Rogers (1976), there was some consistency within the effectiveness models (see Table 9). The 1982 world ranking was positively correlated with the 1982 effectiveness ranking which accounted
for the number of competing countries \((r=0.573, p=0.002)\). This goal model indicator was also moderately related to changes in the effectiveness ranking from 1978 to 1982 \((r=0.391, p=0.048)\). These findings suggest that regardless of the number of competing countries, the raw world-ranking standard can be employed as a measure of goal effectiveness. Only the 1982 effectiveness ranking and changes in the effectiveness were not significantly correlated. This implies that those countries which ranked the highest in 1982 world standings, while accounting for the number of competing countries, have not substantially changed in world standings since the last world championships. This may be due to a plateau effect wherein it is difficult to improve performance once a team is highly ranked.

The systems model indicators, the total operating budget and the increase in FAS financial support from 1970 to 1982, were strongly correlated \((r=0.690, p=0.000)\). Thus, organizations which have been successful in securing more financial resources from government sources over time, also have a larger total operating budget from which to operate.

**Summary**

Although several of the relationships between the goal and systems measures were weak, the 1982 effectiveness ranking variable was moderately correlated with the total operating budget. This finding provides support for Webb's
(1974) argument that the goal and systems models are complementary tools for measuring organizational effectiveness. Others have previously argued that the acquisition of inputs, such as financial resources, does not necessarily lead to desired outputs and therefore, the two models measure separate aspects of organizational effectiveness.

There has been considerable debate in the literature on organizational effectiveness regarding the superiority of these and other models of effectiveness. The results in this study suggest that even with the complexities involved in producing successful teams, the acquisition of financial resources is related to the effectiveness ranking of the sport. In addition, there was some consistency within models since the goal model indicators were intercorrelated, as were the system model indicators.

In the following section, a more detailed analysis of the relationship between bureaucratic structure and the models of organizational effectiveness is provided.

Structure and Effectiveness

Formalization and Effectiveness

As indicated in Table 10, the formalization variables tend to be positively correlated with both the goal and systems measures of effectiveness. Job description formalization was positively related to the 1982 World Ranking ($r = .420$, $p = .046$) and to the 1982 Effectiveness Ranking
(r = 0.519, p = 0.011). This formalization measure was strongly and positively correlated with the total operating budget (r = 0.747, p = 0.000). Publication formalization was also positively correlated with increases in FAS support from 1970 to 1982 (r = 0.397, p = 0.041).

These findings suggest that NSGBs which are bureaucratized along the formalization dimension, secure more financial inputs than do less formalized NSGBs. These organizations are also more likely to be successful as measured by their standings in international competition. Thus, it appears that the more formalized the organization is, particularly with respect to role definition, the more effective it will be. This may be due to the fact that increased formalization reduces work uncertainty and clarifies the responsibilities of the individuals within the organization. In addition, increased formalization is thought to ensure stability and continuity even when there are frequent changes in personnel; a common occurrence in many voluntary organizations.

To determine the extent to which these formalization variables remain correlated with the effectiveness measures once controls are introduced, partial correlations were computed. Only those structural variables which had exhibited a significant relationship with publication and job description formalization, or which were causing a suppressor effect, are reported. This was done to consolidate the tables.
TABLE 10
MATRIX OF PEARSON CORRELATION COEFFICIENTS
FOR STRUCTURAL AND EFFECTIVENESS VARIABLES

<table>
<thead>
<tr>
<th>STRUCTURAL VARIABLES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORMALIZATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Publications</td>
<td>.194</td>
<td>.255</td>
<td>.048</td>
<td>.308</td>
<td>.397*</td>
</tr>
<tr>
<td>2. Constitutions</td>
<td>.117</td>
<td>.209</td>
<td>.224</td>
<td>.165</td>
<td>.211</td>
</tr>
<tr>
<td>3. Job Descriptions</td>
<td>.420*</td>
<td>.519**</td>
<td>.214</td>
<td>.747***</td>
<td>.324</td>
</tr>
<tr>
<td>CENTRALIZATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Budget Decisions</td>
<td>-.064</td>
<td>-.091</td>
<td>-.272</td>
<td>-.156</td>
<td>-.024</td>
</tr>
<tr>
<td>5. Policy Decisions</td>
<td>-.328</td>
<td>-.181</td>
<td>-.183</td>
<td>-.280</td>
<td>-.099</td>
</tr>
<tr>
<td>6. Personnel Decisions</td>
<td>-.385*</td>
<td>-.147</td>
<td>-.385*</td>
<td>-.252</td>
<td>-.129</td>
</tr>
<tr>
<td>7. New Program Decisions</td>
<td>-.362</td>
<td>-.088</td>
<td>-.010</td>
<td>-.356</td>
<td>-.259</td>
</tr>
<tr>
<td>8. Promotion Decisions</td>
<td>-.266</td>
<td>-.199</td>
<td>.177</td>
<td>-.145</td>
<td>.094</td>
</tr>
<tr>
<td>9. Total Centralization</td>
<td>-.323</td>
<td>-.149</td>
<td>-.175</td>
<td>-.163</td>
<td>-.146</td>
</tr>
<tr>
<td>IMPERSONALITY OF WORK RELATIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Formality of Evaluation Procedures</td>
<td>.034</td>
<td>.164</td>
<td>.412*</td>
<td>.247</td>
<td>.007</td>
</tr>
<tr>
<td>SPECIALIZATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Board Member Roles</td>
<td>.180</td>
<td>.189</td>
<td>.242</td>
<td>.077</td>
<td>-.014</td>
</tr>
<tr>
<td>12. Executive Board Roles</td>
<td>.131</td>
<td>.120</td>
<td>.060</td>
<td>.048</td>
<td>-.001</td>
</tr>
<tr>
<td>13. Salaried Program Staff Roles</td>
<td>.267</td>
<td>.355</td>
<td>.209</td>
<td>.834***</td>
<td>.353</td>
</tr>
<tr>
<td>14. Number of Committees</td>
<td>.437*</td>
<td>.431*</td>
<td>.322</td>
<td>.465*</td>
<td>.376*</td>
</tr>
<tr>
<td>15. Number of Clerical Support Staff</td>
<td>.137</td>
<td>.343</td>
<td>.270</td>
<td>.771***</td>
<td>.463**</td>
</tr>
<tr>
<td>16. Total Specialization</td>
<td>.320</td>
<td>.367</td>
<td>.314</td>
<td>.445*</td>
<td>.238</td>
</tr>
<tr>
<td>CLERICAL RATIO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Ratio of Clerical to Other Positions</td>
<td>-.095</td>
<td>-.256</td>
<td>.189</td>
<td>.689***</td>
<td>.578**</td>
</tr>
<tr>
<td>PROFESSIONALISM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Voluntary Member Education</td>
<td>.380</td>
<td>.306</td>
<td>.348</td>
<td>.379*</td>
<td>.239</td>
</tr>
<tr>
<td>19. Paid Staff Education</td>
<td>.331</td>
<td>.012</td>
<td>.526**</td>
<td>.070</td>
<td>.131</td>
</tr>
<tr>
<td>CAREER STABILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Paid Turnover Rate</td>
<td>-.341</td>
<td>-.040</td>
<td>.697**</td>
<td>.220</td>
<td>.099</td>
</tr>
<tr>
<td>21. Mean Year Voluntary Involvement</td>
<td>-.043</td>
<td>-.148</td>
<td>.322</td>
<td>-.187</td>
<td>-.173</td>
</tr>
</tbody>
</table>

* Significant at .05 level
** Significant at .01 level
*** Significant at .001 level
which, with partials for twenty-one structural variables, would have been unwieldy.

As illustrated in Table 11, when most of the variables were controlled, with one exception, the strength of the relationship between publication formalization and the increase in FAS support from 1970 to 1982 declined. In fact, with controls for the clerical ratio, none of the variance is explained. This suggests that the relationship is spurious with the clerical ratio having the greatest contaminating effect. Thus, an increase in clerical support, as opposed to an increase in publication formalization, is related to increased government financial support over time.

The decreases in the first order correlations were not as dramatic when controls were applied to the relationship between job description formalization and the effectiveness measures. As illustrated in Table 12, a moderate correlation remained between job description formalization and the 1982 world ranking. Moreover, the strong relationship between this formalization measure and the total operating budget is still evident.

The inclusion of the three formalization variables was designed to measure three aspects of written documentation: information passing (e.g. publications), rules and procedures (e.g. constitutions) and role definition (e.g. job descriptions). It would appear from this analysis that role definition formalization is most closely associated with the
Table 11

PARTIAL CORRELATIONS FOR PUBLICATION FORMALIZATION AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLES</th>
<th>PUBLICATION FORMALIZATION WITH CONTROLS$^{1}$ FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONSTITUTION FORMALIZATION</td>
</tr>
<tr>
<td>$\text{$^\text{INCREASE IN FAS SUPPORT 1970-1982}$} (r = .397*) pr$</td>
<td>.343</td>
</tr>
<tr>
<td>$\text{$^\text{INCREASE IN FAS SUPPORT 1970-1982}$} (r^2 = .158*) pr^2$</td>
<td>.118</td>
</tr>
<tr>
<td>\text{CLERICAL SPECIALIZATION}</td>
<td></td>
</tr>
<tr>
<td>$pr$</td>
<td>.278</td>
</tr>
<tr>
<td>$pr^2$</td>
<td>.077</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

1. Only the variables which were significantly correlated with publication formalization were included.
Table 12
PARTIAL CORRELATIONS FOR JOB DESCRIPTION
FORMALIZATION AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLES</th>
<th>JOB DESCRIPTION FORMALIZATION WITH CONTROLS$^1$ FOR:</th>
<th>NEW PROGRAM PROMOTION COMMITTEE CLERICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CRONACIZATION CENTRALIZATION SPECIALIZATION SPECIALIZATION</td>
<td></td>
</tr>
<tr>
<td>1. 1982 WORLD RANKING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( r = -.420^* )</td>
<td>.313</td>
<td>.358</td>
</tr>
<tr>
<td>( r^2 = .176^* )</td>
<td>.098</td>
<td>.128</td>
</tr>
<tr>
<td>TOTAL SPECIALIZATION</td>
<td>.295</td>
<td>.529**</td>
</tr>
<tr>
<td>( pr^2 )</td>
<td>.087</td>
<td>.280</td>
</tr>
<tr>
<td>2. 1982 EFFECTIVENESS RANKING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( r = -.519^{**} )</td>
<td>.535**</td>
<td>.489*</td>
</tr>
<tr>
<td>( r^2 = .269^{**} )</td>
<td>.286</td>
<td>.239</td>
</tr>
<tr>
<td>TOTAL SPECIALIZATION</td>
<td>.398*</td>
<td>.467*</td>
</tr>
<tr>
<td>( pr^2 )</td>
<td>.158</td>
<td>.218</td>
</tr>
<tr>
<td>3. TOTAL OPERATING BUDGET</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( r = .747^{***} )</td>
<td>.704^{***}</td>
<td>.755^{***}</td>
</tr>
<tr>
<td>( r^2 = .558^{***} )</td>
<td>.496^{***}</td>
<td>.570^{***}</td>
</tr>
<tr>
<td>TOTAL SPECIALIZATION</td>
<td>.670^{***}</td>
<td>.660^{***}</td>
</tr>
<tr>
<td>( pr^2 )</td>
<td>.449^{***}</td>
<td>.436^{***}</td>
</tr>
</tbody>
</table>

* Significant at the .05 level  
** Significant at the .01 level  
*** Significant at the .001 level

$^1$ Only those variables significantly correlated with job description formalization were included.
effectiveness indicators. Thus, NSGBs with well documented job descriptions are most likely to have had increased government financial support over the last twelve years. This may be because they are better at meeting the Sport Canada Funding Criteria (see Chapter 2) which encourage NSGBs to demonstrate administrative maturity. While this role definition documentation leads to increased government financial support, it is also associated with success in international World Championships. These relationships hold even when the effects of other structural variables are controlled. One explanation for these findings may be that work responsibilities are clarified with increased job description formalization. Thus, volunteers and salaried program staff use their time more effectively when designing programs leading to performance success and when raising financial resources. In addition, increased job description formalization may provide stability and continuity in NSGBs which have frequent changes in personnel.

Centralization and Effectiveness

In contrast to the formalization measures, centralization exhibits a negative association with the goal model indicators and the system model indicators. Policy centralization \( (r = -0.328, \ p = 0.100) \), personnel centralization \( (r = -0.385, \ p = 0.050) \) and new program centralization \( (r = -0.362, \ p = 0.069) \) were moderately correlated with 1982 World Rankings. Person-
nel centralization was also negatively correlated with changes in Effectiveness Rankings ($r=-.385, p=.093$). However, most of these relationships did not reach the .05 level of significance. Several of the relationships between centralization and the systems indicators were also negative but weak. Only new program centralization was close to being significantly related to the total operating budget ($r=-.356, p=.075$). Based on these findings, centralized organizations tend to do less well in World Championship standings, and tend to have somewhat lesser financial resources than do more decentralized organizations. A larger sample size would help clarify whether or not the conclusion that centralized NSGBs are less effective than decentralized NSGBs is warranted.

The direction of these relationships is not surprising as centralization was negatively correlated with several of the other structural variables. To examine the relationship between centralization and effectiveness, the effects of the structural variables were controlled through the partial correlation technique. Only those variables that were significantly correlated with the centralization measures, or which showed a suppressor effect when the partials were analysed, were included in the tables. In addition, because each centralization measure was strongly correlated with total centralization, this latter measure was the only centralization measure used as a control.
The results in Table 13 revealed that, when the selected structural variable were controlled, policy centralization was no longer moderately related to the goal model variable, 1982 world ranking. Both voluntary and salaried program staff professionalism are somewhat responsible for the interdependency between policy centralization and this effectiveness measure. In addition, when the effect of total centralization is controlled the amount of variance explained is almost negligible (pr²=.022). Thus, policy centralization on its own does not explain the variance in 1982 world ranking.

The first order partials (pr) decreased from the zero order correlations (r) when total centralization is controlled for in the relationships between personnel and new program centralization with 1982 world ranking (see Tables 14 & 15). However, in addition to the variance explained by other centralization measures, it is more important to consider the effects of the remaining structural variables. For personnel centralization, only total specialization significantly lowers the partial values. Still, personnel centralization explains 8.4% of the variance in 1982 World Ranking. Since the direction of this relationship is negative, it would appear that to some extent, the more decentralized the NSGBs are with respect to personnel decision-making, the more effective the organization will be with respect to international performance. Perhaps delegating responsibilities
Table 13
PARTIAL CORRELATIONS FOR POLICY CENTRALIZATION AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLE</th>
<th>POLICY CENTRALIZATION WITH CONTROLS&lt;sup&gt;1&lt;/sup&gt; FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL CENTRALIZATION</td>
</tr>
<tr>
<td>1982 WORLD RANKING</td>
<td>(.328*)&lt;sup&gt;r&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(.057)&lt;sup&gt;r^2&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>*</sup> Significant at the .05 level  
<sup>**</sup> Significant at the .01 level  
<sup>***</sup> Significant at the .001 level

<sup>1</sup> Only those variables significantly correlated with policy centralization were included.
to more specialized groups results in the selection of more qualified paid personnel. As it is the salaried program staff who work full-time on association business, it may be that their competency leads to improved national team performance. Future studies on voluntary sport organizations should include an evaluation of the competency of salaried program staff as a possible intervening variable in this process.

Both the total centralization and total specialization controls tend to reduce the effect that new program centralization has on the effectiveness measures (see Table 15). With controls for total specialization, new program centralization explains 6.9% of the variance in 1982 World Ranking and 4.0% of the variance in total operating budget. However, neither of these $r^2$ values reached the .05 level of significance. Yet, given the low sample size and the fact that a number of complex variables in addition to organizational structure likely influence organizational effectiveness, this variable should not be totally ignored in future studies. It may be that decentralized new program decision making is more effective and has some impact on national team performance. Furthermore, more effective new program decision making may encourage the government and other funding sources to contribute financially to the NSGBs.

Decentralized decision making may be more effective because it is a form of participative decision making. That
Table 14
PARTIAL CORRELATIONS FOR PERSONNEL CENTRALIZATION AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLE</th>
<th>PERSONNEL CENTRALIZATION WITH CONTROLS¹ FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL CENTRALIZATION</td>
</tr>
<tr>
<td>1982 WORLD RANKING</td>
<td>(.r = -.385*)pr</td>
</tr>
<tr>
<td></td>
<td>(.r² = .148)pr²</td>
</tr>
<tr>
<td>IMPROVEMENT IN</td>
<td>TOTAL CENTRALIZATION</td>
</tr>
<tr>
<td>WORLD RANKING</td>
<td>(.r = -.385*)pr</td>
</tr>
<tr>
<td></td>
<td>(.r² = .148)pr²</td>
</tr>
</tbody>
</table>

* Significant at the .05 level  
** Significant at the .01 level  
*** Significant at the .001 level

¹ Only those variables significantly correlated with personnel centralization were included.
Table 15

PARTIAL CORRELATIONS FOR NEW PROGRAM CENTRALIZATION AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLES</th>
<th>NEW PROGRAM CENTRALIZATION WITH CONTROLS¹ FOR:</th>
<th>EXECUTIVE</th>
<th>CLERICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TOTAL CENTRALIZATION</td>
<td>BOARD SPECIALIZATION</td>
</tr>
<tr>
<td>1982 WORLD RANKING</td>
<td></td>
<td>.191</td>
<td>-.341</td>
</tr>
<tr>
<td>(r = -.362*)pr</td>
<td></td>
<td>.036</td>
<td>.116</td>
</tr>
<tr>
<td>(r² = .131)pr²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL SPECIALIZATION</td>
<td></td>
<td>.263</td>
<td>-.347</td>
</tr>
<tr>
<td>VOLUNTARY PROFESSIONALISM</td>
<td></td>
<td>.069</td>
<td>.120</td>
</tr>
<tr>
<td>TOTAL OPERATING BUDGET</td>
<td></td>
<td>-.358</td>
<td>-.364</td>
</tr>
<tr>
<td>(r = .356)pr</td>
<td></td>
<td>.128</td>
<td>.132</td>
</tr>
<tr>
<td>(r² = .127)pr²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL SPECIALIZATION</td>
<td></td>
<td>-.202</td>
<td>-.201</td>
</tr>
<tr>
<td>VOLUNTARY PROFESSIONALISM</td>
<td></td>
<td>.040</td>
<td>.040</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

¹ Only those variables significantly correlated with new program centralization were included.
is, decision making responsibility is delegated throughout the organization and tends to involve more people. This approach is designed to motivate individuals to become more committed to the organization through active involvement. It is also thought to help clarify goals and role responsibilities. That there is a trend toward decentralization in these organizations, especially when some of them have very few salaried program staff, emphasizes the importance of including this variable as a measure of organization structure.

**Impersonality and Effectiveness**

The impersonality of work relations variable was positively correlated with changes in world ranking from 1978 to 1982 ($r = .412, p = .089$). This structural variable was not significantly related to any of the other effectiveness indicators. The relationship between impersonal work relations and changes in world ranking remained moderately strong when the effects of other structural variables were controlled (see Table 16). However, the relationships did not always meet the .05 level of significance as the pairwise deletion of missing data lowers the number of cases. Therefore, this variable needs to be examined in a larger sample of organizations and over a number of world championships before confidence can be gained in conclusions regarding the relationship of this variable to the goal model of effectiveness.
Table 16

PARTIAL CORRELATIONS FOR IMPERSONALITY OF
WORK RELATIONS AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLE</th>
<th>IMPERSONALITY OF WORK RELATIONS WITH CONTROLS¹ FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERSONNEL CENTRALIZATION</td>
</tr>
<tr>
<td>CHANGES IN RANKING WORLD</td>
<td>.306</td>
</tr>
<tr>
<td>(r = .412)pr</td>
<td>.094</td>
</tr>
<tr>
<td>(r² = .170)pr²</td>
<td></td>
</tr>
<tr>
<td>CLERICAL SPECIALIZATION</td>
<td>.334</td>
</tr>
<tr>
<td>pr²</td>
<td>.112</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

¹ Only those variables significantly correlated with impersonality of work relations were included.
According to Weber, impersonal work relations are designed to prevent personal feelings from distorting rational decision making and thus make an organization more effective. From the results of this study, it appears that there is only limited support for this argument. There are a number of possible explanations for this finding. First, the lack of significant relationships may imply that less bureaucratic organizations are more able to adapt to their competitive environment and therefore improve more quickly. There is some support for this explanation as Burrell and Morgan (1979) have suggested that less structured organizations are more effective in rapidly changing environments. The de-emphasis on rigid structure is thought to allow the organization more flexibility in adapting to changing conditions. Thus, the degree of environmental stability and the ability of the organization to adapt to change are additional variables that could be considered in future studies on structure and organizational effectiveness.

A second possible explanation is that there may be a period of adjustment to new bureaucratic procedures which is not associated with organizational effectiveness. Sigelman (1981) supports this explanation as he suggests that it will take time for bureaucracy to have a positive affect on organizational effectiveness. In addition, through discussions with executive directors, it was revealed that even those NSGBs with formal evaluation procedures have had them in
place for a relatively short period of time. Investigation of these alternative explanations are needed to clarify the relationship between this feature of Weber's ideal bureaucracy and the effectiveness indicators.

Specialization and Effectiveness

Several of the specialization measures were moderately or strongly correlated with the effectiveness indicators as illustrated in Table 10. Salaried program staff specialization ($r = .355$, $p = .082$), committee specialization ($r = .431$, $p = .032$), clerical specialization ($r = .343$, $p = .093$), and total specialization ($r = .367$, $p = .071$) were positively related to the 1982 effectiveness rankings. However, several of these relationships did not reach the .05 level of significance. In addition, committee specialization was positively associated with the 1982 World Rankings ($r = .437$, $p = .033$). Salaried program staff specialization ($r = .834$, $p = .000$), committee specialization ($r = .455$, $p = .020$), clerical specialization ($r = .771$, $p = .000$) and total specialization ($r = .448$, $p = .022$) were positively associated with the total operating budget. Similarly, salaried program staff specialization ($r = .353$, $p = .077$), committee specialization ($r = .376$, $p = .050$), and clerical specialization ($r = .463$, $p = .017$) were positively correlated with increases in FAS Support from 1970 to 1982. Thus, NSGBs that are more specialized tend to be able to acquire greater financial resources and tend to rank higher in
international competition than less specialized organizations.

However, some interesting patterns emerge when the effects of other structural variables are controlled. The results in Table 17 reveal that salaried program staff specialization is still strongly correlated with the total operating budget, even when total specialization and the clerical ratio are controlled. This is not surprising as staff salaries constitute a major portion of most NSGB budgets. However, controlling for these variables did lower the association between salaried program staff specialization and the remaining effectiveness variables.

Committee specialization is not as strongly related to the dependent measures once controls are introduced (see Table 18). For example, controlling for job description formalization tends to substantially lower the pr values. As the need for volunteer job descriptions will likely increase with greater committee specialization, this variable may be effecting the bivariate relationship between specialization and effectiveness. Since job description formalization remained significantly correlated with effectiveness, after controls were introduced, it appears to be a better determinant of effectiveness. As mentioned previously, this may occur because job descriptions help to clarify role responsibilities, or they may have been devised to attract more qualified personnel. Either of these intervening factors may be responsible for increased effectiveness.
Table 17
PARTIAL CORRELATIONS FOR SALARIED PROGRAM
STAFF SPECIALIZATION AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLES</th>
<th>SALARIED PROGRAM STAFF SPECIALIZATION WITH CONTROLS&lt;sup&gt;1&lt;/sup&gt; FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982 WORLD RANKING</td>
<td>TOTAL SPECIALIZATION</td>
</tr>
<tr>
<td>(r = -.355)&lt;sup&gt;pr&lt;/sup&gt;</td>
<td>.208</td>
</tr>
<tr>
<td>(r&lt;sup&gt;2&lt;/sup&gt; = .126)&lt;sup&gt;pr&lt;sup&gt;2&lt;/sup&gt;&lt;/sup&gt;</td>
<td>.043</td>
</tr>
<tr>
<td>TOTAL OPERATING BUDGET</td>
<td>TOTAL SPECIALIZATION</td>
</tr>
<tr>
<td>(r = .834&lt;sup&gt;***&lt;/sup&gt;)&lt;sup&gt;pr&lt;/sup&gt;</td>
<td>.786&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>(r&lt;sup&gt;2&lt;/sup&gt; = .696&lt;sup&gt;***&lt;/sup&gt;)&lt;sup&gt;pr&lt;sup&gt;2&lt;/sup&gt;&lt;/sup&gt;</td>
<td>.618&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>INCREASE IN FAS SUPPORT 1970-82</td>
<td>TOTAL SPECIALIZATION</td>
</tr>
<tr>
<td>(r = .353)&lt;sup&gt;pr&lt;/sup&gt;</td>
<td>.276</td>
</tr>
<tr>
<td>(r&lt;sup&gt;2&lt;/sup&gt; = .125)&lt;sup&gt;pr&lt;sup&gt;2&lt;/sup&gt;&lt;/sup&gt;</td>
<td>.076</td>
</tr>
<tr>
<td>CLERICAL RATIO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.263</td>
</tr>
<tr>
<td></td>
<td>.069</td>
</tr>
<tr>
<td></td>
<td>.738&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>.545&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>.031</td>
</tr>
<tr>
<td></td>
<td>.001</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

<sup>1</sup> Only the variables that were significantly correlated with salaried program staff specialization were included.
<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLES</th>
<th>COMMITTEE SPECIALIZATION WITH CONTROLS¹ FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982 WORLD RANKING</td>
<td>JOB DESCRIPTION FORMALIZATION</td>
</tr>
<tr>
<td>(r = .437*)</td>
<td>.222</td>
</tr>
<tr>
<td>(r² = .191)</td>
<td>.048</td>
</tr>
<tr>
<td>1982 EFFECTIVENESS RATING</td>
<td>JOB DESCRIPTION FORMALIZATION</td>
</tr>
<tr>
<td>(r = .431*)</td>
<td>.141</td>
</tr>
<tr>
<td>(r² = .185)</td>
<td>.019</td>
</tr>
<tr>
<td>TOTAL OPERATING BUDGET</td>
<td>JOB DESCRIPTION FORMALIZATION</td>
</tr>
<tr>
<td>(r = .455*)</td>
<td>.068</td>
</tr>
<tr>
<td>(r² = .207)</td>
<td>.004</td>
</tr>
<tr>
<td>$ INCREASE IN FAS SUPPORT 1970-82</td>
<td>JOB DESCRIPTION FORMALIZATION</td>
</tr>
<tr>
<td>(r = .376*)</td>
<td>.230</td>
</tr>
<tr>
<td>(r² = .141)</td>
<td>.053</td>
</tr>
</tbody>
</table>

* Significant at the .05 level  
** Significant at the .01 level  
*** Significant at the .001 level

¹ Only the variables significantly correlated with committee specialization were included.
Clerical specialization also remained moderately to strongly related to effectiveness when controls were used. Only the clerical ratio tended to decrease the partial correlations substantially for increases in FAS Support from 1970 to 1982 (see Table 19). However, both of these variables take the number of clerical support staff into account. Therefore, it should be expected that controlling for the clerical ratio would have this lowering effect. It would still seem appropriate to consider these variables separately as clerical specialization accounts for 29.8% of the variance in total operating budget even when the clerical ratio effects are partialled out. As with salaried program staff, clerical salaries are a major portion of most operating budgets. This could explain the positive correlations with the systems variables. Controlling for job description formalization also reduced the association between clerical specialization and the 1982 effectiveness ranking.

Job description formalization and salaried program staff specialization substantially reduced the effect that total specialization had on the effectiveness variables (see Table 20). This provides further support for including job description formalization and salaried program staff specialization as significant determinants of systems effectiveness.
Table 19
PARTIAL CORRELATIONS FOR CLERICAL SPECIALIZATION
AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLES</th>
<th>CLERICAL SPECIALIZATION WITH CONTROLS¹ FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982 EFFECTIVENESS RATING (r = -.343)pr</td>
<td>JOB DESCRIPTION</td>
</tr>
<tr>
<td></td>
<td>.140</td>
</tr>
<tr>
<td></td>
<td>.020</td>
</tr>
<tr>
<td>TOTAL OPERATING BUDGET (r = .771***pr</td>
<td>JOB DESCRIPTION</td>
</tr>
<tr>
<td></td>
<td>.490**</td>
</tr>
<tr>
<td></td>
<td>.240</td>
</tr>
<tr>
<td>INCREASES IN FAS SUPPORT 1970-1982 (r = .463*)pr</td>
<td>JOB DESCRIPTION</td>
</tr>
<tr>
<td></td>
<td>.352</td>
</tr>
<tr>
<td></td>
<td>.124</td>
</tr>
</tbody>
</table>

¹ Only the variables significantly correlated with committee specialization were included.

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level
Table 20
PARTIAL CORRELATIONS FOR TOTAL SPECIALIZATION AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS VARIABLES</th>
<th>TOTAL SPECIALIZATION WITH CONTROLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982 EFFECTIVENESS RANKING</td>
<td>JOB DESCRIPTION FORMALIZATION</td>
</tr>
<tr>
<td>(r = .367)pr</td>
<td>- .055</td>
</tr>
<tr>
<td>(r² = .135)pr²</td>
<td>.003</td>
</tr>
<tr>
<td>IMPERSONALITY OF WORK RELATIONS</td>
<td>BOARD MEMBER SPECIALIZATION</td>
</tr>
<tr>
<td>pr</td>
<td>.332</td>
</tr>
<tr>
<td>pr²</td>
<td>.110</td>
</tr>
<tr>
<td>TOTAL OPERATING BUDGET</td>
<td>JOB DESCRIPTION FORMALIZATION</td>
</tr>
<tr>
<td>(r = .448*)pr</td>
<td>- .052</td>
</tr>
<tr>
<td>(r² = .201)pr²</td>
<td>.002</td>
</tr>
<tr>
<td>IMPERSONALITY OF WORK RELATIONS</td>
<td>BOARD MEMBER SPECIALIZATION</td>
</tr>
<tr>
<td>pr</td>
<td>.387*</td>
</tr>
<tr>
<td>pr²</td>
<td>.150</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

1 Only the variables significantly correlated with total specialization were included.
Clerical Ratio and Effectiveness

The clerical ratio was strongly and positively correlated with both systems measures: the total operating budget \( r = 0.689, \ p = 0.000 \) and the increase in FAS support \( r = 0.578, \ p = 0.002 \). As shown in Table 21, these relationships remained strong even after controls for the other structural variables were introduced. Only the control of clerical specialization tended to decrease the partials substantially. However, as discussed previously, clerical specialization and the clerical ratio both account for the number of clerical support staff. Therefore, this effect was not unexpected.

That the clerical ratio is still moderately related to the effectiveness measures, even when controls were introduced, supports its inclusion as a structural variable. An interesting feature of bureaucracy is that the number of clerical staff in relation to other positions will increase as an organization becomes more bureaucratized. Based on the findings in this study, it appears that an increase in the proportion of clerical staff results in an increase in financial resource acquisition. As both the total operating budget and increases in government financial support are strongly associated with the clerical ratio, it seems that NSGBs are able to justify the need to finance clerical support. Increased clerical support is required as an organization adopts features of bureaucracy to coordinate the specialized positions and to relieve decision makers from clerical tasks.
Table 21

PARTIAL CORRELATIONS FOR THE CLERICAL RATIO AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS MEASURES</th>
<th>CLERICAL RATIO WITH CONTROLS (^1) FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL OPERATING BUDGET</td>
<td>PUBLICATION FORMALIZATION</td>
</tr>
<tr>
<td>((r = .689^{***})) pr</td>
<td>.689**</td>
</tr>
<tr>
<td>((r^2 = .475^{***})pr^2</td>
<td>.475***</td>
</tr>
<tr>
<td></td>
<td>CONSTITUTION FORMALIZATION</td>
</tr>
<tr>
<td></td>
<td>.686***</td>
</tr>
<tr>
<td></td>
<td>.471***</td>
</tr>
<tr>
<td></td>
<td>JOB DESCRIPTION FORMALIZATION</td>
</tr>
<tr>
<td></td>
<td>.575**</td>
</tr>
<tr>
<td></td>
<td>.331**</td>
</tr>
<tr>
<td>$ INCREASE IN FAS SUPPORT 1970-1982</td>
<td></td>
</tr>
<tr>
<td>((r = .578^{***}) pr</td>
<td>.458**</td>
</tr>
<tr>
<td>((r^2 = .334^{***})pr^2</td>
<td>.210**</td>
</tr>
<tr>
<td></td>
<td>IMPERSONALITY OF WORK RELATIONS</td>
</tr>
<tr>
<td></td>
<td>.643***</td>
</tr>
<tr>
<td></td>
<td>.413***</td>
</tr>
<tr>
<td></td>
<td>SALARIED PROGRAM STAFF SPECIALIZATION</td>
</tr>
<tr>
<td></td>
<td>.465**</td>
</tr>
<tr>
<td></td>
<td>.240**</td>
</tr>
<tr>
<td></td>
<td>CLERICAL SPECIALIZATION</td>
</tr>
<tr>
<td></td>
<td>.304</td>
</tr>
<tr>
<td></td>
<td>.158*</td>
</tr>
</tbody>
</table>

\(^*\) Significant at the .05 level
\(^**\) Significant at the .01 level
\(^***\) Significant at the .001 level

\(^1\) Only the variables significantly correlated with the clerical ratio were included.
Professionalism and Effectiveness

Voluntary member education was moderately associated with the 1982 World Ranking ($r=.380$, $p=.080$), changes in effectiveness rankings from 1978 to 1982 ($r=.348$, $p=.100$) and the total operating budget ($r=.379$, $p=.090$). However, none of these relationships reached the .05 level of significance. Salaried program staff education was also positively correlated with changes in effectiveness rankings ($r=.526$, $p=.036$).

The results in Table 22 reveal that controlling for the effects of job description formalization weaken the relationship between voluntary professionalism and the effectiveness measures. Therefore, it may be that it is not so much the level of volunteer educational attainment that is related to effectiveness, but rather it is the degree to which role definition documents have been devised. Job descriptions are a very important managerial tool, especially for voluntary organizations in which roles and responsibilities have not been clearly delineated. These documents help clarify what needs to be done as well as who is responsible for each task. Thus, NSGBs may demonstrate better organization once job descriptions have been formalized. They may also be more capable of acquiring greater financial resources. Since NSGBs would then demonstrate greater administrative maturity to the federal government, they may be more able to obtain larger operating budgets. This, in turn, may lead to improved world rankings.
It may be that other indicators in addition to the level of educational attainment, are related to organizational effectiveness. Perhaps past experience in the sport or the ability to work with provincial and international associations are more important characteristics.

The same conclusion can not be drawn regarding the effects of salaried program staff professionalism since this variable remains positively associated with changes in world ranking once the structural variables are controlled. This suggests that the increased educational attainment of the salaried program staff is positively related to improvements in world standing. This finding provides support for Weber's contention that in order to increase effectiveness, the modern organization would put more emphasis on educational qualifications when hiring paid personnel. He suggested that the possession of educational certificates is usually linked with qualifications for office. Furthermore, trained experts are required to carry out the rational pursuit of objectives. Thus, NSGBs which put more emphasis on this characteristic are more likely to improve in world rankings over time.
Table 22

PARTIAL CORRELATIONS FOR VOLUNTARY PROFESSIONALISM AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS MEASURES</th>
<th>VOLUNTARY PROFESSIONALISM WITH CONTROLS$^\dagger$ FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1982 WORLD RANKING</td>
</tr>
<tr>
<td></td>
<td>($r = .380^\star$)</td>
</tr>
<tr>
<td></td>
<td>($r^2 = .144) \text{ pr}^2$</td>
</tr>
<tr>
<td></td>
<td>CHANGES IN WORLD RANKING</td>
</tr>
<tr>
<td></td>
<td>($r = .348^\star$)</td>
</tr>
<tr>
<td></td>
<td>($r^2 = .121) \text{ pr}^2$</td>
</tr>
<tr>
<td></td>
<td>TOTAL OPERATING BUDGET</td>
</tr>
<tr>
<td></td>
<td>($r = .379^\star$)</td>
</tr>
<tr>
<td></td>
<td>($r^2 = .144^\star$)</td>
</tr>
</tbody>
</table>

* Significant at the .05 level  
** Significant at the .01 level  
*** Significant at the .001 level

$^\dagger$ Only the variables significantly correlated with the clerical ratio were included.
Table 23

PARTIAL CORRELATIONS FOR SALARIED PROGRAM STAFF PROFESSIONALISM AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>EFFECTIVENESS MEASURES</th>
<th>SALARIED PROGRAM STAFF PROFESSIONALISM WITH CONTROLS(^1) FOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANGES IN WORLD RANKING</td>
<td>POLICY CENTRALIZATION</td>
</tr>
<tr>
<td>((r = .526* \cdot \text{pr}))</td>
<td>-.504*</td>
</tr>
<tr>
<td>((r^2 = .277) \cdot \text{pr}^2)</td>
<td>.254*</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

\(^1\) Only the variables significantly correlated with salaried program staff professionalism were included.
**Career Stability and Effectiveness**

Neither volunteer nor salaried program staff career stability were related to effectiveness, with one exception. Program staff turnover rate was positively related to the change in world ranking indicator ($r=.679$, $p=.003$). Thus, the greater the salaried program staff career stability, the greater the improvement in international ranking since the last world championships. This suggests that continuity in salaried program staff positions is necessary for improvements in world standing. Since it takes time for new staff to learn their roles, it may be that constant turnover leads to ineffectiveness. With continuity in these positions, less time is lost due to initial adjustments on the job and, therefore, more can be accomplished over time. This finding poses practical implications for the NSGBs in terms of job design. That is, jobs that can be made more attractive will likely encourage salaried program staff to stay in their positions. Increased responsibility, the opportunity to be upwardly mobile and salary benefits are all worthy of consideration in this regard. As the salaried program staff turnover rate was not significantly correlated with the other structural variables, partial correlations were not included.

It was somewhat surprising that volunteer career stability was not significantly related to the effectiveness indicators. It had been expected that greater career sta-
bility would be associated with greater effectiveness due to role consistency. The lack of a linear relationship suggests that the degree of volunteer career stability is not a strong predictor of organizational effectiveness. Perhaps other characteristics of volunteer involvement need to be considered further. For example, the amount of time that the volunteer has to devote to an NSGB may be an important variable.

Summary

Even though there are a number of factors, in addition to organizational structure, that influence whether or not an organization will be effective, several of the structural variables were positively correlated with the effectiveness indicators. However, the centralization measures exhibited a consistent negative association with both the goal and systems model variables.

Job description formalization is one of the structural variables that is most strongly associated with the effectiveness measures. NSGBs with well documented job descriptions are most likely to have had increased government financial support over the last twelve years. This may occur because they are better at meeting Sport Canada Funding criteria. In addition, the NSGBs with greater job description formalization are also more effective in achieving their goals of performance excellence. This may be because in-
creased role definition formalization reduces work uncertainty and also provides stability when there is a high rate of personnel turnover.

Personnel centralization appears to be the centralization measure that is most strongly associated with the effectiveness measures, although the direction of this association is negative. It may be that the delegation of decision making on personnel matters results in the selection of more qualified paid personnel. Their competency may in turn lead to improved national team performance. New program centralization also explains some of the variance in the goal and systems organizational effectiveness. Therefore, this seems to be an important area in which decision-making control should be decentralized.

There is a tendency for the NSGBs with formalized salaried program staff evaluation procedures to have improved more since the last world championships. This suggests that an impersonal work orientation is associated with improved performance. However, this bureaucratic feature was not significantly associated with the remaining effectiveness variables. Additional features such as the move to develop objective athlete talent identification and selection criteria should be considered to more adequately represent the concept of impersonal work relations.

Salaried program staff and clerical specialization are strongly correlated with the total operating budget. This
finding can be explained by the fact that salaries are a major portion of most operating budgets. Controls for job description formalization and salaried program staff specialization substantially reduced the effect that total specialization had on the effectiveness variables. This provides further support for including these variables as determinants of the systems measures of effectiveness.

Furthermore, the findings of this study reveal that an increase in the proportion of clerical staff to other positions is related to an increase in financial resource acquisition. It seems that NSGBs are able to justify the important function that clerical staff provide and are thus able to raise more revenue in order to support them.

The strength of the relationships between voluntary professionalism and the effectiveness indicators decrease when the effects of job description formalization are controlled. Therefore, it may be that it is not the level of volunteer educational attainment that is related to effectiveness, but rather it is the degree to which roles and responsibilities have been clearly delineated. Or, there may be qualities that are more important than educational attainment that lead to improved performance. Work related experience and the ability to work with volunteers and government officials are additional features that should be considered. In contrast, salaried program professionalism remains positively related to the changes in the world rank-
ing variable when controls are introduced. This finding supports Weber's conviction that modern bureaucracies would place a strong emphasis on the educational qualifications of their salaried program staff so that the pursuit of organizational goals could be carried out more rationally.

With respect to career stability, salaried program staff turnover rate was significantly related to changes in the effectiveness ranking. This suggests that continuity in these positions is necessary for improvements in world ranking.

Based on these findings, it appears that the more bureaucratic the NSGB, the more effective it will be with respect to goal attainment and financial resource acquisition. More specifically, job description formalization, personnel centralization, new program centralization, salaried program staff specialization, the clerical ratio, salaried program staff professionalism and salaried program staff turnover rate are the structural variables that are most strongly associated with the effectiveness measures. However, the direction of the relationships between the centralization measures and effectiveness are negative. This indicates that decentralized decision making in these two decision making areas is associated with effectiveness. In addition, the effectiveness variable that exhibited the strongest relationships with the indices of bureaucratic structure was a systems model variable; the total operating budget.
CHAPTER 5 - SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Weber's theory of bureaucracy has stimulated research into the nature of complex modern organizations from a variety of perspectives. A major research strategy has been to investigate the interrelationships among the structural variables of Weber's ideal type bureaucracy. In addition, researchers have looked at the effects of contextual variables on structure and a few have been interested in the relationship between organizational structure and organizational effectiveness. However, there has been virtually no attempt to look at these relationships within voluntary organizations such as Canadian national sport governing bodies (NSGBs). This study sought to examine Weber's theory of bureaucracy in the context of voluntary sport organizations, while, at the same time, applying an organizational perspective to the study of voluntary organizations.

Summary

Contextual Variables

The contextual variables of organizational size, dependence on other organizations, technological expertise and organizational age were intercorrelated. Thus, larger organizations have more technically certified coaches and tend to
have been incorporated longer than smaller organizations.
In addition, as organizational size increases, dependence on
Fitness and Amateur Sport (FAS) for financial support de-
creases.

There are a number of possible explanations for these
findings. As NSGBs become larger, they may become more vis-
ible and therefore more able to attract corporate sponsor-
ship. This will result in decreased dependence on federal
government financing. An alternative explanation is that
with an increase in size, an NSGB has more manpower to ini-
tiate outside fund-raising activities.

The addition of these outside financial resources also
seems to lead to a larger total operating budget. Organiza-
tions which are larger in size not only tend to be less de-
pendent on government financing but they also tend to have
larger total operating budgets. Thus, there may be a greater
need to seek additional sources of funding to pay for the
needs of a large membership base.

The intercorrelations among contextual variables have
seldom been reported in previous research on context and or-
ganizational structure. However, the findings in this study
show that multicollinearity exists among the contextual
variables. This has important implications for the interpre-
tation of the relationships between context and structure
since multicollinearity makes it difficult to determine the
proportion of the correlation which is uniquely determined.
Therefore, first order partial correlations were employed to control for the possible confounding effects of the contextual variables.

**Context and Structure**

Without controls, the contextual variables of size and dependence on other organizations were the two variables that were most highly correlated with the structural variables. Organizational size was positively related to some of the measures of formalization, specialization and the clerical ratio. This supports Hinings et al.'s (1976) conclusion that an increased division of labor and regulation through role definition documents is required to coordinate activities as organizational size increases. These relationships tend to hold when organizational age and the technological expertise measures are controlled. However, when the effects of financial dependence were partialled out, the original relationships between organizational size and structure were weakened.

Membership fee revenue may be the variable which is responsible for the interdependence between organizational size and the measure of dependence on structure. An increase in the number of memberships may cause an increase in the membership fee portion of the total operating budget which, in turn, reduces the dependence on government financing. The finding that these two contextual variables overlap
suggests that a more sophisticated explanatory model is needed to clarify the relationship between contextual variables and structure. Additional variables, such as membership fee revenue, need to be considered in such a model.

The results of this study do provide partial support for the first hypothesis presented in Chapter 3. Thus, the greater the organizational size, the greater the bureaucratization. However, an increase in size is only positively related to the "structuring of activities" and the "line control of workflow" dimensions of bureaucracy. None of the contextual variables, including organizational size, were strongly correlated with the "concentration of authority" or the "characteristics of office holders" dimensions. This suggests that an expanded model of contextual variables needs to be considered which will better predict the structure of voluntary sport organizations along these dimensions. Geographic centralization and past experience of volunteers and salaried program staff are additional variables that could be considered.

Contrary to Pugh et al. (1969) prediction, and the hypothesis presented in Chapter 3, dependence on other organizations was found to be inversely related to measures of formalization, specialization and the clerical ratio. Pugh et al. (1969) had suggested that dependent organizations would become more centralized and that dependence would not have an effect on the "structuring of activities" dimension
of bureaucracy. However, the nature of the dependent relationship between government and voluntary organizations may be different from the subsidiary and parent companies studied by the Aston group. Fitness and Amateur Sport, through Sport Canada, has encouraged NSGBs to become administratively and financially mature. This seems to be occurring as the NSGBs are becoming more formalized and specialized and less financially dependent on FAS.

Although Woodward (1965) and Thompson (1967) have argued that technology is an important determinant of organizational structure, there was little support for this hypothesis based on the findings of this study. Neither of the measures of technological expertise were related to many of the structural variables. Those correlations that were significant were also substantially reduced when the effects of the other contextual variables were controlled. These findings support Khandwalla's (1974) observation that there has been little empirical support for including technology as a contextual variable. With respect to voluntary sport organizations, it may be more appropriate to consider other variables, such as interorganizational communication and interaction systems between local, provincial, and international organizations, instead of the level of technological expertise. NSGBs often work closely with the different levels of administration within their sports. It may be that differences between these systems have an effect on structure.
Thus, not only should explanatory models be improved by accounting for intercorrelations among already identified contextual variables, but these additional contextual variables should also be considered.

There was no support for the hypothesis that organizational age would be significantly correlated with the measures of bureaucratic structure. Both Weber (1968) and Sigelman (1981) have argued that organizations will become more bureaucratic over time. However, as most of the NSGBs have been incorporated for a relatively short period of time, and because government intervention has been a recent development (Broom and Baka, 1978), organizational age should not be ignored as a contextual variable. It may be that age will become a better predictor of bureaucratic structure, after the organizations move out of the initial stages of growth.

Organizational size and dependence appear to be the best predictors of the "structuring of activities" and the "line control" of workflow dimensions of bureaucracy. However, there is an overlap in these two contextual variables which may be explained, in part, by an intervening variable like membership fee revenue. Additional contextual variables such as geographic centralization, the degree of stability in the environment, interorganizational networks and the past experience of NSGB members should also be considered.
Structural Variables

Although some of the intercorrelations among the structural variables were not as strong as reported in the literature, there were many similarities in the pattern of relationships. For example, several of the formalization, specialization and clerical ratio measures were positively intercorrelated. The association between formalization and specialization supports the contention of Pugh et al. that these two variables form an underlying "structuring of activities" dimension in the modern bureaucracy. The clerical ratio has usually been considered to be part of a separate "line control of workflow" dimension. However, as reported by Pugh et al. (1968) and Grinyer et al. (1980), both formalization and specialization have been found to be positively related to the clerical ratio. Clerical staff are an essential aspect of Weber's bureaucracy as they are thought to provide an important communication link between the number of increasingly specialized decision-making roles. Thus, the higher the clerical ratio, the more coordination there is between the various roles.

Furthermore, part of this coordination occurs through publication, constitution and job description formalization. From the results of this study, job description formalization was found to be the variable that was most strongly related to the other dimensions of bureaucracy. As organizations become more specialized, job descriptions are
increasingly required to coordinate role responsibilities. In addition, clerical staff are required to process the formalization of such documents. For Weber, clerical staff are an essential feature of bureaucracy because they are thought to relieve the decision makers from these time-consuming processing tasks. This time factor is magnified even further in voluntary organizations because volunteers usually commit less time to their involvement than those with full time occupations. In addition, they are not geographically centralized in Ottawa as are the salaried program staff and clerical support staff.

Although the Aston group suggested that the locus of decision-making control is a separate dimension of bureaucracy, Child (1976) and Grinyer et al. (1980) have reported that centralization is negatively related to the other dimensions of bureaucracy. The results of this study support the latter view as centralization tended to be negatively associated with some of the measures of formalization, specialization, the impersonality of work relations, and professionalism. Thus, NSGBs will tend to decentralize decision-making power to executive boards and paid staff as the organization becomes more bureaucratized. This supports Grinyer et al's (1980: 414) explanation that "bureaucracy is a strategy of knowledge based control that permits decentralization". Centralization was not significantly related to the clerical ratio or career stability.
The impersonality of work relations variable was correlated with some of the specialization measures. This suggests that as NSGBs become more highly specialized, they will also develop more formalized evaluation procedures for their salaried program staff. Although this variable has seldom been included in previous research, it is an integral part of Weber's theory of bureaucracy, and thus deserves further attention.

The professionalism measures were moderately correlated with some of the variables within the "concentration of authority" dimension (e.g. centralization). This suggests that this variable should be included along with the impersonality of work relations and career stability as part of a "characteristics of office holders" dimension of bureaucracy. In fact, it can be conceptualized as an important intervening variable. That is, it is unlikely that decision-making authority will be delegated unless qualified people are available to take on the responsibility. Volunteer professionalism was also associated with job description formalization. That salaried program staff professionalism was negatively associated with the measures of career stability implies that paid staff with higher levels of educational attainment frequently turnover more in their jobs.

There are two possible explanations for the finding that professionalism was not significantly correlated with the other dimensions of bureaucracy. The volunteers and
paid staff are relatively homogeneous with respect to this variable, and thus there is not enough variability to show significant relationships with the other dimensions of structure. This is consistent with Weber's argument that the possession of educational qualifications would create a certain amount of class homogeneity among officials. Or, it may be that volunteers and salaried program staff are selected to positions for reasons other than their educational qualifications. Previous experience, whether as volunteers or as salaried program staff, in other national or provincial level roles may be an additional element of professionalism.

Volunteer career stability was intercorrelated with measures of specialization and the impersonality of work relations. It therefore deserves further consideration as an interrelated aspect of bureaucracy. However, the lack of career stability on the part of volunteers and paid staff in most NSGBs may be a response to the value of constantly involving new people to maintain grassroots support. Or, it may be a function of the nature of the administrative roles in NSGBs. That is, in some organizations, volunteers can only stay elected for a certain term. Paid staff are often in a difficult situation as they must deal with volunteers on the one hand, and with government officials on the other. In addition, because there are few possibilities of career mobility, paid staff may tend to turn over quickly.
The findings reported here partially support Weber's prediction that bureaucracy would invade all sectors of modern life. However, the dimensions of bureaucracy were not as highly correlated as in previous studies which have mostly sampled the business type of organization. This supports Hall's (1963) work in which he suggests that bureaucracy exists on a continuum that depends on the type of organization studied. In addition, much of the previous research has focused on three dimensions of bureaucracy that were developed by Pugh et al. (1968). These include: the structuring of activities dimension, including formalization and specialization; the concentration of authority dimension, including centralization; and the line control of workflow dimension, which includes the clerical ratio. However, Weber also described a number of characteristics of the office holder in the ideal type bureaucracy. The three variables that were included in this study to measure this dimension, namely the impersonality of work relations, professionalism and career stability, were intercorrelated with the other structural variables to some degree. This suggests that this fourth dimension should be given more attention as an integral feature of modern bureaucracies.

As presented in Chapter 3, the structural hypothesis was that formalization, the impersonality of work relations, professionalism, specialization, the clerical ratio and career stability would be positively interrelated. This hy-
The hypothesis was not supported. Formalization, specialization and the clerical ratio were positively correlated. However, the impersonality of work relations was only positively correlated with specialization. Professionalism and career stability were significantly correlated with only some of the other structural variables.

There was limited support for the second structural hypothesis that centralization is negatively associated with the other measures of bureaucracy. While the measures of centralization did exhibit a negative association with the other structural variables, many of these relationships were weak and nonsignificant.

Goal and Systems Models

Although several of the relationships between the goal and systems measures were weak, the 1982 effectiveness rating variable was moderately correlated with the total operating budget. This finding provides support for Webb's (1974) argument that the goal and systems models are complementary tools for measuring organizational effectiveness. Others have previously argued that the acquisition of inputs, such as financial resources, does not necessarily lead to desired outputs and therefore, the two models measure separate aspects of organizational effectiveness.

There has been considerable debate in the literature on organizational effectiveness regarding the superiority of
these and other models of effectiveness. The results in this study suggest that even with the complexities involved in producing successful teams, the acquisition of financial resources is related to the effectiveness ranking of the sport. Based on this finding, there is support for the hypothesis that the goal and systems models of effectiveness are positively correlated. In addition, there was some consistency within models as the goal model indicators were intercorrelated, as were the system model indicators.

Structure and Effectiveness

Even though there are a number of factors in addition to organizational structure that influence whether or not an organization will be effective, several of the structural variables were positively correlated with the effectiveness indicators. However, the centralization measures exhibited a consistent negative association with both the goal and systems models variables. Thus, there was some support for the general structure and effectiveness hypotheses presented in Chapter 3. It had been predicted that the greater the extent of formalization, decentralization, impersonality of work relations, professionalism, clerical staff, specialization and career stability, the greater the degree of goal attainment and resource acquisition.

More specifically, job description formalization is one of the structural variables that is most strongly associated
with the effectiveness measures. NSGBs with well documented job descriptions are most likely to have had increased government financial support over the last twelve years. This may occur because they are better at meeting Sport Canada Funding criteria. In addition, the NSGBs with greater formalization are also more effective in achieving their goals of performance excellence. This may occur because increased role definition formalization is thought to reduce work uncertainty and provide stability.

Personnel centralization is the centralization measure that is most strongly associated with the effectiveness measures. It may be that the delegation of decision making on personnel matters results in the selection of more qualified paid personnel. Their competency may, in turn, lead to improved national team performance. New program centralization also explains some of the variance in goal and systems organizational effectiveness. Therefore, this seems to be an important area in which decision-making control should be decentralized.

There is a tendency for the NSGBs with formalized paid staff evaluation procedures to have improved their effectiveness rankings since the last world championships. This suggests that a more impersonal work orientation is associated with improved performance. However, this bureaucratic feature was not significantly associated with the remaining effectiveness variables.
Salaried program staff and clerical specialization are strongly correlated with the total operating budget. This finding can be explained by the fact that salaries are a major portion of most operating budgets. Job description formalization and salaried program staff specialization substantially reduced the effect that total specialization had on the effectiveness variables. This provides further support for including these variables as determinants of the systems measures of effectiveness.

Furthermore, the findings of this study reveal that an increase in the proportion of clerical staff compared to other positions is related to an increase in financial resource acquisition. It seems that NSGBs are able to justify the important function that clerical staff provide and are thus able to raise more revenue in order to support them.

The strength of the relationships between voluntary professionalism and the effectiveness indicators decreases when the effects of job description formalization are controlled. Therefore, it may be that it is not the level of volunteer educational attainment that is related to effectiveness, but rather it is the degree to which roles and responsibilities are clearly delineated. Or, there may be qualities that are more important than educational attainment that lead to improved performance. Past experience and the ability to work with volunteers and government officials are additional features that should be considered. In con-
trust, salaried program staff professionalism remains positively related to the changes in the world ranking when controls are introduced. This finding supports Weber's conviction that modern bureaucracies would place a strong emphasis on the educational qualifications of their paid staff so that the pursuit of organizational goals could be carried out more rationally.

Based on these findings, it appears that the more bureaucratic the NSGB, the more effective it will be with respect to goal attainment and financial resource acquisition. More specifically, job description formalization, personnel centralization, new program centralization, salaried program staff specialization, the clerical ratio, paid staff professionalism and paid staff turnover rate are the structural variables that are most strongly associated with the effectiveness measures. However, the direction of the relationships between the centralization measures and effectiveness are negative. This indicates that decentralized decision making in these two decision making areas is associated with effectiveness. Furthermore, the total operating budget, a systems model variable, was the effectiveness variable that was most strongly related to the indices of bureaucratic structure.
Conclusions

This study examined several combinations of relationships including: the intercorrelations of the contextual variables, the relationships between context and structure, the intercorrelations of the structural variables, the intercorrelations among the effectiveness variables, and the relationships between structure and effectiveness. The major conclusions of this study are as follows:

1. The contextual variables are intercorrelated. More specifically, organizational size is positively correlated with the number of technically certified coaches, and to a lesser extent, with organizational age. Organizational size is also strongly, but negatively associated with the degree of financial dependence on other organizations.

2. Organizational size is correlated with measures of formalization, specialization and the clerical ratio. Thus, an increase in size requires an increase in some measures of bureaucratic structure and control.

3. Financial dependence on other organizations is inversely related to measures of formalization, specialization and the clerical ratio. This suggests that organizations which are less dependent on government financial support are more bureaucratic along these specific dimensions.
4. Measures of technological expertise and organizational age are not significantly correlated with organizational structure in voluntary sport organizations.

5. The contextual variables included in this study are not good predictors of the "concentration of authority" or the "characteristics of office holders" dimensions of bureaucracy.

6. Patterns of relationships among features of bureaucratic structure that exist in voluntary amateur sport organizations are similar to those that have been reported for business organizations. More specifically, the "structuring of activities" dimension of bureaucracy, including formalization and specialization, is positively correlated with the "line control of workflow" dimension which includes the clerical ratio. In addition, the "concentration of authority" dimension, which measures centralization, is negatively correlated with the "structuring of activities" dimension, although several of the correlations are weak.

7. A fourth dimension of bureaucracy, "the characteristics of office holders", should be considered as an integral aspect of bureaucratic structure. The addition of this dimension more fully captures Weber's ideal type of bureaucracy. Furthermore, the variables contained within this dimension, including the imper-
sonality of work relations, professionalism and career stability, are intercorrelated with some of the variables within the other dimensions.

8. The characteristics of bureaucratic structure exist in voluntary sport organizations but they are not as strongly correlated as those in business organizations.

9. NSGBs with the largest total operating budgets are ranked the highest in the 1982 World Championships when accounting for the number of competing countries. This suggests that the acquisition of financial inputs is associated with the attainment of organizational objectives such as performance excellence. It also supports Webb's (1974) contention that the goal and systems models are complementary tools for measuring organizational effectiveness.

10. NSGBs that are more bureaucratic in terms of job description formalization, personnel centralization, new program centralization, salaried program staff specialization, the clerical ratio, paid staff professionalism and paid staff career stability are more likely to be effective.

11. The effectiveness variable that exhibited the strongest relationships with the indices of bureaucratic structure was a systems model variable; the total operating budget.
12. Weber's theory of bureaucracy provides a useful framework for understanding the nature of voluntary amateur sport organizations.

**Recommendations**

Based on the analysis of the research problems in this study, a number of additional considerations for future research can be suggested. The following recommendations, if pursued, could advance knowledge regarding the nature of voluntary sport organizations. These recommendations are:

1. Additional contextual variables should be included as possible determinants of organizational structure; particularly for the "concentration of authority" and the "characteristics of office holder" dimensions of bureaucracy.

2. The causal ordering of the contextual, structural and effectiveness variables needs to be determined.

3. In addition to the three dimensions of bureaucratic structure outlined by Pugh et al. (1968), a fourth dimension that includes the impersonality of work relations, professionalism and career stability should be included. This dimension, perhaps called the "characteristics of office holders" dimension, could more adequately define Weber's ideal type bureaucracy.
4. This study only looked at the structural aspect of Weber's theory of bureaucracy. To further understand the nature of voluntary sport organizations, the historical and cultural context in which these decision-making bodies have developed should be examined. In addition, the possible alienating effects that bureaucracy have on the individual should also be investigated.

5. The process of bureaucratization and its relationship to effectiveness needs to be examined over time. This would help identify the causal process and determine the influence that the federal government has had, and will have, on this process.

6. Voluntary organizations should continue to be studied from an organizational perspective. Additional concepts that could be examined include organizational growth, interorganizational networking, the trend toward oligarchy, goal displacement, goal succession, and comparisons of the rational legal type of domination with the charismatic and traditional types of domination.

7. Additional inputs, in addition to financial resources acquisition, should be included as measures of the systems model of bureaucracy. These include human resources such as coaching effectiveness, talented athletes, in addition to effective local and provincial associations.
8. Several additional variables should be considered as indices of the goal model of effectiveness. These include the level of international performance in addition to the World Championships, changes in performance over a longer span of time, cross-cultural within-sport differences, differences in men's and women's teams and differences in performance between team and individual sports.

9. To examine the extent of regularities across organizational types, the structure of voluntary organizations should be compared with the structure of business, government organizations and other types of sport organizations.

10. The relationships between a number of subgoals, such as coaching development and junior player development, and the main goal of performance excellence should be examined. This would help determine the degree to which additional inputs, in addition to financial resource acquisition, lead to the attainment of main goals.

11. The transformation processes operating between system inputs and outputs need to be examined. This would help to explain the relationships between the goal and systems measures of effectiveness.

12. Alternative methods of defining organizational effectiveness should be considered. For example, Mott
(1972) feels that effectiveness should be defined in terms of the organization's ability to adapt to changing conditions and its ability to cope with temporarily unpredictable emergencies.

13. In addition to studying the formal aspects of organizational structure, informal processes such as friendship networks and power struggles should also be examined to more fully understand the dynamics of these organizations.

14. The use of a larger sample size would permit the use of more sophisticated statistical procedures. For example, regression analysis could help to clarify the relationship between variables.

15. In addition to approaching the study of sport organizations from a structural approach, the use of a variety of perspectives could increase our understanding of the nature of these modern organizations. For example, a Marxist approach would focus on the alienating effects of bureaucratic structures, while a symbolic interactionist approach would study organizational action from the actor's point of view.
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Kidd, Bruce. The Canadian State and Sport: The Dilemma of Intervention, 2nd Annual Conference of the National Association for Physical Education for Higher Education. Brainerd, Minnesota, 1980.


B. Government Documents


Campagnola, Iona, Toward a National Policy on Fitness and Recreation. Ministry of Fitness and Amateur Sport, Ottawa, 1979b.


## APPENDIX A

### SELECTED EMPIRICAL STUDIES OF ORGANIZATIONAL EFFECTIVENESS

<table>
<thead>
<tr>
<th>AUTHOR</th>
<th>TYPE OF ORGANIZATION</th>
<th>INDEPENDENT VARIABLES</th>
<th>DEPENDENT VARIABLES</th>
<th>CONCLUSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameron 1978</td>
<td>six colleges and universities</td>
<td>-NA-</td>
<td>130 items of effectiveness</td>
<td>there are nine dimensions of effectiveness</td>
</tr>
<tr>
<td>Pennings 1970</td>
<td>40 brokerage firms</td>
<td>participativeness, centralization, organizational autonomy</td>
<td>total production, decline in production, financial loss due to errors, morale, anxiety</td>
<td>participative, decentralized, and autonomous organizations are more effective</td>
</tr>
<tr>
<td>Pennings 1975</td>
<td>40 brokerage firms</td>
<td>environmental indicators: resourcefulness, quality of intelligence, knowledge about competition, uncertainty, instability. organizational indicators: participativeness social interdependence,</td>
<td>morale, anxiety, total production, decline in production</td>
<td>the goodness of fit between environmental and structural variables fails to explain variance in effectiveness</td>
</tr>
<tr>
<td>Author</td>
<td>Type of Organization</td>
<td>Independent Variables</td>
<td>Dependent Variables</td>
<td>Conclusions</td>
</tr>
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</tr>
<tr>
<td>Osborn and Hunt 1974</td>
<td>26 social service organizations</td>
<td>environmental complexity: risk, dependency, interorganizational relationships</td>
<td>ratings of performance in relation to effectiveness</td>
<td>task environment dependency and interorganizational interaction are positively related to effectiveness</td>
</tr>
<tr>
<td>Price 1976</td>
<td></td>
<td>turnover</td>
<td>cost efficiency in achieving goals</td>
<td>no consistent findings</td>
</tr>
<tr>
<td>Negandhi and Reimann 1973</td>
<td>30 manufacturing firms in India</td>
<td>task environment agents, nine factors related to decentralized decision making</td>
<td>ability to hire and retain high level manpower, employee morale and work satisfaction, turnover and absenteeism, interpersonal relationships, interdepartmental</td>
<td>firms with a greater concern for task environment agents have more layers of hierarchy and opt for consultive decision making; decentralized firms are more effective even in a stable environment</td>
</tr>
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</table>
### APPENDIX A (Cont'd)

<table>
<thead>
<tr>
<th>AUTHOR</th>
<th>TYPE OF ORGANIZATION</th>
<th>INDEPENDENT VARIABLES</th>
<th>DEPENDENT VARIABLES</th>
<th>CONCLUSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rushing 1974</td>
<td>105 hospitals</td>
<td>full time personnel: production, administration, hotel, ratios of the above profit versus nonprofit hospitals</td>
<td>relationships, utilization of high level manpower</td>
<td>ratio of management and support staff is negatively associated with occupancy while production personnel is positively associated in profit but not nonprofit hospitals; average daily charges are associated with community wealth for profit hospitals</td>
</tr>
<tr>
<td>Webb 1974</td>
<td>100 churches</td>
<td>cohesion, efficiency, reliability, support, conflict, communication, adequacy of authority, planning, goal consensus and clarity, adaptability</td>
<td>28 church objectives</td>
<td>only planning, goal consensus and adequacy of authority were not significantly related to effectiveness</td>
</tr>
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## APPENDIX A (Cont'd)

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<thead>
<tr>
<th>AUTHOR</th>
<th>TYPE OF ORGANIZATION</th>
<th>INDEPENDENT VARIABLES</th>
<th>DEPENDENT VARIABLES</th>
<th>CONCLUSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molnar and Rogers 1976</td>
<td>110 public agencies</td>
<td>decision making variables; formalization, autonomy, accountability, goal clarity</td>
<td>goal model: self ratings, peer ratings, systems resource approach: administration, orientation scale, resource difference, resource inflow resource outflow</td>
<td>the goal and systems approaches to effectiveness are only weakly related and therefore measure separate dimensions of effectiveness</td>
</tr>
<tr>
<td>Hitt and Middlemist 1978</td>
<td>a state health department with 22 depts.</td>
<td>-NA-</td>
<td>25 indices of performance and organization criteria</td>
<td>there are substantial differences between subunits with respect to the weighting of effectiveness criteria</td>
</tr>
<tr>
<td>Hirsch 1975</td>
<td>23 pharmaceutical and manufacturing firms and 21 phonograph record companies</td>
<td>control of pricing and distribution, patent and copyright laws, control of external opinion leaders</td>
<td>profitability</td>
<td>pharmaceutical firms are more successful than record companies at controlling their institutional environments</td>
</tr>
<tr>
<td>Price 1972</td>
<td>hospitals (data from Georgopoulos)</td>
<td>-NA-</td>
<td>adequacy of patient care, medical care, resource adequacy</td>
<td>these measures can be used generally as measures of effectiveness</td>
</tr>
<tr>
<td>AUTHOR</td>
<td>TYPE OF ORGANIZATION</td>
<td>INDEPENDENT VARIABLES</td>
<td>DEPENDENT VARIABLES</td>
<td>CONCLUSIONS</td>
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<tr>
<td>and Mann 1962)</td>
<td></td>
<td></td>
<td>overall patient care, comparative overall patient care</td>
<td>effectiveness</td>
</tr>
<tr>
<td>Marsh and Mannari</td>
<td>2 Japanese factories</td>
<td>structural theory: status, formal reward system</td>
<td>attendance, number of suggestions, thinking about suggestions, desire to meet production goals</td>
<td>the most important causes of effectiveness are associated with the structural theory variables</td>
</tr>
<tr>
<td>Likert 1961</td>
<td>104 local League of Women Voters</td>
<td>size of league, growth of league, quality and quantity of materials, level of participation, interest and knowledge in League activities, success in fund raising, organizational structure</td>
<td>goal accomplishment</td>
<td>the most effective leagues have high levels of communication interaction, influence, expectations and participation</td>
</tr>
<tr>
<td>AUTHOR</td>
<td>TYPE OF ORGANIZATION</td>
<td>INDEPENDENT VARIABLES</td>
<td>DEPENDENT VARIABLES</td>
<td>CONCLUSIONS</td>
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</tr>
<tr>
<td>Georgopoulos and Tannenbaum 1957</td>
<td>business</td>
<td>-NA-</td>
<td>organizational productivity, organizational flexibility, absence of intra-organizational strain &amp; conflict</td>
<td>these effectiveness criteria are generally applicable across organizations</td>
</tr>
<tr>
<td>Price 1968</td>
<td>review of 50 effectiveness studies</td>
<td>economic, political and control variables, population and ecology, productivity, conformity, morale, adaptiveness institutionalization</td>
<td>degree of goal attainment</td>
<td>to fully measure effectiveness economic, political control and environmental factors must be considered</td>
</tr>
<tr>
<td>Mahoney and Weitzel 1969</td>
<td>13 businesses</td>
<td>24 dimensions including bureaucracy variables</td>
<td>productive performance</td>
<td>dimensions of effectiveness vary across organizations</td>
</tr>
<tr>
<td>Simpson and Gully 1973</td>
<td>211 national voluntary organizations</td>
<td>centralization, emphasis on active loyal involvement, internal communication</td>
<td>number of goal, satisfaction of internal or external members</td>
<td>diffuse external organizations have decentralized structure, emphasize active involvement and internal communication</td>
</tr>
<tr>
<td>AUTHOR</td>
<td>TYPE OF ORGANIZATION</td>
<td>INDEPENDENT VARIABLES</td>
<td>DEPENDENT VARIABLES</td>
<td>CONCLUSIONS</td>
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</tr>
<tr>
<td>Blau 1974</td>
<td>156 public personnel agencies</td>
<td>division of labor, professionalism, managerial hierarchy, administrative apparatus</td>
<td>operating costs</td>
<td>professionalism is an alternative to centralization; structural differentiation lowers operating costs; size and division of labor are also strongly related</td>
</tr>
<tr>
<td>Luschen 1979</td>
<td>21 National Olympic Committees</td>
<td>emphasis placed on performance</td>
<td>effectiveness, efficiency, fidelity, responsiveness</td>
<td>National Olympic Committees place a high priority on fidelity, effectiveness and efficiency</td>
</tr>
<tr>
<td>McPherson</td>
<td>records of the National Hockey League, 1950-51 1965-66</td>
<td>players, coaches and managers entering new organizations; star vs. marginal players; differential performance scores</td>
<td>organizational effectiveness: statistics re: games won and lost; goals scored; team standings; penalty minutes</td>
<td>the replacement of personnel by a sport organization will not guarantee greater effectiveness</td>
</tr>
</tbody>
</table>
Appendix B
SAMPLE OF ORGANIZATIONS

6. Canadian Amateur Synchronized Swimming Association
7. Canadian Boxing Association.
13. Canadian Figure Skating Association.
15. Canadian Ski Association (includes Ski Alpine, Ski Jump and Ski Cross Country).
17. Canadian Team Handball Federation.
18. Canadian Track and Field Association.
22. Canadian Women's Field Hockey Association.
25. Federation of Canadian Archers.
27. Shooting Federation of Canada.
APPENDIX C

FITNESS AND AMATEUR SPORT
SPORT CANADA

Organizational/Administrative Profile

A. GENERAL INFORMATION

1. Registered name of your National Organization _______________________

2. Date of Incorporation _______________________
   Day       Month       Year

3. Registered as a non-profit organization with Revenue Canada?
   (re: Tax receipts for donations) Yes No

4. Please enclose a copy of your constitution and bylaws.

5. Identify any amendments or additions which have been made to your constitution and bylaws in the past year.
B. ROLES & PRIORITIES

1. What are the long range objectives of your national organization (major priorities for the next 5 years)?

2. What are your organization's priorities for the upcoming fiscal year?
C. MEMBERSHIP & LEADERSHIP

1. Briefly describe the membership structure in your sport. Please cover the subject from grassroots to the international level.

2. What are the usual recurring and incremental costs paid by participants in your sport?
   - recreationist
   - junior competitor
   - national team competitor

3. Indicate the statistics requested on the next page, both provincially/territorially and in Total. Please be as accurate as possible.
### Membership/Leadership Statistics

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<tbody>
<tr>
<td>(a) Provincial/Territorial Organization</td>
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<td>- indicate active SGBs</td>
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<td>- amount of financial support from Govt.</td>
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<td>- # of paid staff</td>
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<td>(b) Participation</td>
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<tr>
<td>- Nationally registered competitors</td>
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<td>Male - Jr.</td>
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<td>Female - Jr.</td>
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<td>- estimated total # of competitors</td>
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<td>Male - Jr.</td>
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<tr>
<td>Female - Jr.</td>
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<td></td>
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<tr>
<td>- estimated # of recreationists</td>
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</tr>
</tbody>
</table>


### Membership/Leadership Statistics

#### (c) Leadership

1. **Coaches**
   - Nationally registered (NCCP)
     - **L I**
     - **L II**
     - **L III**
     - **L IV**
     - **L V**
   - Estimated total (registered and unregistered)

2. **Officials**
   - Internationally registered
   - Nationally registered

3. **Full-time administrators**
   - # in each Prov/Terr.
4. Paid Staff:

(a) Indicate full-time staff employed by the NSGB since 1970.

<table>
<thead>
<tr>
<th>Function</th>
<th>Date of first Incumbent</th>
<th># of Incumbents</th>
<th>Name of Present Incumbent</th>
<th>Present Salary and Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FAS Contributions</td>
</tr>
<tr>
<td>Exec Dir.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tech Dir.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prg Coord</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nat'l Coach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Additional staffing proposed for the upcoming fiscal year.

(c) Long range (3-5 year) staffing plan.
MEMBERSHIP/LEADERSHIP

5. Please enclose written job descriptions for each paid staff member beyond that described in the constitution or bylaws.

6. Describe the schedule, format and content of your paid staff evaluation procedures.
MEMBERSHIP/LEADERSHIP

7. Organization Structure

(a) Please attach a description of your organization structure using charts or diagrams where possible.

(b) List the members of the National Board of Directors. Indicate Executive Committee members by (*) after the name.

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
<th>Address &amp; Tel. #</th>
</tr>
</thead>
</table>

(c) Enclose a written description of responsibilities for each Executive Committee member beyond that described in the constitution or bylaws.
MEMBERSHIP/LEADERSHIP

(d) Describe your committee structure indicating the major responsibilities and average time demand on chairpersons.

<table>
<thead>
<tr>
<th>Committee</th>
<th>Major Responsibilities</th>
<th>Schedule or Frequency of meetings</th>
<th>Time demand on Chairperson</th>
</tr>
</thead>
</table>

8. Describe any leadership training programs or courses undertaken last year:

(a) by your paid staff

(b) by volunteers with national responsibilities
D. PROMOTION & COMMUNICATION

1. Is your national organization active in developing participation in your sport?
   If yes, briefly describe the methods and programs used.

2. Indicate the type and frequency of communications initiated by the national organization (magazines, newsletters, special seminars, etc.) used to keep the membership, sponsors, and general public informed of developments in your sport.

<table>
<thead>
<tr>
<th>Title</th>
<th>Frequency of Production</th>
<th>Target Audience</th>
</tr>
</thead>
</table>

3. Does your organization publish a procedure manual to direct and inform members and others of administrative and financial requirements related to programs of the national organization. If so, please attach copies and/or updates.
E. FINANCES

1. The latest audited financial statement at FAS for your organization is:

   Title       Dated

Please attach a copy of your latest statements if they are more recent than the above.

2. Describe the normal procedures for financial control in the organization, including:

   a) Who approves the organization's financial policies and decisions?

   b) Who exercises day-to-day control over finances?

   c) What are the organization's bookkeeping procedures?

   d) What is the format and frequency of financial reporting? To whom are these reports communicated on a regular basis?

   e) What are the normal procedures for monitoring expenditures on projects funded by the organization?

   f) What are your planning and budgetting procedures and timetables?
3. Are you anticipating any significant new program initiatives in the next year? In the next 3-5 years? Please be specific.
## I. TECHNICAL STAFF

1.1 List names and titles of all professional technical staff other than coaches who are employed by the national sport governing body:

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
<th>SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>FAS</td>
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</table>

salary (s); honoraria (h)

## II. COACHING DEVELOPMENT

2.1 List names and titles of all professional staff employed by national sport governing bodies in a coaching capacity:

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
<th>SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>FAS</td>
</tr>
</tbody>
</table>

salary (s); honoraria (h)
2.2 Identify and list the basic duties of the individual who is responsible for the supervision of national team training and competition:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2.3 Provide details of activity in areas of Coaching Certification:

2.3.1 Level of completed Technical Manual -

2.3.2 Number of coaches certified at each technical level -

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
</table>

2.4 Provide details of any activity in the areas of:

2.4.1 CAC Coaches Apprenticeship Program

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2.4.2 CAC Masters Scholarship Program

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2.4.3 Sport Specific Coaching Development Programs other than those sponsored by the CAC

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
III. ATHLETE DEVELOPMENT

3.1 Profile of sports AAP status for the past four years:

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<tr>
<th></th>
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<tbody>
<tr>
<td>A</td>
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<td>B</td>
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<tr>
<td>C</td>
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</tbody>
</table>

3.2 Describe basic structure and operations of your sport's national team (centralization, clubs, interim centralization, etc.):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3.3 Attach to this Profile the most recent National Team documentation in the following areas:

3.3.1 Athlete's Contract
3.3.2 National Team Competitive Program 1980-81
3.3.3 Selection Criteria for AAP
3.3.4 National Team Testing Program
3.3.5 National Team Special Needs Requests
3.4 Describe the basic structure and controls for your sport's national junior team or talent squad program (selection, supervision, evaluation). Attach additional documentation if required:


IV. OFFICIALS DEVELOPMENT

4.1 Describe the educational program (including courses, written materials, international experiences, etc.) used to develop Canadian officials in your sport:


4.2 List the number of Canadian Officials qualified in each of the national and international officials categories:

<table>
<thead>
<tr>
<th>DOMESTIC CATEGORIES</th>
<th># OF CANADIANS QUALIFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERNATIONAL CATEGORIES</th>
<th># OF CANADIANS QUALIFIED</th>
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</thead>
<tbody>
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<td>3.</td>
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<td>4.</td>
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</tbody>
</table>
TECHNICAL COMMITTEES AND FUNCTIONS

5.1 List the names and basic functions of each technical committee or role associated with your sport (officials, medical, research, coaches, etc.):

<table>
<thead>
<tr>
<th>NAME</th>
<th>FUNCTION</th>
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</tbody>
</table>

5.2 Attach to this document the organization chart and mandate of each of the above committees.
VI. ANALYSIS OF SPORT

6.1 National Championships

6.1.1 List all the events and age categories in which a national championship is held.

6.1.2 List current Canadian Champion in each event.

6.1.3 List Canadian world record and leading country in each event where applicable.

<table>
<thead>
<tr>
<th>EVENT</th>
<th>CANADIAN CHAMPION</th>
<th>CANADIAN RECORD</th>
<th>WORLD RECORD</th>
<th>COUNTRY</th>
</tr>
</thead>
</table>

Code Events in Olympics with (O)

6.2 List the major games and fixtures which will comprise your basic competitive program for the next quadrennial (include approximate dates).

6.2.1 Domestic:

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<tbody>
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</table>
6.2.2 International:

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</tbody>
</table>

VII. TECHNICAL PROGRAMS OF SPORT

7.1 Provide a brief explanation of your association's activities in the following technical program areas (including any others that you are involved with):

RESEARCH

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

TESTING

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

TALENT IDENTIFICATION

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX E
SUPPLEMENTARY QUESTIONNAIRE
TO THE EXECUTIVE DIRECTORS

(1) What was the world ranking of your sport in:
   (a) The world championships held since 1980?
       __________ (rank) ___________ (year)
       How many competing countries were there?
       __________
   (b) The world championships held between 1976-1980?
       __________ (rank) ___________ (year)
       How many competing countries were there?
       __________
   (c) The world championships held between 1972-1976?
       __________ (rank) ___________ (year)
       How many competing countries were there?
       __________

(2) How are the world rankings calculated for your sport?

(3) How many people sit on your national board (or comparable structure)?
     __________
     How many of these are paid staff? __________
     What positions do not have voting privileges?

(4) How many people sit on your executive board (or comparable structure)?
     __________
     How many of these are paid staff? __________
     What positions do not have voting privileges?
(5) How many committees does your national association have? __________

What are the titles of these committees?

(6) In the space provided, please name the position or committee which is responsible for making final decisions regarding:

a) budgets __________

b) policies and goals __________

c) personnel __________

d) new programs __________

e) promotions __________

(7) Please identify the highest level of education attained by national board members:

a) Volunteers:

i) how many have graduate degrees? ______

ii) how many have undergraduate degrees? ______

iii) how many have high school diplomas? ______

iv) how many have less than a high school diploma? ______

b) Paid Staff: (not including Clerical staff)

i) how many have a graduate degree? ______

ii) how many have a undergraduate degree? ______

iii) how many have a high school diploma? ______

iv) how many have less than a high school diploma? ______
During 1981-1982, did national board members undertake any training to improve administrative skills? If yes, please identify the number and types of training:

a) Volunteers:

b) Paid Staff:

Without identifying names, please specify approximately how many years each volunteer board member has been involved in national board roles?

Member #1: _____yrs.  Member #6: _____yrs.  Member #11: _____yrs.

Member #2: _____yrs.  Member #7: _____yrs.  Member #12: _____yrs.

Member #3: _____yrs.  Member #8: _____yrs.  Member #13: _____yrs.

Member #4: _____yrs.  Member #9: _____yrs.  Member #14: _____yrs.

Member #5: _____yrs.  Member #10: _____yrs.  Member #15: _____yrs.

Approximately, what is the total membership of your national association? How are total membership figures derived? (eg. what are your membership categories?)

How many full time _____ and part time _____ clerical staff work for your national association?

During 1981-82, how many researchers consulted for your national team or association? _________

During 1981-82, was any money spent by your association on research? _______. If yes, approximately how much? _________

THANK YOU VERY MUCH FOR YOUR TIME AND ASSISTANCE IN THIS PROJECT
## Appendix F

### DESCRIPTIVE STATISTICS FOR THE CONTEXTUAL VARIABLES

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MEAN</th>
<th>STD. DEV.</th>
<th>RANGE</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGANIZATIONAL SIZE</td>
<td>23,442</td>
<td>52,389</td>
<td>224,991</td>
<td>26</td>
</tr>
<tr>
<td>ORGANIZATIONAL AGE</td>
<td>21</td>
<td>19</td>
<td>62</td>
<td>27</td>
</tr>
</tbody>
</table>

### TECHNOLOGICAL EXPERTISE

- a) No. Sport Scientists Consulted
  - Mean: 1.3
  - Std. Dev.: 1.4
  - Range: 5
  - N: 26
- b) No. Technically Certified Coaches
  - Mean: 1,363
  - Std. Dev.: 2,388
  - Range: 9,867
  - N: 27

### DEPENDENCE ON FAS FOR FINANCIAL SUPPORT (%)
- Mean: 70
- Std. Dev.: 17
- Range: 78
- N: 28
## Appendix G

### DESCRIPTIVE STATISTICS FOR THE STRUCTURAL VARIABLES

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MEAN</th>
<th>STD. DEV.</th>
<th>RANGE</th>
<th>N (TOTAL=29)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FORMALIZATION</strong></td>
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<td></td>
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</tr>
<tr>
<td>1. Publications</td>
<td>61.7</td>
<td>154.6</td>
<td>803.0</td>
<td>28</td>
</tr>
<tr>
<td>2. Constitutions</td>
<td>7040.7</td>
<td>7469.8</td>
<td>33272.0</td>
<td>28</td>
</tr>
<tr>
<td>3. Job Descriptions</td>
<td>2844.2</td>
<td>2184.2</td>
<td>10900.0</td>
<td>26</td>
</tr>
<tr>
<td><strong>CENTRALIZATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Budget Decisions</td>
<td>2.8</td>
<td>0.9</td>
<td>2.0</td>
<td>27</td>
</tr>
<tr>
<td>5. Policy Decisions</td>
<td>2.6</td>
<td>0.8</td>
<td>0.8</td>
<td>27</td>
</tr>
<tr>
<td>6. Personnel Decisions</td>
<td>3.1</td>
<td>1.0</td>
<td>3.0</td>
<td>27</td>
</tr>
<tr>
<td>7. New Program Decisions</td>
<td>2.9</td>
<td>0.8</td>
<td>2.0</td>
<td>27</td>
</tr>
<tr>
<td>8. Promotion Decisions</td>
<td>3.2</td>
<td>0.9</td>
<td>3.0</td>
<td>27</td>
</tr>
<tr>
<td>9. Total Centralization</td>
<td>14.4</td>
<td>3.3</td>
<td>10.0</td>
<td>27</td>
</tr>
<tr>
<td><strong>IMPERSONALITY</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>10. Formality of Evaluation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Procedures</td>
<td>2.2</td>
<td>0.9</td>
<td>3.0</td>
<td>26</td>
</tr>
<tr>
<td><strong>SPECIALIZATION</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>11. Board Member Roles</td>
<td>16.5</td>
<td>11.5</td>
<td>54.0</td>
<td>29</td>
</tr>
<tr>
<td>12. Executive Member Roles</td>
<td>6.6</td>
<td>3.9</td>
<td>17.0</td>
<td>29</td>
</tr>
<tr>
<td>13. Salaried Program Staff</td>
<td>3.8</td>
<td>4.1</td>
<td>22.0</td>
<td>29</td>
</tr>
<tr>
<td>14. Committees</td>
<td>10.2</td>
<td>6.8</td>
<td>47.5</td>
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<td>16. Total Specialization</td>
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<td><strong>CLERICAL RATIO</strong></td>
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<td>17. Clerical Ratio</td>
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<td><strong>PROFESSIONALISM</strong></td>
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<td>18. Voluntary Educational</td>
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<td>20. Salaried Program Staff</td>
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<td>Turnover Rate</td>
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<td>21. Mean Years of Voluntary</td>
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<td>Executive Involvement</td>
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<td>4.6</td>
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Appendix H

DESCRIPTIVE STATISTICS FOR THE EFFECTIVENESS VARIABLES

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<th>VARIABLE</th>
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<th>STD. DEV.</th>
<th>RANGE</th>
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