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Pages 195-201, 203,

205-207.
THE PERCEIVED STATUS OF FEMALE ATHLETES BY MALE
AND FEMALE ATHLETES AND NON-ATHLETES
IN CANADA AND THE UNITED STATES

by

Roy Paul Holman

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Greensboro
1978

Approved by

Dissertation Adviser
This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Dissertation Adviser

Committee Members

Date of Acceptance by Committee

July 10, 1978
The primary purpose of this study was to investigate the perceived status of the American high-school female athlete as compared to the perceived status of the Canadian high-school female athlete. Of secondary concern was the investigation of the status of the high-school female athlete as perceived by high-school female athletes and non-athletes and male athletes and non-athletes, and the comparison of the perceived status of the high-school female athlete with that of the female scholar and cheerleader. Subjects participating in this study were 531 students from two high schools in Thunder Bay, Ontario, Canada and 532 students from two high schools in Greensboro, North Carolina.

The subjects responded to a two-part test packet. The first part consisted of a semantic differential investigating the concepts: "girl athlete," "girl scholar" and "girl cheerleader." The second part of the packet consisted of a background questionnaire.

Data were examined through three analytic procedures: (a) profile analysis, to ascertain American and Canadian perceptions of the concepts; (b) calculation of D matrices by means of the geometric general distance formula; and (c) the construction of D models from these matrices, to give a visual comparison of perceptions of the concepts to each other and the origin, or the center of semantic space.
Results showed that the total American high-school sample, as well as each of its subgroups (female athletes and non-athletes, and male athletes and non-athletes) had a less well defined and less favorable perception of the high-school female athlete than had the Canadian high-school sample and each of its corresponding subgroups. Also, of the three concepts, "girl cheerleader" had the most favorable and sharply defined perception of meaning for the American and Canadian high-school students. For the Americans, "girl scholar" was the next most favorable and well defined concept and "girl athlete" was the least. For the Canadians, "girl athlete" was the next most favorable and sharply defined concept and "girl scholar" was the least. This indicated that the high-school female athlete was perceived lowest in status, when compared with the female scholar and cheerleader by the American high school students and she was perceived above the female scholar and below the cheerleader in status by the Canadian high school students.
ACKNOWLEDGEMENTS

The writer would like to express his appreciation to Dr. Celeste Ulrich, his adviser, for her encouragement, guidance, and understanding from the initial to the final stage of this research problem. Gratitude is also extended to committee members: Dr. Margaret Mordy, Dr. Rosemary McGee, Dr. Gail Hennis, and Dr. William Noland for their assistance in overseeing this study. A special thanks is also expressed to Kathy Martinek for her patience and understanding in typing the final copy of this study. Lastly, the writer would like to thank his wife, Karen, without whose love and support this study would have not taken place.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROVAL PAGE</td>
<td></td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td></td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td></td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

### CHAPTER

#### I. INTRODUCTION

- Statement of the Problem | 4 |
- Primary | 4 |
- Secondary | 4 |
- Definition of Terms | 5 |
- Assumptions of the Study | 5 |
- Scope of the Study | 6 |
- Significance of the Study | 7 |

#### II. REVIEW OF THE RELATED LITERATURE

- Comparison of Canada and the United States | 10 |
- Cultural Assessment | 10 |
- Education | 14 |
- Sport | 15 |
- Canadian and American Women in Sport | 19 |
- Perceptions Regarding Women's Role | 22 |
- Perceptions of Women's Role in Society | 22 |
- Changing Role of Women | 25 |
- Perceptions of Self and Others | 27 |
- Implications of Role for the Adolescent | 31 |
- Peer Importance in Adolescence | 31 |
- Athletics in the Adolescent Status System | 36 |
- The Status of the Girl Athlete in the Adolescent Society | 40 |
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women in Sport</td>
<td>43</td>
</tr>
<tr>
<td>An Overview</td>
<td>43</td>
</tr>
<tr>
<td>Changing Attitudes Toward Women in Sport</td>
<td>47</td>
</tr>
<tr>
<td>Perception of the Female Athlete</td>
<td>50</td>
</tr>
<tr>
<td>Conflict Between the Female Athlete, the Female Stereotype, and the Feminine Image</td>
<td>57</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>62</td>
</tr>
</tbody>
</table>

### III. PROCEDURES

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of Communities</td>
<td>63</td>
</tr>
<tr>
<td>Selection of High Schools</td>
<td>64</td>
</tr>
<tr>
<td>Selection of Subjects</td>
<td>66</td>
</tr>
<tr>
<td>Organization and Testing</td>
<td>66</td>
</tr>
<tr>
<td>Selection of the Semantic Differential</td>
<td>67</td>
</tr>
<tr>
<td>Rationale</td>
<td>67</td>
</tr>
<tr>
<td>Previous Studies</td>
<td>71</td>
</tr>
<tr>
<td>Format</td>
<td>72</td>
</tr>
<tr>
<td>Griffin's Semantic Differential</td>
<td>73</td>
</tr>
<tr>
<td>Background Questionnaire</td>
<td>75</td>
</tr>
<tr>
<td>Analysis of Data</td>
<td>75</td>
</tr>
<tr>
<td>Profile Analysis</td>
<td>76</td>
</tr>
<tr>
<td>D Matrix and D Model</td>
<td>77</td>
</tr>
</tbody>
</table>

### IV. DATA AND ANALYSIS

<table>
<thead>
<tr>
<th>Data and Analysis</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of &quot;Girl Athlete&quot; by Canadian and American High-School Students</td>
<td>79</td>
</tr>
<tr>
<td>Profile Analysis</td>
<td>79</td>
</tr>
<tr>
<td>Differences Among Factors on the Perceptions of &quot;Girl Athlete&quot;</td>
<td>86</td>
</tr>
<tr>
<td>D Matrix and D Models in Semantic Space</td>
<td>93</td>
</tr>
<tr>
<td>Perceptions of &quot;Girl Athlete&quot; by Canadian and American High-School Female Athletes</td>
<td>97</td>
</tr>
<tr>
<td>Profile Analysis</td>
<td>97</td>
</tr>
<tr>
<td>D Matrix and D Models in Semantic Space</td>
<td>100</td>
</tr>
<tr>
<td>Perceptions of &quot;Girl Athlete&quot; by Canadian and American High-School Female Non-athletes</td>
<td>103</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>Profile Analysis</td>
<td>103</td>
</tr>
<tr>
<td>D Matrix and D Models in Semantic Space</td>
<td>106</td>
</tr>
<tr>
<td>Perceptions of &quot;Girl Athlete&quot; by Canadian and American High-School Male Athletes</td>
<td>108</td>
</tr>
<tr>
<td>Profile Analysis</td>
<td>108</td>
</tr>
<tr>
<td>D Matrix and D Models in Semantic Space</td>
<td>111</td>
</tr>
<tr>
<td>Perceptions of &quot;Girl Athlete&quot; by Canadian and American High-School Male Non-athletes</td>
<td>113</td>
</tr>
<tr>
<td>Profile Analysis</td>
<td>113</td>
</tr>
<tr>
<td>D Matrix and D Models in Semantic Space</td>
<td>116</td>
</tr>
<tr>
<td>Perceptions of the Three Concepts by the Total American High-School Sample</td>
<td>116</td>
</tr>
<tr>
<td>Profile Analysis</td>
<td>116</td>
</tr>
<tr>
<td>Perceptions of the Three Concepts by the Total Canadian High-School Sample</td>
<td>124</td>
</tr>
<tr>
<td>Profile Analysis</td>
<td>124</td>
</tr>
<tr>
<td>Differences Among Factors on the Perceptions of the Three Concepts by American and Canadian High-School Students</td>
<td>131</td>
</tr>
<tr>
<td>D Matrix and D Models in Semantic Space for the Perceptions of the Three Concepts by Canadian and American High-School Students</td>
<td>136</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>140</td>
</tr>
<tr>
<td>Discussion</td>
<td>145</td>
</tr>
<tr>
<td>V. SUMMARY AND CONCLUSIONS</td>
<td>155</td>
</tr>
<tr>
<td>Summary</td>
<td>155</td>
</tr>
<tr>
<td>Purpose</td>
<td>155</td>
</tr>
<tr>
<td>Primary</td>
<td>155</td>
</tr>
<tr>
<td>Secondary</td>
<td>155</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Procedures</td>
<td>155</td>
</tr>
<tr>
<td>Review of literature</td>
<td>155</td>
</tr>
<tr>
<td>Selection of Subjects and Data-Gathering</td>
<td>157</td>
</tr>
<tr>
<td>Analysis of Data</td>
<td>158</td>
</tr>
<tr>
<td>Conclusions</td>
<td>158</td>
</tr>
<tr>
<td>Suggestions for Future Study</td>
<td>162</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>165</td>
</tr>
<tr>
<td>APPENDIXES</td>
<td>178</td>
</tr>
<tr>
<td>APPENDIX A Correspondence</td>
<td>179</td>
</tr>
<tr>
<td>APPENDIX B Sample Tally Sheet</td>
<td>191</td>
</tr>
<tr>
<td>APPENDIX C Sample Test Packet</td>
<td>193</td>
</tr>
<tr>
<td>APPENDIX D Generalized Distance Formula for D Matrix and D Model</td>
<td>202</td>
</tr>
<tr>
<td>APPENDIX E Instrument for Scoring Purposes</td>
<td>204</td>
</tr>
<tr>
<td>Table</td>
<td>Title</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>Population, Sex, and Race Comparison of High Schools</td>
</tr>
<tr>
<td>2.</td>
<td>Scale Means of Canadian Sample for Concept &quot;Girl Athlete&quot;</td>
</tr>
<tr>
<td>3.</td>
<td>Scale Means of American Sample for Concept &quot;Girl Athlete&quot;</td>
</tr>
<tr>
<td>4.</td>
<td>Factor Means for the Concept &quot;Girl Athlete&quot; as Held by the Total Canadian and American High-School Samples</td>
</tr>
<tr>
<td>5.</td>
<td>Factor Means for the Concept &quot;Girl Athlete&quot; as Held by Canadian and American High-School Female Athletes</td>
</tr>
<tr>
<td>6.</td>
<td>Factor Means for the Concept &quot;Girl Athlete&quot; as Held by Canadian and American High-School Female Non-athletes</td>
</tr>
<tr>
<td>7.</td>
<td>Factor Means for the Concept &quot;Girl Athlete&quot; as Held by Canadian and American High-School Male Athletes</td>
</tr>
<tr>
<td>8.</td>
<td>Factor Means for the Concept &quot;Girl Athlete&quot; as Held by Canadian and American High-School Male Non-athletes</td>
</tr>
<tr>
<td>9.</td>
<td>D Matrix of the Concept &quot;Girl Athlete&quot; as Held by the Total Canadian and American Samples</td>
</tr>
<tr>
<td>10.</td>
<td>D Matrices of the Concept &quot;Girl Athlete&quot; as Held by Canadian and American High-School Students</td>
</tr>
<tr>
<td>11.</td>
<td>Scale Means of American Sample for Concept &quot;Girl Scholar&quot;</td>
</tr>
<tr>
<td>12.</td>
<td>Scale Means of American Sample for Concept &quot;Girl Cheerleader&quot;</td>
</tr>
<tr>
<td>13.</td>
<td>Scale Means of Canadian Sample for Concept &quot;Girl Scholar&quot;</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>14</td>
<td>Scale Means of Canadian Sample for Concept &quot;Girl Cheerleader&quot;</td>
</tr>
<tr>
<td>15</td>
<td>Factor Means of the Three Concepts as Held by the Total Canadian High-School Sample</td>
</tr>
<tr>
<td>16</td>
<td>Factor Means of the Three Concepts as Held by the Total American High-School Sample</td>
</tr>
<tr>
<td>17</td>
<td>Concepts Ranked According to Factor Means for the Total Canadian and American High-School Samples</td>
</tr>
<tr>
<td>18</td>
<td>D Matrix of Concepts as Held by the Total Canadian Sample</td>
</tr>
<tr>
<td>19</td>
<td>D Matrix of Concepts as Held by the Total American Sample</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Assigned Values for Interpretation of Scale Means</td>
<td>82</td>
</tr>
<tr>
<td>2.</td>
<td>Comparison of Profiles of Total Canadian and American High-School Samples for the Concept &quot;Girl Athlete&quot;</td>
<td>83</td>
</tr>
<tr>
<td>3.</td>
<td>D Model on a Three Dimensional Grid of the Perceptions of &quot;Girl Athlete&quot;</td>
<td>95</td>
</tr>
<tr>
<td>4.</td>
<td>Constructed D Model of Canadian and American High-School Students' Perceptions of &quot;Girl Athlete&quot;</td>
<td>96</td>
</tr>
<tr>
<td>5.</td>
<td>Comparison of Profiles of Canadian and American High-School Female Athletes for the Concept &quot;Girl Athlete&quot;</td>
<td>98</td>
</tr>
<tr>
<td>6.</td>
<td>Constructed D Model of Canadian and American High-School Female Athletes' Perceptions of &quot;Girl Athlete&quot;</td>
<td>102</td>
</tr>
<tr>
<td>7.</td>
<td>Comparison of Profiles of Canadian and American High-School Female Non-athletes for the Concept &quot;Girl Athlete&quot;</td>
<td>105</td>
</tr>
<tr>
<td>8.</td>
<td>Constructed D Model of Canadian and American High-School Female Non-athletes' Perceptions of &quot;Girl Athlete&quot;</td>
<td>107</td>
</tr>
<tr>
<td>9.</td>
<td>Comparison of Profiles of Canadian and American High-School Male Athletes for the Concept &quot;Girl Athlete&quot;</td>
<td>109</td>
</tr>
<tr>
<td>10.</td>
<td>Constructed D Model of Canadian and American High-School Male Athletes' Perceptions of &quot;Girl Athlete&quot;</td>
<td>112</td>
</tr>
<tr>
<td>11.</td>
<td>Comparison of Profiles of Canadian and American High-School Male Non-athletes for the Concept &quot;Girl Athlete&quot;</td>
<td>114</td>
</tr>
<tr>
<td>12.</td>
<td>Constructed D Model of Canadian and American High-School Male Non-athletes' Perceptions of &quot;Girl Athlete&quot;</td>
<td>117</td>
</tr>
<tr>
<td>FIGURE</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>13.</td>
<td>Comparison of Profiles of the Three Concepts as Held by the Total American</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>High-School Sample</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Comparison of the Three Concepts as Held by the Total Canadian High-School</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Sample</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>D Model on a Three Dimensional Grid of the Perceptions of the Three Concepts</td>
<td>138</td>
</tr>
<tr>
<td>16.</td>
<td>Constructed D Model of Canadian High School Students' Perceptions of the</td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>Three Concepts</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Constructed D Model of American High School Students' Perceptions of the</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>Three Concepts</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

James Coleman in 1961 published the results of a study entitled *The Adolescent Society: The Social Life of the Teenager and its Impact on Education*. The study investigated among other things the adolescent culture, the value climates of high schools, psychological effects of the social system, scholastic effects of the social system, sources of the adolescent value systems, and adolescence and secondary education in modern society. One of the most striking findings of this research was the similarity of the responses of the students of all ten high schools studied with regard to the importance attached to athletics. Greater similarity among the school populations was found in this variable than in any other dimension of the research. As Coleman stated:

> More attention is paid to athletics by teenagers both as athletes and spectators than to scholastic matters. A stranger might also suppose that the school was essentially organized around athletic contests and that scholastic matters were of lesser importance to all involved. (Coleman, 1961a, p. 36)

In this statement, as well as in almost all of his references to athletics, Coleman is referring to boys' athletics. The following areas investigated support this conjecture: athletics in the status system, athletics among the elites, social rewards for athletes and scholars, athletics as the
organizer of freshman leading cliques, and interscholastic athletics and the structure of activities in a school. Coleman devoted a great deal of attention to the status of the interscholastic male athlete as ascribed by his peers and as discerned in the social stratification system. No mention was made of how the female athlete was perceived by her peers. As a matter of fact, there was no reference to the female athlete at all. The data for Coleman's research were collected in 1957 and 1958. At that time female interscholastic athletics had limited offerings, received little attention, and the social attitude may have been one that did not condone or was not interested in such activity for adolescent girls. The lack of information on the status of girls' interscholastic athletics is an obvious omission in Coleman's research.

Eitzen (1975) repeated Coleman's study but he too was concerned only about the importance of athletics in the male adolescent status system. The research report stated that information was attained from girls but not reported at that time. The status of girls' interscholastic athletics and the status of the adolescent female were ignored in the data analysis.

Researchers such as Brown, 1965; Griffin, 1972; Hall, 1972; Rector, 1972; Small, 1973; Tyler, 1973; LeGrand, 1976; and Bird and McCullough, 1977; have examined the female athlete with reference to femininity, perceptions of women's roles and female sport involvement. These studies were
conducted on college populations. Little research has been done with special attention directed toward the status of the pre-college age adolescent female athlete.

Sherriff (1969) in a study of the status of female athletes as viewed by selected peers and parents in certain high schools in central California found that generally respondents were not favorable towards female athletic competition. However, 95 per cent of those questioned thought girls and women should have opportunities to compete. Sherriff also noted that the female athlete was socially accepted by both parents and peers. McGee (1956) found that parents seemed to be in favor of intensive athletic competition for high-school girls.

Buhrmann and Jarvis (1971), in an investigation of rural and small town Iowa high schools, reported that where girls' athletics were an important, valued and integral part of high-school programs, girl athletes received consistently higher status ratings from their male and female peers, as well as teachers, than non-athletes. The researchers concluded that athletics at the institutions included in their study served as a vital medium in status achievement for the adolescent high-school girl. In a similar study conducted in rural and small town Alberta high schools, Buhrmann and Bratton (1977) found that girl athletes are substantially more popular than non-athletes with their male and female peers and are more often members of the leading crowd as perceived by their peers and teachers.
The emphasis being given to female athletics through the media, the changing social patterns, and the legal mandate of Title IX of the Omnibus Education Act of 1972, led this researcher to study the status of the adolescent female athlete.

Statement of the Problem

The purpose of this study was to investigate the perceived status of American and Canadian adolescent female athletes. The questions to be answered were:

Primary

What is the perceived status of the American high-school female athlete as compared to the perceived status of the Canadian high-school female athlete?

Secondary

1. What is the self-perceived status of the high-school female athlete?

2. What is the status of the high-school female athlete as perceived by high-school female non-athletes?

3. What is the status of the high-school female athlete as perceived by high-school male athletes?

4. What is the status of the high-school female athlete as perceived by high-school male non-athletes?

5. How does the perceived status of the high-school female athlete compare to the perceived status of the high-school female scholar and the high-school female cheerleader?
Definition of Terms

1. Athlete: A student who has been a member of an interscholastic team for at least one season at either the high school or junior high school level.

2. Non-athlete: A student who is not now, or never has been, a member of an interscholastic athletic team.

3. Interscholastic athletics: Teams organized for either team or individual sports which represent a school in organized competition with other schools.


Assumptions of the Study

Certain assumptions were made in this study:

1. Subjects in the study responded to the questionnaire and the semantic differential according to their true feelings.

2. Perceptions are considered representable, and therefore measurable by a paper-and-pencil test. The information in this study was gathered by questionnaire and the semantic differential developed by Griffin (1972).

3. The scales of Griffin's (1972) semantic differential are considered valid in measuring the perceptions of the concepts used in this study.

4. Griffin's (1972) semantic differential is reliable.
Scope of the Study

This study was concerned with the status of the high-school female athlete as perceived by herself and her peers in selected high schools in Canada and the United States. The study attempted to determine if differences in the perceptions of the female high-school athlete exist among American and Canadian high-school male and female athletes and non-athletes. The initial size of the sample was 1,063 subjects. The subjects were selected from the physical education classes of two Greensboro, North Carolina, U.S.A. and two Thunder Bay, Ontario, Canada high schools.

A semantic differential developed by Griffin (1972) was used to measure the status of the high-school female athlete.

The study was delimited by certain factors:

1. The semantic differential interprets the concept of meaning in a general way.

2. The nature of the research was delimited by time. Specifically, the data was collected in the winter of 1977-78.

3. The results of this research may have been influenced by the geographic region in which the high schools are located.

4. The results of the study may have been biased by the nature of the semantic differential used, by the testing conditions, and in the selection of subjects. Therefore, no attempt was made to generalize the results of this study to anything other than the high schools selected.
Significance of the Study

Investigations of the past have stated that perceptions of men's and women's roles are stereotyped. The woman is depicted as being "dependent, fragile, non-aggressive, non-competitive, yielding, receptive, supportive and emotionally pliable. The male is depicted as independent, aggressive, competitive, assertive, strong, enduring, courageous, active, disciplined, and emotionally controlled" (Ulrich, 1973, p. 113). Many researchers, Broverman, 1972; Steinmann, 1963; Whittington, 1968; and Small, 1973, have noted these stereotypical characteristics of the male and female roles in society. Other researchers, Brown, 1965; Cheska, 1970; Clark and Lantis, 1958; Gilbert and Williamson, 1973; Griffin, 1973; Rosenberg and Sutton-Smith, 1960; Hall, 1972; Harris, 1971a; and Hart, 1971, have shown the discrepancy or incompatibilities between the traits needed to be an athletic woman and a feminine, socially accepted woman. But with time, the stereotypical views of a woman's role are changing. Many factors support such a belief: the impact of the Women's Liberation Movement, the influx of women into professional careers, society's toleration and acceptance of women in such roles, and the increase of literature studying women's roles. If there is change in stereotypical assumptions, then it would follow that more roles are now considered alternatives for women than were available a decade ago. Therefore, one important aspect of the present study was to see how the
adolescent age group perceives the athletic girl's role. The study was structured to provide information for conjectures as to whether the role of the female athlete has changed from the stereotypical generalization men and women have had with regard to the women's role in society. Another aspect of this research was to see if there were any differences in adolescent boys' and girls' perceptions of the athletic girls' role.

Yet another significant aspect of the study was the comparison of the perceived status of high-school female athletes when nationalistic patterns are considered. Athletics, at all levels, is much more strongly emphasized in the United States than in Canada. Athletic scholarships for collegiate male athletes in the United States is an established practice, whereas, in Canada only two universities in the country offer athletic scholarships. Just recently, United States universities have begun to offer athletic scholarships to female athletes. As of yet this is not a widespread occurrence in Canadian universities. In addition, the United States mandates female athletic opportunity through the law. Therefore, part of the intrigue of the study was to see if the different emphases on athletics, as well as possible cultural and legal differences, were reflected in the perceived status of the American and Canadian female high-school athlete.

Another significant aspect of this study was made apparent because of Title IX of the Omnibus Education Act of 1972.
Equal opportunity for girls' interscholastic athletic programs in terms of money, facilities, time, schedules, and coaching are mandated by law for all schools which receive federal money. The total effects of this legislation have not yet been observed. Once girls are given the same opportunity and emphasis for interscholastic athletics as boys, the status of the high-school female athlete may reflect such legal endorsement in a positive manner. The improved status of high-school female athletes in the rural schools of Iowa, as a result of emphasis and opportunity, is a case in point (Gilbert and Williamson, 1973). Therefore, a study of the status of the female high-school athlete is needed now so that a replication can be conducted in five or ten years' time to ascertain the effects, if any, of legal legislative and social directives.
CHAPTER II
REVIEW OF THE RELATED LITERATURE

The nature of this study necessitated examining previous research and philosophical inquiries in a number of areas. A cultural assessment of the commonalities and differences in the areas of education, sport, and women and sport between Canada and the United States was important to this study. Perceptions of various women's roles by both men and women was important to this study. If and how gender-oriented roles are changing was also a very relevant consideration. Research on sex-role stereotyping and perception of self and others was also examined. In addition, peer importance in adolescence and athletics in the adolescent status system were also areas that had to be studied. Lastly, a general investigation of women in sport; and more specifically, changing attitudes toward women in sport, perceptions of the female, and the conflict between sport and the female image and stereotype were considered.

Comparison of Canada and the United States Cultural Assessment

Lipset (1973) completed a comparison between Canada and the United States, basing his observations on pattern variables originated by Parsons as a method for arranging the basic values of social systems. This procedure involved
perceiving the separate needs to the defined interests of
the larger group. He discovered a rather "consistent pattern
of differences between them" (Lipset, 1973, p. 4), even though
these two countries approximate each other more than any
other two countries in the world.

Canada is viewed as being less egalitarian, self-oriented,
universalistic and achievement-oriented than the United States,
but the variations in these values aren't really large. In
comparing the two countries, Lipset (1973) asserted:

Though many factors in the history of these nations
account for the variations between them, the following
factors may be singled out: Varying origins in their
political systems and national identities, varying
religious traditions, and varying frontier experiences.
In general terms, the value orientations of Canada
stem from a counterrevolutionary past, a need to dif­
ferentiate itself from the United States, the influence
of monarchical institutions, a dominant Anglican relig­
ious tradition, and a less individualistic and more
governmentally controlled expansion of the Canadian
than of the American frontier. (p. 5)

Lipset (1973) also suggests that Canada may be moving towards
a more achievement-oriented and egalitarian attitude.

The peoples of the two countries are modern mixes, blended
from primarily European overseas migration, which started in
the seventeenth century and still continues, augmented by
migrations from other continents. The largest minority in
each country is quite different from that of the other. In
Canada the greatest minority is the French and in the United
States, the Negroes. A comparison is that both are native
born; it is interesting to "...find that part of any large
American city in which 90 percent of the population is native-
born of native-born parents; it is a Negro district. Find it in Canada; it is French" (Hughes, 1964, p. 20).

A precise definition of the Canadian character is very difficult. In the last 100 years, almost as many people have left Canada as have arrived from other lands. In addition, the bilingual nature of Canada poses a special problem. On the basis of inadequate data, sociologists list the following traits of the Canadian national character:

It can be described succinctly as a conservative syndrome, made up of a tendency to be guided by tradition; to accept the decision-making functions of elites, many of whom virtually or actually inherit their positions; to put a strong emphasis on the maintenance of order and predictability. (Vallee and Whyte, 1968, p. 836)

Canada's strong ties with the past, and the bilingualism and cultural pluralism have prevented the establishment of a distinctive Canadian identity (Vallee and Whyte, 1968). This lack of a strong Canadian identity is changing due to the nationalistic younger generation. It was suggested by some that this feeling of nationalism will affect the dominant climate of opinion.

Another intriguing comparison is that when at home, the average Canadian appears to live approximately 50 miles from the United States-Canadian border. The average American lives many hundreds of miles from it, which may be one of the reasons why Canadians are more aware of American activities than Americans are of Canadian activities. Canadians have opinions about almost everything American; Americans are
not well enough informed to have many opinions about Canada. Canadians participate in the World Series, the Super Bowl and the American presidential elections. Canadian newspapers carry as much news from the United States as they do national news. Canadian conversation commonly centers around events happening in the United States. Americans have given Canadians a type of "national inferiority complex." Many Americans "...have taken Canada for granted, and many do wonder why Canadians haven't simply joined them to form a united, even more mighty nation of some sixty states and a few territories" (Zeigler, 1978, p. 7). It appears that Canada and the United States may slowly be changing their character, adopting some of the values formerly associated with the other.

Recently, the Canadian government took measures to reduce the amount of American input into many of the media areas in order to promote Canadian interests and talents. Radio and television networks must air a certain percentage of Canadian produced products, American advertising in Canadian publications has been reduced and some American magazines such as Time are unavailable in Canada. Cultural nationalism is becoming a strong force in Canada. The attitudes of the younger generation have influenced opinions. Evidence of this was shown by the readiness of the Trudeau government to legislate if necessary (it was not necessary) to bar the presence of American teams and more "imports" in Canadian professional football.
Education

Downey (1971) in a study of the residents of four geographic regions in the United States and one in Canada discovered they differed from each other in their perceptions of the functions of the public school. There were greater differences between Canada and any single American region than there were between any two American regions. Comparisons among all Canadians and all Americans revealed even greater differences. Canadians believed the public school should benefit the individual, whereas Americans felt it should benefit society. Canadians gave higher priority to knowledge, scholarly attitudes, creative skills, aesthetic appreciation, and morality as results of schooling. Downey (1971) explained the Canadian's priorities as follows:

Canada is less industrialized and, in some respects, less developed than the United States. Mass-communication—the easy popular way to information, culture, and entertainment—are not as much a part of the Canadian's life as they are of the American's. Perhaps Canadians feel that they still have to work for their information, their culture, and their leisure-time entertainment. (p. 214)

The same growth in higher education has occurred in both countries. The British influence on the higher education system in Canada is seen as the major reason for differences in the Canadian system from the United States system. The British system, until recently, was based on the opinion that only the elite should obtain training, whereas, in the United States the equalitarian ethos has emphasized universal educational opportunity. Canadian institutions of higher
education have more uniform standards of admission and graduation than American institutions. In addition, the entrance and academic standards are typically higher in Canadian institutions (Zeigler, 1978).

**Sport**

Sport in both Canada and the United States has been influenced by technological changes. Betts (1953) discussed the effects such inventions as the sewing machine, the telegraph, the Kodak camera and pneumatic tire had on the rise of sport in America. Jobling (1970) discussed the effects specialized industries had on the rise of sport in Canada, producing such items as pucks, curling stones, skis, and snowshoes. The increase in sport interest and participation has been paralleled in both countries with the United States holding the lead with respect to exposure, facilities, investment, and organization.

In the recent past, Canada has been trying to cope with the new world of sport. In 1961, Bill C-131 was passed by the federal government giving up to five million dollars annually for the promotion of amateur and fitness sport. A single governing body was formed—The Fitness and Amateur Sport Directorate. Two controlling bodies have emerged from this, both answerable to the Minister of Health and Welfare—Sport Canada and Recreation Canada. All the sport-governing bodies were put in a national sports administrative center in Ottawa. Substantial government funds were made available
for the staging of "national sports championships, regional and national coaching and training camps, international sports competitions, both abroad and at home, and the recent government-inspired Canada summer and winter games" (Macintosh, 1973, p. 4). The government also provided monies to promising athletes in the form of grants-in-aid to further education. The federal government of Canada feels it has a major responsibility to promote and foster sport as a positive means of national unity and as an instrument projecting the Canadian image abroad.

The United States government as yet has not taken such drastic steps to become involved in sport. The government has had to mediate the bitter disputes arising from the power struggle between the Amateur Athletic Union and the National Collegiate Athletic Association over control of Olympic selections. Presently Senate Bill 2727—the Amateur Sports Act of 1978—addresses governmental organization of amateur sport in the United States. The bill is yet to be passed by the House of Representatives.

The results of the Kraus-Weber report, indicating the children of the United States were not as fit as they were thought to be led to the formation of the President's Council on Physical Fitness and Sports in 1956. This was a national promotional and advisory body formed to make the nation aware of the importance of fitness.
In 1959 Senate Bill 2727 was passed to improve the quality of education in the United States. The bill called for improving curriculum, raising standards of scholarship expected of students, and improving the quality of teaching. An important facet of this bill pointed to the need for physical education facilities of all kinds. This bill recommended making the Committee on Education, established by the Act of July 26, 1954, advisory to the President and available to the states for consultation, as a means of improving the quality of education. Generally, the United States government has left sport to the sport-governing bodies of the country.

Intercollegiate competition in Canada is administered along lines similar to the United States but with important differences. Until the present, Canadian universities, with a few exceptions, have resisted the temptation to offer athletic scholarships. The government grants-in-aid mentioned earlier are few and not accessible to any but top-caliber athletes. Very few coaches are employed on a full-time basis. Most coaches are expected to teach courses in physical education departments. Competition in Canadian universities is hindered by the size of the country, the available institutions of higher education, and the severe winter weather. A big difference is the large amount of publicity and attention given to American intercollegiate athletics, as compared to Canadian intercollegiate athletics.
Some of these differences are apparent when comparing interscholastic athletics in Canada and the United States. High school coaches in Canada are teachers who have "volunteered" their services as coaches. "They are expected to coach and receive no remuneration for it" (Cosentino, 1973, p. 4). The high-school athlete in the United States receives publicity that the Canadian high school athlete does not. High-school athletics in the United States is covered by national sports magazines, as well as, the local newspapers. Results of high-school competitions, all-star teams and articles on high-school athletes of national caliber are carried in these periodicals. The coverage of the Canadian high school athlete usually ends with the high-school column of the local newspaper. Also, the American community support for the high school program is much greater than that present in Canada.

American communities identify with "their" team. It is not uncommon to see a large number of adults mixed with students at high school athletic contests. In most Canadian schools, it is uncommon to see a large number of students in attendance. (Jerome and Phillips, 1976, p. 126)

Studies reviewed earlier (Coleman, 1961a; and Eitzen, 1975) showed that athletic success was clearly one of the best ways to attain status in the American high school. In Canadian high school, the athlete is in the limelight, but to a lesser degree, and his acceptance into the leading crowd also depends upon his academic capabilities. There definitely
appears to be a difference in rewards and recognition between the two countries for participation in interscholastic athletics.

Friesen (1976) ranked the priority of values for American adolescents as athletics, popularity, and academic achievement. He hypothesized that the same would be true for Canadian adolescents. His hypothesis was rejected and Canadian high school students' priorities were in the order of academic achievement, popularity, and athletics.

Canadian and American Women in Sport

The general state of affairs for women in the United States paints a much brighter picture than it does for Canadian women. For instance, in Canada gender is a clearer indicator of where men and women will be located in the labor force than it is in American society. While more women than ever are employed and are entering some lower-level occupations formerly restricted to men, the proportion of women in professional occupations has declined in the 30 years from 1931 to 1961. During this time, women's earnings were about half that of men's earnings.

The women in sport in the United States are also in a much better situation than their counterparts north of the border. The Royal Commission on the Status of Women in Canada (1970) made a report stating that women should no longer be given second-degree status in terms of the number of sports they participate in and the rate of participation.
It was time to offer the same extent of athletic opportunities that had always been available to the men. Since this report was issued nothing has really been done to improve the plight of the woman athlete in Canada. Frank Cosentino (1973) lamented the neglect shown towards Canadian sports heroes in the schools. Instead, the students learn more about American sports figures. He states:

While this is general of Canadian sports, it is even of more immediate concern in the field of women in sport. Our young girls are given the impression that sport is to be indulged in at a very early age but is to be dropped as "unladylike" after sixteen. With very few female athlete models exposed to the students, there is little to convince them sport is indeed "ladylike". (p. 5)

Young aspiring female athletes in the United States do have many more role models to emulate than young Canadian female athletes.

Keyes (1974) presented this dismal view of the future for the Canadian Women's Intercollegiate Athletic Union (CWIAU):

To gaze into the crystal ball is foolhardy at the best of times, but when the universities across the country are experiencing lower student enrollments and more than 80 per cent of the funds for intercollegiate programs is obtained from student athletic fees, it would be insane to be too optimistic for the future. (p. 32)

Canadian university women in sport are categorized by Zeigler (1978) as being at the second- and third-class levels.

In the United States the situation is much different. Women in sport are experiencing an incredible boom in their field. For several years, there has been a move to improve athletic programs for girls.
The passing of Title IX has been able to aid and accelerate the development of girls' athletic programs. Title IX is based on the premise that all activities in educational programs have equal benefit for both sexes. Section S6.11 of the Title IX Regulation states that an institution or district must develop and operate athletic programs according to the following specifications:

a) General. No person shall on the basis of sex, be excluded from participation in, be denied benefits of, be treated differently from another person or otherwise be discriminated against.

b) Separate Teams. If a sport is offered for one sex and not the other, members of the excluded sex must be allowed to try out for the team unless the sport is a contact sport.

c) Equal Opportunity. Equal opportunity must be provided for members of both sexes in the areas of sport selection, level of competition, equipment and supplies, schedules, practice times, travel, per diem allowance, coaching, tutoring, salaries, facilities, and publicity. (Blaufarb, 1977).

The door has been partially opened for woman athletes in the United States. The Association of Intercollegiate Athletics for Women (AIAW) is in a much better state of economic and programmatic health than the CWIAU, its parallel north of the border. Female athletes are now entitled to
many of the benefits accorded male athletes. They are recruited and given scholarships. Women coaches are getting better salaries, athletic directors are being hired, facilities and equipment improved. Title IX applies to all levels of education, thus assuring girls in elementary and secondary schools of the same opportunity in athletics as has been available to boys. Failure by any institution to comply with the Title IX regulations could result in the stoppage of federal funding to that school.

The future of women in sport in the United States appears to be much brighter than that of the women athletes in Canada.

Perceptions Regarding Women's Role

Perceptions of Women's Role in Society

In the past, the North American cultural ethic has supported the belief that women must be cared for, coddled, and protected. The woman's place was thought to be in the home and any deviations in life style were considered atypical. Society believed women possessed different physiological and psychological needs than men. Women were given no encouragement to develop assertive, independent thinking patterns as individuals; instead they were generally socialized into the role of housewife and mother. Today the cultural expectation has changed less than one would expect.

In analyzing the autobiographies of college women, Komarovsky (1946) discovered these women attributed certain
characteristics to sex-roles. Sport was seen as an important part of the masculine role. Pressure existed for the women studied to lose matches on purpose. Komarovsky felt the influence of boyfriends and family interfered with career aspirations, since women were expected to become loyal housewives.

Sheriffs and Jarrett (1953) found that men and women generally agree on masculine and feminine behavior. They discovered that few behaviors exist which are not identified with a female or male stereotype.

A number of studies have found that the perceptions of the male stereotype were more favorable than the perceptions of the female stereotype. Broverman (1970) and her colleagues discovered that male and female clinical psychologists, psychiatrists, and social workers reached significant consensus as to the attributes characterizing a healthy adult male and female. The opinions held by these subjects paralleled the commonly held sex-role stereotypes in American society. Male-valued items on the sex-role stereotype questionnaire were 'very aggressive,' 'very independent,' 'very logical,' 'very ambitious,' and 'very self-confident.' Female-valued items were 'very talkative,' 'very tactful,' 'very gentle,' 'very quiet,' and 'a strong need for security.' It was concluded that the male stereotypic characteristics were healthier and more socially favorable. This investigation implied that women are persuaded to adopt a role that is less
favorable and less healthy. The healthy adult was characterized as independent, logical, and self confident, whereas, the healthy adult female was described as emotional, social and neurotic, and men were described as competent, bold and straightforward.

Rosenkrantz et al. (1968) examined the social desirability of traits connected to males and females by college men and women. Masculine associated traits were considered more socially desirable by both men and women than those connected with the female stereotype. The self concept of the college women was closely aligned with the female stereotype. As the researchers stated:

Despite historical changes in the legal status of women and despite the changes in permissible behaviors accorded men and women, the sex-role stereotypes continue to be clearly defined and held in agreement by both college men and women. (p. 293)

It seems apparent that although men and women are perceived in very distinct roles, the male role is considered more socially desirable and prestigious. Even though the female role is perceived as less important and substantial, women are coerced to fulfill their role or suffer the social consequence of pity for having failed to meet role expectations. Neal and Tutko (1975) summed up the situation:

Girls and women have had trouble knowing themselves because they have seen themselves as reflected in the opinions of others, especially males, and have sought to please men by being what they wanted women to be.... Women have found that opportunities and achievements have come to those who show superior traits and intellect--two of the things they underplayed in the search to please the male. (p. 38)
Changing Role of Women

A number of research studies conducted have found that women feel that men expect them to fulfill the passive, feminine stereotype; but, men are found actually to view the women's role in a different light. Historically, the women's feelings concerning the man's "ideal woman" might have been correct. But, times have changed and the research appears to reflect the change.

Steinmann (1963, 1964, and 1966) has been involved in a number of studies investigating the behavior expected of the female stereotypic role. Steinmann, Levi, and Fox (1964) studied college women's perceptions of sex-role stereotypes. The subjects were asked to describe their own self concept, their concept of an ideal woman and their concept of man's ideal woman. The results indicated that a woman's self concept is closely related with her concept of the "ideal woman" who was considered to be active and assertive. They viewed man's "ideal woman" as traditional, passive, and submissive, relinquishing professional and personal growth to devote time and energy to being a housewife.

Steinmann (1963) had arrived at similar findings in an earlier study. The A.B. Fand Feminine Role Rating Inventory was given to college women and their parents. The college women saw themselves and their "ideal woman" possessing a similar number of traditional and modern elements. The fathers' perceptions of the woman's role were much the same
as the daughters' perceptions. The father's perception of his "ideal woman" was much more liberal than the daughters and mothers perceived it would be. They perceived man's "ideal woman" to be more traditionally oriented.

Steinmann and Fox (1966) administered the Inventory of Female Values to yet another sample of men and women. Women viewed their real selves as having a combination of modern and traditional elements. They perceived man's "ideal woman" to be the traditional role and perceived the "ideal woman" to be the happy medium between "ideal woman" and the man's "ideal woman."

McKee and Sheriffs (1959) studied unmarried college student's beliefs, ideals, and self concepts. The findings paralleled those of Steinmann. Women perceived men to want behavior expected of the traditional female stereotype. Men did not believe that women should behave in such a way, but they were unwilling to affix traditionally male characteristics such as vigor, action, and achievement effectiveness to the "ideal woman." It was concluded that "the findings are completely consistent with the assumptions that the roles of men and women are changing and that there is disequilibrium in the relationship between the groups" (McKee and Sheriffs, 1959, p. 362).

The woman in the professional world is confronted with a problem that is analogous to the one facing the woman athlete. The behaviors associated with and expected of the
successful professional woman are not consistent with those of the traditional female role. "The fact is most women are unhappy because they have been trained to be passive and dependent in a world that values activity and strength" (Chesler, 1971, p. 97).

The literature suggests that stereotypes do exist, but they are slowly changing. Women are gradually being accepted in roles that are in conflict with the traditional view of the passive and dependent female. The literature reviewed indicated that the acceptance of changing roles for women is an uphill battle, slowly being exposed in the research. Society is beginning to accept behavior by women that is atypical of the traditional feminine image. Acceptance of a greater range of behavior in the feminine role is necessary if a woman is to be given the opportunity to choose more diverse roles, and still not be considered unfeminine.

Perceptions of Self and Others

A person's perception of himself or herself or the concept of self identity has been a part of the social sciences and philosophical thought for quite some time (Sherwood, 1965). Little research was initially conducted in this area, and the research problems with reference to the self lacked clarity because of the diverse uses of the concept "self." Cottrell noted in 1950:

It may seem a bit presumptuous on my part to point to the self as a neglected problem for research in view of the increasing attention the concept has received during
the past several years...with a few exceptions the research reported and the general discussions of the self still suffer from a failure to profit fully by the insights and formulations contributed by G.H. Mead, H.S. Sullivan and others of their general orientations. (p. 708-709)

MacLeod in 1951 and Wylie in 1961 have also stated that researchers have never really accepted the self as a topic of study. This is viewed as a problem due to the lack of an organized theory upon which to base systematic research (MacLeod, 1951 and Sherwood, 1965).

Lindesmith and Strauss (1949) were researchers who began to look at self in a more sophisticated way than had past investigators. They stated:

The concept of self, if it is to be useful and valid, must be formulated as an organization of activity. More specifically, it refers to (a) a set of responses which (b) exercise a regulatory function over other responses of the same organism. This is equivalent to saying in another way...that the behavior of the child is first controlled and guided by the responses of others, but in time these responses become internalized so that the person himself controls and guides his own behavior. (p. 199)

A person starts to appraise and then adjust his or her behavior by assuming the roles of others toward himself or herself. One's self, therefore, is connected with involvement in groups. An individual's conception of one's self is a partial illumination of the way others react to him or her.

Sherwood (1965) explored relationships between self identity and the social environment in a natural experiment with human relations training groups. Bipolar adjective rating scales measured changes in self identity (self concept) and these variations were related to comparable ratings
furnished by group members. It was found that self concepts were affected by what the subjects thought the group members perceived them to be. Influences on self identity were determined by (a) the differential importance of various peers for the individual; (b) the amount of communication of peer perception to the individual; and (c) the extent of the individual's involvement in the group.

Reeder, Donohue, and Biblarz (1960) conducted a study using the Mead-Cooley symbolic-interactionist frame of reference as a basis for the investigation of the beginning of self conception. The researchers administered self ratings, objective group ratings, and estimated group ratings to military groups to ascertain the connections between perceptions of others and self concept. The Mead-Cooley symbolic interactionist theory has been outlined by emphasizing that: (1) the determination of self-definitions are affected by the responses of others; (2) a difference exists between an individual's perception of the response of the other and the actual response of the other; (3) the self adopts the role of the "generalized other" (Miyamoto and Dornbusch, 1956). The generalized other has been described by Mead to consist of attitudes of other persons related to the self, attitudes of other persons toward one another, and attitudes of other persons "toward the various phases or aspects of the common social activity or set of social undertakings in which, as members of an organized society or social group, they are engaged"
(Strauss, 1956, p. 231-232). Reeder, Donohue, and Biblarz (1960) concluded that a direct relationship existed between self-conception, the perceived generalized other, and the actual responses of others. Persons with low rated self concepts were more influenced by the perceptions and opinions of others than were those persons who had a more positive self image.

A personality description scale was used by Kipnis (1961) to research the notion that opinions held by subjects of "significant others" affect an individual's self conception of performance. The findings indicated that individual self evaluation of the men tested is influenced by "significant others."

A study was undertaken by Becker and Dileo (1967) to discover whether low, medium, and high scorers on a Dogmatism Scale differ in their willingness to present to themselves and to those who examine the test scores a positive social image and a positive personal image. The Marlowe-Crown Social Desirability Scale, Worchel's Activity Inventory and Rokeach's Dogmatism Scale were administered to 216 college students. The results showed that females expressed a greater dependency on the acceptance and approval of others, whereas males exhibited a considerable need for the approval and acceptance of self. Males were inclined to demonstrate a more positive personal image than were females, and females were inclined to exhibit a more positive social image than were males.
Generally, the studies mentioned, as well as others (Helper, 1955 and 1958; and Videbeck, 1960) have addressed the assumption that the concept of self develops as a result of and in response to the reactions of "significant others." The importance of significant others in the life of a teenager, especially as it relates to one's self concept, becomes apparent.

**Implications of Role for the Adolescent**

**Peer Importance in Adolescence**

Kiesman, Denney, and Glazer (1950) have called modern man "other directed." The "other-directed" man in contrast to the "tradition-directed" and "inner-directed" man makes his way through the complexities of life by picking up cues from his environment. A major aspect of this collecting of cues is man's dependence upon the approval of his peers to tell him what success is. This importance of one's peers is especially apparent in the life of the modern-day adolescent.

The student peer group is instrumental in aiding the adolescent to develop a conception of the self in a transitional period, complicated by the competition for academic and social status (Cole and Hall, 1970; Hamacheck, 1976; Broom and Selznick, 1968; and Horrocks, 1969). Peer group relationships are closely related to the status systems of adolescents and the school. Peer groups can strengthen the prestige of some individuals and lessen that of others. In adolescence the peer groups take on the character of cliques and introduce
the individual to the status system that evolves in a high school. The student is assigned a high or low status according to his clique membership or lack of it.

The peer group and the school are interdependent socializing agents. School systems are focusing on the influence of this interaction with regard to motivation in learning. The increased recognition given to the school program's extracurricular activities is testimony to this.

The collaboration of the school and the peer group in promoting activities common to their social goals is a powerful and pervasive force in the high-school students' daily life. Some students respond to this socializing pressure and identify with its purposes. Others resist or escape its influence in varying degrees. (Jones, 1958, p. 87)

In a study investigating adolescent drinkers, Alexander (1964) asserted that the peer group is a powerful force in establishing behavior and attitude standards toward various problems. The individual adolescent was accepted by his group as long as he conformed to their standards and opinions. By not conforming, he perceives his group to be less appealing than it previously was and members of his group reject him.

Reisman, Denney, and Glazer (1950) have stated that the peer group is becoming the most important socializing agency. A number of researchers and authors would tend to agree that this is especially true during adolescence (Coleman, 1961; Hamachek, 1976; Horrocks, 1969; and Remmers and Radler, 1957). However, there is also a growing number of researchers who state that the peer group in adolescence is not as important
and influential as some would have us believe (Elkin and Westley, 1955; Snyder, 1966; Solomon, 1961; and Piaget, 1952). These researchers argue that family guidance and authority and an adolescent's individuality are more influential than an adolescent peer group.

In his study of ten midwestern high schools, Coleman (1961a) reported that the adolescent boys and girls in high school appear to be more influenced by their peers than by their parents and teachers. Hamachek (1976) has stated that the adolescent peer group has an enormous influence on the behavior and self-attitudes of young people.

Being liked and accepted is important at any age, but it seems particularly crucial during the adolescent years. Sometimes the dependence on group approval is so severe that it seems something on the order of a "popularity neurosis." (p. 163)

The adolescents' need to be accepted by peers is heightened because they are still developing personality, and such development is dependent upon positive feedback. Horrocks (1969) sees the adolescent peer group as a "necessary state of affairs." Within the peer group the adolescent may boost his or her ego, which alleviates the feeling of insecurity due to the changing environment and lack of experience. "The peer group becomes a means of gaining security and anchorage" (Horrocks, 1976, p. 244). Remmers and Radler (1958) in polls of teenage attitudes and opinions conducted during a period of 17 years discovered that even though American teenagers exhibited large class differences, they exhibit a common desire
for popularity and a conformist attitude. The researchers' most striking and consistent finding was the teenagers' concern to be liked.

In contrast to this line of thought, Elkin and Westley (1955) suggest that peer influence upon adolescents is not nearly as great as has been commonly assumed. They conducted interviews with 40 middle-class Montreal teenagers and concluded that although a well defined and clearly identifiable youth culture does exist, its influence is less dominant than family guidance and authority. Snyder (1966) in agreeing with Elkin and Westley noted that the youth culture has various dimensions and is not typically characterized by conformity in values and behavior. In a study of 372 Michigan high-school students, Solomon (1961) stated that in affecting students' decisions, parents were often unexpectedly noninfluential, peers were moderately influential and most influential of all were the students' "impulses" and "values." Piaget (1952) has stated that an adolescent creates and codifies his or her own rules in social development, thus having less of a need to conform than does the preadolescent or even the early adolescent. Following this rationale, the adolescent would be less likely to conform to peer pressure and norms.

Much of the literature deals with the comparison of parental versus peer influence on the adolescent. Coleman (1961a) found that in small-town schools, the daughters of middle-class families were less likely to ignore parents' judgement
than were girls from lower social origins. However, in city or suburban schools, middle-class girls were more likely to conform to peer expectations despite parents' disapproval. Broom and Selznick (1968) asserted that during adolescence "the child is subject to a contest of wills between parents and peers" (p. 358). Various researchers have stated that adolescents tend to conform to the opinions, activities, and appearance of other adolescents and this conformity points to a lessening of the influence of family and adult norms (Horrock, 1969; Hamachek, 1976; Blos, 1941; and Utech and Hoving, 1969). Utech and Hoving (1969) tested 360 boys and girls from the third, fifth, seventh, ninth, and eleventh grades in a semirural area of Ohio. They found that conformity to the advice of parents is a decreasing function of age, when parents and peers offer conflicting advice. An increasing conformity to peers was noted. These results strengthen the observation that the peer group influences the actions of its members and this influence increases with the age of the child.

Studies have also been conducted which illustrate the influence of the adolescent peer group in areas such as: sexual activity (Gordon, 1957; Coleman, 1961; and Kovar, 1968), and occupations, education, and politics (Wilson, 1959; Duncan, Haller and Portes, 1971; Haller and Batterworth, 1960; and McDill and Coleman, 1965).
Athletics in the Adolescent Status System

From the literature reviewed, it can be summarized that the ability of an individual to attain status among his or her peers and to be liked is extremely important to the adolescent. One of the major avenues for achieving status for the adolescent is participation in athletics. "Competition for scholastic or athletic honors is important," asserts Coleman (1961a, p. 143), "not on its own account, but because it helps to win status in the eyes of other teenagers." In another study conducted by Coleman (1965) on a number of high schools, he found that boys placed a great value on athletic achievement for attaining popularity. Status was objectively calculated by asking each boy to name another boy he would like to be like, one he would like to be friends with, and who were members of the leading crowd. The number of choices received determined one's status. Although the star athletes comprised only 6.6 percent of the male student population, they received 47.4 percent of the "be friends with" and "be like" choices and 36.5 percent of all the leading crowd nominations. Coleman stated:

> According to all evidence, then, the status of athletic achievement in the schools surveyed is exceedingly high, considerably higher than that of scholastic achievement. Thus, the attention paid to athletics in American high schools, which would so puzzle an innocent visitor, is paralleled by the status of athletic achievement among adolescents. (1965, p. 43)

Eitzen (1975) did a replication of Coleman's original study to ascertain if athletic prowess continued to be the
most important criterion for high status as it was in 1957 and 1958 when Coleman collected his data. Students from nine high schools were administered a questionnaire that contained many of Coleman's original items. The results of this research indicated that athletic participation was still a dominant criterion for status among adolescent males.

McGraw and Tolbert (1953) studied the relationship between sociometric status and general athletic ability in 438 junior high-school boys. The degree to which this relationship compared with that between sociometric status and mental maturity was noted. A score was obtained for each student's status in his own class, his grade level, and in the entire school. The scores were based on student choices of those who were liked the best. The relationship between sociometric status and athletic ability appeared moderately high in nearly all the groups investigated. It was "...possible that the boys achieved their popularity through participation in interschool athletics more than any other factor included in this investigation" (McGraw and Tolbert, 1953, p. 79).

In 1966 a Youth in Transition project began in which a national representative sample of 2,227 tenth grade boys located in 87 public high schools throughout the United States were surveyed on the subject of school objectives (Bachman, et al., 1967). In 1968, 2,100 high school teachers in each of the 87 participating schools were also surveyed on the same topic (Bachman et al., 1971). A startling conclusion
was that students and teachers alike agreed that athletics is the area receiving most emphasis in the nation's schools. Objectives more directly related to psychological and social development received the least emphasis. When asked for their preferences, both teachers and students felt that athletics should be downgraded from first to last place and that objectives related to the psychological growth and socialization of the student should receive considerably more emphasis. The belief was that such objectives were concerned with the transmission of values and knowledge that are related to the taking of adult roles.

Friesen (1976) felt that the research conducted in American schools indicated adolescents value athletics, popularity, and academics in that order. He conducted a study using 10,019 high-school students in a large western Canadian city to test the hypothesis that: The priority of values of Canadian adolescents is in the order of athletics, popularity, and academic achievement. The results showed that the hypothesis must be rejected. The pattern for "enduring" values for boys resulted in the order of: academic > athletics > popularity. For girls it was: academic > popularity > athletics. The pattern for the most satisfying values in school for boys emerged in the order of: academic > popularity > athletics. For girls it was: popularity > academic > athletics. Friesen pointed out that the athletic area is available only to a small number of students, especially in a large urban school.
"Half the students have no involvement in any extracurricular activities; they receive no satisfactions from this vital, adolescent 'need' zone" (Friesen, 1976, p. 369). Boys claimed the academic area slightly more satisfying than girls, which may be attributed to the girls' greater concern with popularity. The students who chose athletic stardom as something for which they wished to be remembered appeared to justify that choice. They stated that it is not the most satisfying characteristic in their school life, and that it possesses little value for their future, but it has immediate worth as status within their referent peer groups.

In his classic study of Chicago gangs, Thrasher (1927) acknowledged the relevance of athletic skill in combination with "gameness" and daring to the boy who hopes to be a leader among his peers. This assertion is still apparent today and could be applied to other social groups than gangs.

Broom and Selznick (1968) saw athletic achievement as playing an important role in membership in high-status groups in most schools. Boys from low-income families who become successful athletes and are instrumental in victories for their school are heroes of the system. Acceptance into the most popular crowd is their reward (Horowitz, 1967; Horrocks, 1969; and Feinberg et al., 1958). Students respect this status as more legitimate than that obtained from family prestige. The athlete's status is achieved as opposed to being ascribed.
In summary, the majority of the research has implied that athletics is held high in the status system of the adolescent. But one very important point needs to be stressed; in almost every instance athletics means boys' athletics and athlete is referring to the boy athlete. Little research has been conducted in the area of the status of girls' athletics in the adolescent society. It is a major omission that needs to be rectified.

The status of the girl athlete in the adolescent society. The paucity of research in this area makes it difficult to come to any conclusions or generalizations concerning the status of the adolescent girl athlete. The literature that is reviewed presents two contradicting beliefs: (a) Athletics does not contribute to high status in adolescence for girls, and (b) Athletics does contribute to the high adolescent status for girls.

Some researchers have stated that the tomboy is tolerated by society for only a short time (Tyler, 1973; Bardwick, 1971; Rector, 1972; and Ziegler, 1972). As Bardwick points out:

...the motorically active, pre-adolescent girl will achieve status through competitive sports. Later, in adolescence, especially when teenagers are cruel in their demands for stereotyped conformity of behaviors, she will undergo a deep crisis. (p. 104)

Horrocks (1969) and Downey (1965) have made somewhat similar statements with respect to what is valued with regard to status in the adolescent value system. Downey (1965) felt that adolescent boys appear to value athletics, whereas
adolescent girls appear to value social success. Horrocks (1969) stated: "...it appears that physical ability is important in promoting all-around adjustment and social acceptance for any adolescent boy, and to a lesser extent and more limited areas, for any adolescent girl" (p. 438). Limited and specified areas of involvement with physical activity for an adolescent girl may be cheerleading or twirling. A girl's interest in sports may be the result of what affords status in her school. Status sports in some schools, for example, basketball and volleyball, may be considered taboo along with all sports at other schools. Cheerleading and twirling appear to be universally accepted as a way to attain high status.

Being a cheerleader or twirler often gives validation that she is 'in'. The cheerleader works with the athletes to lead the school to victory and shares their popularity. In addition the cheerleader has the thrill provided by being on public display. The cheerleaders often form an elite group that is highly selective in membership. (Kovar, 1968, p. 31)

Buhrmann and Bratton (1977), Buhrmann and Jarvis (1971), and Gilbert and Williamson (1973) maintain that girl athletes do attain status in the adolescent world. Buhrmann and Bratton (1977) studied the relationship between athletic participation and status measures of girls in six rural and small-town Alberta high schools. Data were collected from school records and personally administered questionnaires and athletic rating sheets. Results indicated that high-school girl athletes achieve significantly higher levels of status and are more frequently members of the leading crowd than their
non-athletic peers. Quality and amount of athletic performance were highly and positively related to status measures. It would appear that athletic participation in the investigated Alberta high schools is an important area of status achievement for the adolescent high-school girl. These results are very similar to those found in a comparable investigation in the state of Iowa (Buhrmann and Jarvis, 1971). In this study 857 girls from seven different rural and small town schools in Iowa were studied. The same data collecting techniques as in the Buhrmann and Bratton study were used. It was concluded that high-school girl athletes reach a substantially higher level of status achievement than their non-athletic peers. Girl athletes were thought to be more popular with both male and female peers and were found more often in the social elite, according to their peers and teachers, than their non-athletic counterparts. The similarity of these results of the two studies is startling, considering that Iowa schools have greater financial, peer and administrative support than the Alberta schools. According to Buhrmann and Bratton (1977) the Alberta girl athletes managed to attain slightly higher status ratings than the Iowa girl athletes.

Gilbert and Williamson (1973) empirically verify the status given to Iowa high school girl athletes. "As a class they tend to be the most popular girls, enjoying more status in the eyes of other students, their teachers and townspeople" (p. 48). In small towns where interscholastic athletics are
the major entertainment, girls receive as much attention and recognition as boys. In Iowa, girl athletes receive the same opportunities as boys from the standpoint of facilities, caliber of coaching, travel, media coverage, and equipment.

Literature reviewed in the areas of perception of the woman athlete and the conflict of the woman athlete and female stereotype helps to clarify the attitudes held toward the woman athlete. Society's changing attitude toward the contemporary woman athlete is slowly eliminating beliefs and fallacies which surrounded past impressions of the female athlete. The literature reviewed in these areas helps to shed light on the attitudes held towards the adolescent girl athlete.

Women in Sport

An Overview

The late nineteenth and early twentieth centuries were significant in the education of women and in the history of competitive sports for women and girls in the United States. The effects of the industrial and technological revolution resulted in changes in educational thought and practice. Educators were called upon to provide a type of education to meet the needs of youth. Women repeatedly requested equality of educational opportunity, but gains in this area were slow. However, women began to enter areas previously considered the male domain and during this period demanded the right to engage in competitive sports. It was an era which saw change
from the middle nineteenth century beliefs regarding the "woman's place."

In the mid-1800's, lack of strength and inability to do physical tasks indicated the status of gentility. Thus the ideal was established and strengthened by the choice of suitable activities such as piano playing, art, and embroidering none of which caused the development of signs of physical vigor. (Gerber, 1971, p. 59)

The real impetus to the movement for competitive sports for women was the introduction of the team sport of basketball. Basketball became very popular and in a few years was played in many colleges for women throughout the country. These institutions were instrumental in introducing sports for females into the public schools, state colleges and private institutions. The programs were justified by their contributions to the health of the students and to poise and grace stimulated by movement.

During the early twentieth century, physical education programs evolved which consisted of a modified form of gymnastics, play and games. Athletics became a part of the physical education program for boys and girls. Diverse beliefs regarding the participation of females in competitive sports were held by men and women physical educators. Debate centered around traditional negative views, which for some, still exist today:

There were those who believed (1) that competitive sports were too strenuous and would have dire effect upon child bearing, which was woman's main function; (2) that competitive sports would cause women and girls to develop masculine qualities; (3) that biologically, physiologically and emotionally, men and women were different
and that women consequently were weaker; and (4) women and girls did not need that type of training as their place was in the home. (Watts, 1960, p. 126)

Because our society has supported the traditional perception of the female role, conservative beliefs regarding athletic participation for girls and women have endured. These biased attitudes are one of the main reasons women have been generally excluded from the sport arena (Felshin, 1974; Harris, 1971; Hart, 1972; and Ulrich, 1973).

There is little documentation on the status of competitive sports for females in the schools and colleges during the depression years. It was during this period that strenuous activities for women were curtailed. The danger of another world war in the late thirties revived competitive sports as a means of preparing youth for war service. Sports programs were outlined for girls and boys and men and women. Competitive sports for women and girls were stressed, team sports in particular.

The post World War II period was one of adjustment to social change. Advances in science and technology once again necessitated a redefinition of the goals of education to meet the needs of youth for life in a complex society. The women leaders of the American Association for Health, Physical Education, and Recreation accepted a challenge from the Educational Policies Commission to demonstrate the contribution athletics could make in the area of human relations (Watts, 1960, p. 131). They conducted conferences, workshops,
sectional meetings, and clinics to prepare leaders who would organize programs of competitive sport for girls and women.

Interest in competitive sports for women persisted in the late 1950's and early 1960's, but the trend was in the direction of individual sports, with reservations about involvement in varsity athletics. Attention was directed to the needs of the highly skilled individual, who had been neglected in the campaign for universal participation in competitive sports.

Females generally were not expected to participate in sport involving body contact, body movement over long distances, or heavy objects (Metheny, 1956). It was considered more appropriate for women to be involved in sports with light implements, body movement over medium distances, and team sports with barriers separating teams. Women were expected to participate in sports that emphasized grace and rhythm, which in most cases meant individual sports (Higdon and Higdon, 1967; Cheska, 1970; Griffin, 1972; Hart, 1972; Malumphy, 1970; Klafs and Lyon, 1973; Ulrich, 1968; and Debacey, Spaeth and Busch, 1970). Women's growing independence has been correlated to their growth in sport during these years (Sherriff, 1971). Despite the prominent role sport has in American society, women still combat problems of acceptance in the sports arena.

It is historically true that men and boys have had opportunities to participate in sports not afforded to women and
girls. This lack of equal opportunity was undoubtedly due to human ignorance and societal pressures.

**Changing Attitudes Toward Women in Sport**

Today the negative attitudes toward females in sport are being dismissed as foolish. The range of activities for women has greatly increased. Recent research in the fields of physical education, medicine, sociology, and psychology negated many if not all of the misconceived beliefs of the past. As Watts (1960) stated:

> Advances in medical science and health knowledge and pertinent research in the field of physical education aided in modifying the attitudes toward competitive sports for girls and women. Almost without exception, authorities in physical education and medicine agree that competitive sports for girls and women have merit when conducted under proper standards. (p. 133)

Gerber (1971) gave further support to this view: "Physiological research has failed to support the old contentions about the weakness of females; women today engage in almost every sport that men do" (p. 60).

A need for a change with respect to women in sport was cited by Clark and Lantis (1958). They felt that women had become so entrenched in the world of the typewriter, card-punch machine, and assembly line that they must fight to achieve a desirable female image. This image should not simply be a replica of an employable male. This and other new goals and values with respect to females need to be considered by physical educators.
The change in attitude toward women in sport is also due to the change of attitude towards the feminine role in general. A broadening view of femininity has been encouraged by the move towards unisex (Gerber, 1971). Present day adolescents do not possess the same traditional views of sexually designated activities as do their parents and grandparents. The female is free from past cultural restraints and taboos. Her new role in society allows her to participate in play activities which are no longer discouraged and restricted (Neal, 1969). As Ulrich (1973) maintains:

Many girls do not feel unfemale as they run, climb, throw, jump, and endure. More males are daring to seek grace, poise, flexibility, and coordination in activities such as dance, synchronized swimming, and figure skating. Both males and females are participating in gymnastics, softball, volleyball, tennis, climbing, surfing, and a myriad of movement patterns which reflect an unbiased approach to the art and science of human movement, i.e., physical education. The "mod bod" is asexual. (p. 116)

Klafs and Lyon (1973) scrutinized the results of the 1963 Report of the President's Commission on the Status of Women. This report suggested that the goals of the family and education can be attained by women simultaneously. Equality of education, opportunity and change in the women's role, according to Klafs and Lyon (1973), were responsible for de-emphasizing past cultural influences. They indicated that 73 percent of the women had modern views concerning the roles of women.

Bird and McCullough (1977) asserted that the additional media coverage of female athletes, combined with the recent
development of the federal government's passage of Title IX of the Omnibus Education Act of 1972 should lessen the discrepancy between the "social role expectancies for the female and the presence of the competitive female in sport settings" (p. 57).

The recent surge and recognition of sports has definitely served to help change the attitude about women in sport. From 1970 to 1976, there was an incredible 460 percent rise in the number of girls involved in high-school sports, compared to a 12 percent increase for boys (Proctor, 1978). As further evidence of this change, Proctor (1978) quotes Al Crosby, Atlanta swim coach and AAU official: "'Girls are getting stronger because we're doing more for them... girls are heading for the weight room, and they don't look like Amazons'" (p. 14).

Cheska (1970) looked upon the issue in a somewhat different light. She recommended that physical education and coaching be promoted as satisfying careers for women. "Either our culture must change its concept of femininity or we must revamp our programs to be consistent with our culture's concept of feminine behavior patterns" (Cheska, 1970, p. 91). Lowe (1975) believed social knowledge will lead to the nullification of traditional views with the assistance of the woman athlete.

Some changes will be necessitated by the provision of equal opportunity for both girls and boys in interscholastic
athletics. Both men and women must be cognizant of each other's particular situation, realizing that girls can benefit as much as boys from an interscholastic athletic experience. Moyer (1975) pointed out: "Tradition is in the man's favor; society is in their favor. We all have an educational challenge to meet, for we must change the feminine image once fashioned by our society, for a human image" (p. 8).

**Perception of the Female Athlete**

The effects of the traditional view of the feminine role are evident in the perceptions held of the woman athlete. Much of the research conducted centers on the woman athlete's self-perception, and the non-athlete's perception of the woman athlete. Harris (1971a) compared the self perceptions of women athletes in a competitive situation ("the competitive self"), and their self-perceptions in social situations ("the social self"). Members of college women's individual sport teams were the subjects of this investigation. Perceptions were measured by the Gough Adjective Check List. The findings indicated the athletes considered themselves to parallel the general population in their perceptions of the "social self." In competitive situations, however, athletes considered themselves to be more aggressive, dominant, achievement oriented, enduring, and less feminine. They were perceived as being confident, independent, and goal-centered individuals. There was a clear variation in the perception of self in the competitive and social situation.
Other research has been undertaken examining the perception of woman athletes in sport and social situations. Rector (1972), Ziegler (1972) and Kennicke (1972), in investigations of female athletes, ascertained that self-profiles were situationally specific with statistically significant variations between social and sport self-perceptions. Tyler (1973) found that few differences exist in the social self-perceptions of female varsity athletes and physical education class participants. Differences were found in the sport self-perceptions of class participants and varsity athletes. Also, social self-perception of varsity athletes and class participants varied from other female students when perceiving the concept "ideal woman."

Brown (1965) used the semantic differential to study the perceptions college men and women have of the woman athlete and other assumed roles of a college woman. The concepts used in her investigation were the "feminine girl," the "girl athlete," "cheerleader," "sexy girl," "twirler," "tennis player," "swimmer," "basketball player," "track player," and the "girl with high grades." The design of the semantic differential allowed Brown (1965) to rank the concepts according to their evaluative, potency and activity factors. The men in the sample ranked the roles as follows:
The women in the sample ranked the roles as follows:

As a whole, the subjects rated the feminine girl high on the evaluative factor, indicating this is a desired role for college women; but, also rated that role as the least active. Cheerleader was the only role rated high in both evaluative and activity factors. This role evidently was perceived as being active in a very feminine way, and therefore, a preferred role for college women.

The cheerleader has created a strong, aggressive, active, and somewhat loud image...but this has had no effect on the way she is received in regard to her personal appearance, behavior, or manners...It appears that the athletic girl then has a chance of achieving a status equal to that of cheerleader and of approaching the feminine image if her image in the evaluative area can be improved. (Brown, 1965, p. 85)
Berlin (1973) investigated the perceptions of "ideal woman" and "the woman athlete" as held by college men and women athletes and non-athletes. Perceptions were obtained by use of the Activity Vector Analysis scale. Results showed both concepts to be perceived differently by all groups. The men athletes perceived "the ideal woman" to be highly sociable, smooth, glib, and friendly. This perception was comparable to the "perfect person" of the Activity Vector Analysis. The "woman athlete" was thought to be "...positive, self-initiating, outgoing...aggressive tendencies, social confidence, restless..." (Berlin, 1973, p. 3). A low positive relationship was discovered between concepts of "the ideal woman" and "the woman athlete" by men athletes and a low negative relationship for women non-athletes. No relation existed between concepts for men non-athletes and women athletes. A finding, which is surprising in comparison to other research, was that "the ideal woman" had a higher activity score than "the woman athlete."

Hall (1972) used the semantic differential to study the perceptions of the concepts "feminine woman" and "athletic woman." The subjects were 51 active British college female participants in sport. The evaluative measure of the semantic differential was used to obtain the attitudes towards both concepts. Results indicated that the nonparticipants viewed the "athletic woman" to be much less feminine than did the sport participants. Also, the nonparticipants looked upon
the "feminine woman" more favorably than they do the "athletic woman." The participants had a more positive attitude toward the "athletic woman" than did the nonparticipants.

Griffin (1972) utilized the semantic differential as one part of her research to investigate how college students in general perceive women's roles, especially the woman athlete. The subjects for this study were 279 undergraduate men and women attending the University of Massachusetts. The six women's roles studied were "housewife," "woman athlete," "girlfriend," "woman professor," "mother," and "ideal woman." Results, pertinent to the present study, found that the "woman professor" and the "woman athlete" were perceived as farthest from the "ideal woman" of all the roles considered.

Buhrer (1973) also used the semantic differential to study the perceived concepts, "woman athlete" and "woman coach," and the comparison of these concepts, as held by 112 women college athletes and 48 women college coaches. The "woman athlete" was perceived by women athletes to be slightly attractive, relaxed, feminine, affectionate, competitive, experimental, and fast. She was considered to be quite interesting, nice and intelligent (Buhrer, 1973, p. 106). The women coaches perceived the "woman athlete" in a similar manner.

Bird and McCullough (1977) were the most recent researchers to use the semantic differential to ascertain the perception of femininity by athletes and non-athletes. They also
investigated the perception of femininity as exemplified within the following selected social roles: "ideal woman," "mother," "housewife," "hostess," "sister," "working woman," "self" and "athlete." Ninety female undergraduates from the University of Southern California participated in this study. The results showed the role of "athlete" was evaluated second only to that of "ideal woman." It appeared that in considering all factors (activity, potency, and evaluation) the female "athlete" was nearest to "ideal woman" in exhibiting feminine traits. This finding is definitely in contradiction to the research previously reviewed. Bird and McCullough (1977) provide an explanation for this:

These results can be tentatively explained in terms of passage of time and concurrent societal changes or, as previously mentioned, variability attributable to the geographical location of the data collection. In California the outdoor, active female is a viable model for women, while intuitively the role of housewife appears to offer the least desirable role alternative to such a population. (p. 61)

Several studies have investigated men's feelings toward the involvement of women in sport. Harres (1968) utilized an attitude inventory and questionnaire to study college men's and women's opinions of women in competition. The majority of subjects felt that opportunities for female athletic competition should be provided. Athletes held more favorable attitudes toward female athletic competition than non-athletes. Observation of women in athletic competition did not affect these attitudes.
Debacy, Spaeth, and Busch (1970) investigated the attitudes of college men concerning women's competition. Data was obtained from 90 physical education majors. A Likert-type questionnaire consisting of items related to physical education and competition was the instrument used. The researchers concluded that despite the majors' professional preparation, they did not differ significantly from the general male population in reference to their attitudes concerning women competitors and competition. Both groups displayed a positive, though moderate, attitude toward women's competition. Gilbert and Williamson (1973) suggest that men feel competition for women is acceptable to a limited degree. They also stated men's inability to accept defeat by a woman may contribute to the low image of women in sport.

Sherriff (1971) researched the attitudes of parents, daughters, and teenage boys toward female athletic competition. Her findings indicated that teenage boys and parents believed athletes to be better fitted to a masculine build. Boys questioned the need for competitiveness for sport success and were split on peer acceptance of women athletes.

The literature seems to suggest that female athletes are perceived in a very stereotypic way. Roles which are more congruous with the established female stereotype (e.g., feminine girl, cheerleader) are more accepted and highly regarded than is the female sport role. It appears that a female who wishes to be an athletic competitor, which means
being perceived as active and potent, must be willing to be thought unfeminine. In addition men do not seem to condemn women's participation in sports, but the acceptance of stereotypical sex-role patterns has made them cautious in their total acceptance of women's involvement in all sports.

Conflict Between the Female Athlete, the Female Stereotype and the Feminine Image

The conflict that surrounds the female athlete and society's expectations of the female role has been alluded to in much of the literature reviewed. Many researchers have stated that a conflict does exist between the traditional female stereotypic role and the female athlete (Small, 1973; Sage, 1970; Weiss, 1969; Hart, 1971; Harres, 1968; Hall, 1973 and 1977; Moyer, 1975; Bird and McCullough, 1977; and Felshin, 1974b). Others have equated sport with masculinity, and women's entry into this primarily male domain raises questions concerning their feminine image (Beisser, 1967; Lowe, 1975; Brown, 1965; Harris, 1971b; Clark and Lantis, 1958; Buhrer, 1973; Malumphy, 1970; and Ulrich, 1973).

Sport, like the business world at times, is an area where a woman is liable to be considered unfeminine. A female involved in sports may receive conflicting reactions concerning her participation in a previously male-dominated field. Beisser (1967) observed:

Today women as well as men stagger under the burden of pseudo-equality. They labor under expectations consistent with masculine vestiges of Victorian patriarchy, and yet are expected to integrate masculine values with the older tradition of femininity. (p. 232)
Weiss (1969) gives a somewhat different view of women in sport:

They [women] do not seem to have as strong a need as men do to see what it is that bodies can do, in part because they are more firmly established in the role of social beings, wives, and mothers, than men are in their roles... (p. 221)

Weiss's statement is open to debate. Weiss (1969) and Beisser (1967) both consider women in sport an oddity. It is interesting to note that one is a philosopher and the other a psychiatrist. Boslooper (1968), a psychologist, argues from the opposite point of view. He called the acceptance of physical talent and femininity compatible concepts.

Lowe (1975) asserted that the equation of "athlete" with "masculine" is based on the belief that sport cultivates masculine inclinations in women. "In this case, 'athlete' clearly predicates the stereotype derogating the woman in sport" (Lowe, 1975, p. 21). Hart (1971) stated that as a girl gets better and more proficient in a sport, it becomes essential for her to prove her femininity to others, resulting in personal imbalance and anxiety. This may worsen if the girl has chosen a sport that was considered exclusively male-oriented. "And we seem to see sport as a field for men, and female homosexuals. Certainly, for a woman, sport intensifies sex-role problems....A female athlete meets more oppression than most other women in the American way of life" (Hart, 1971, p. 64). By adolescence, a girl is coerced into choosing between sport and the "life of a lady." Moyer (1975)
agreed with Hart in stating that a woman's femininity was questioned if she entered into athletics, which had been thought of as a masculine rite of our culture. Babe Didrikson Zaharias is cited as a case in point. Gilbert and Williamson (1973) concur, stating that a woman athlete must "prove" her femininity as her caliber of performance improves and becomes more successful.

Brown (1965) asserted that rather than directing our energies toward developing girls who play like boys, the emphasis in competitive sports for women should be aimed at discovering ways in which to fit sports into the emerging new feminine image. Malumphy's study (1970) found that the effect of participation on the feminine image was dependent on the participant herself. Individual sports participants generally were more sure that their feminine image was enhanced by participation than were team sport participants. From these results, it was suggested that the type of sport involvement could demonstrate corresponding differences in psychological well being and body image. Clark and Lantis (1958) stated:

Girls and young women are too strongly influenced by our popular conception of femininity, which is stereotyped by the shapely (but not necessarily healthy) girl with careful coiffure and make-up....In the face of such a concept of "ideal femininity" a vigorous and "athletic" woman may be respected and admired but seldom emulated. (p. 39)

Because of this, girls and women were thought to shy away from any sport that was in conflict with the culturally expected feminine image.
The threat of damage to the feminine image confronted by women in sport was also discussed by Harris (1971b). She observed that the traditional stereotype persists, even though the masculinization of the feminine image has been proven a myth. Women are still not allowed to be more skilled than men. Women in sport are content fulfilling the "jock" role or are very confident of their feminine image. She further explained that since men decide what is feminine, they should be educated to realize that the feminine image will not be damaged by women's participation in sport. Lack of communication between the woman athletes and the general population was seen as being the biggest problem.

Felshin (1974b) argued that because the female athlete's behavior is contrary to the acceptable norms of feminine demeanor and because, according to men, the quality of sport is lowered by her very participation, then in reality the athletic woman is a social anomaly.

The assumption has been made, according to Hall (1972), that stereotypes associated with femininity and athleticism in women do exist. The presence of this conflict could be one reason why some women hesitate to participate in any sport activities. Hall (1977) further added: "We know that sports participation has an important positive function in the development of masculine identity but a negative function in the development of female identity" (p. 42). She further stated that the little social data available indicates women
athletes perceive their feminine role the same as other women view their own. Therefore, a distinction between feminine expectations and sport involvement may not be a reality for the woman athlete. It did not exist in the first place, or if it did, she has solved the problem of social conflict. Ulrich (1973) appears to agree: "But in spite of the risk of being accused as being unfeminine, there have always been women who were interested in activity patterns which require both strength and endurance" (p. 113). Snyder and Kivlin (1975) are also supportive of this point of view. They have stated that women athletes have frequently received negative sanctions but their athletic involvement has been compensation enough to oppose the "social costs and tensions associated with the conflicting roles" (p. 105).

The literature studied illustrates the feelings surrounding the conflict between the woman athlete and the female stereotype. Much of it has stated there is an inconsistency between the two. Other literature has shown that the woman athlete has persisted regardless of the conflict. It appears that despite popular claims to the contrary, appropriate female behavior continues to be delimited, especially affecting the woman athlete. A more androgenous attitude toward appropriate female and male behavior is needed in order to alleviate the negative perceptions of the woman athlete.
Chapter Summary

The literature reviewed in this chapter suggests the following observations:

1. Women are forced to fulfill the stereotyped female role or suffer the social consequence of pity for having failed to meet role expectations.

2. Society is beginning to accept behavior by women that is atypical of the traditional feminine image.

3. The concept of self develops as a result of and in response to the reactions of significant others.

4. The peer group is important in the life of an adolescent.

5. Boys' athletics holds a high rank in the status system of the adolescent.

6. Athletics may or may not contribute to high adolescent status for girls.

7. Female athletes are perceived in a very stereotypic way.

8. A conflict exists between society's expectations of the female role and the woman athlete.

9. Society's changing attitude toward the contemporary woman athlete is slowly eliminating this conflict.


11. Sport receives more attention in the United States than in Canada.

12. Women in sport in the United States have a brighter future than women in sport in Canada.
CHAPTER III
PROCEDURES

The initial phase of the procedures of the study centered around the developing of questions which this study specifically attempted to answer. A comprehensive review of the related literature was the next step undertaken. Following this, plans for the collection of data were formulated. These consisted of selecting the instruments, the communities, the high schools and the subjects to be used in this research. Next the instruments were prepared and coded for analysis; cassette tape recorded instructions were made; and correspondence with school board officials, principals, and heads of physical education departments took place. The actual collection of the data in the high schools by the researcher concluded the next phase of the procedures. Lastly, a letter was sent expressing the researcher's gratitude to those who cooperated in the collection of data.

Selection of Communities

The two Canadian high schools selected are located in Thunder Bay, Ontario and the two American high schools are located in Greensboro, North Carolina. These communities were chosen for two reasons: similarity in size and make-up and accessibility to the researcher.
Thunder Bay, Ontario is located in the geographic center of Canada on the shores of Lake Superior. It is 200 miles northeast of Duluth, Minnesota and is 40 miles from the United States border. The population is approximately 120,000 and is of a strong Finnish and Italian ethnic origin. It is a major port for the delivery of farm products from the west to the east and is called the "gateway to the West." Two of the city's main industries are its pulp and paper mills and its grain elevators.

Greensboro, North Carolina is located in north-central North Carolina in the Piedmont section of the state. It has a population of approximately 150,000 with a substantial black minority and is in close proximity to the cities of Winston-Salem and High Point, forming the Triad region of North Carolina. Two primary industries of Greensboro are textiles and tobacco, with a number of textile mills, tobacco warehouses and plants situated in and around the city.

Selection of High Schools

The four high schools selected were relatively similar in size, program offerings, and ethnic and racial make-up. Table I illustrates the total population of the schools, the breakdown of the schools by sex and by race in the American high schools. All four schools in the study offered a range of programs including technical, commercial, vocational and academic. The administrators at the Canadian high schools
each stated that their schools consisted of a cross-section of rural, urban, and ethnic composition.

### Table 1

<table>
<thead>
<tr>
<th>Total Student Pop</th>
<th>Male</th>
<th>Female</th>
<th>Black</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canada</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hammarskjold High School</td>
<td>1401</td>
<td>737</td>
<td>664</td>
<td>+</td>
</tr>
<tr>
<td>Lakeview High School</td>
<td>1049</td>
<td>489</td>
<td>560</td>
<td>+</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith High School</td>
<td>1548*</td>
<td>800</td>
<td>748</td>
<td>515</td>
</tr>
<tr>
<td>Grimsley High School</td>
<td>1638*</td>
<td>832</td>
<td>806</td>
<td>490</td>
</tr>
</tbody>
</table>

*The totals add up to more than just black plus white due to the inclusion of Indian and Oriental races that are not reported.

+A breakdown by race was not applicable to the Canadian schools.

A letter of introduction describing the study and asking for their cooperation and assistance was mailed to the Greensboro Public School System and to the Lakehead Board of Education. When permission was finally granted by each of these boards, a letter and a self-addressed stamped post card were sent to the principals and physical education department heads of each high school. Eight post cards were received back, granting permission to conduct the research. (See Appendix A.)
Selection of Subjects

The subjects for this study were American high-school students (N = 532), who attended Smith (N = 282) and Grimsley (N = 250) High Schools in Greensboro, North Carolina, and Canadian high-school students (N = 531) who attended Hammarskjold (N = 250) and Lakeview (N = 281) High Schools in Thunder Bay, Ontario. The subjects selected were for the most part members of physical education classes. At Hammarskjold High School, one grade 11 sociology class and one grade 12 drafting class and members of the girls' junior volleyball team were tested. At Lakeview High School, three health classes and one grade 12 law class were surveyed. A tally sheet was constructed and after each class was tested a count was made to determine the number of subjects in each group in each grade, e.g., male and female athletes and male and female non-athletes. (See Appendix B.) In Canada, it proved necessary to vary slightly from testing in only physical education classes in order to fill each cell. The researcher had set a goal of 20 to 25 subjects for each cell.

Organization and Testing

The test packet containing instructions, the semantic differential, background questionnaire and an informed consent form was distributed at the beginning of physical education classes. The researcher briefly explained the purpose and necessity of the informed consent form and then gave a very brief outline of the purpose of the study. The students were
then asked to read the instructions and listen to the tape-recorded instructions simultaneously. The tape-recorded instructions expanded on the written instructions and attempted to clarify any questions that may have arisen. The testing was usually conducted in a gymnasium, but classrooms and a cafeteria were also used. The test session lasted approximately 25 minutes.

Selection of the Semantic Differential

The instrument chosen to arrive at the perceptions of the concepts "girl athlete," "girl scholar," and "girl cheerleader" was the semantic differential developed by Osgood, Suci, and Tannenbaum (1957). The semantic differential—specifically, the one used and originated by Griffin (1972)—was selected as a valid, reliable, tested and appropriate instrument for this study.

Rationale

There are few instruments which have been designed to quantitatively measure meaning (Osgood, Suci, and Tannenbaum, 1957, p. 1). Psychologists have evaded dealing with the concept of meaning due largely to its unobservable and complex qualities.

The definition of the concept meaning has also been a difficult task. One attempt at this definition uses a stimulus-response process. In this model, the stimuli (signs) are deciphered, then reaction (behavior) occurs as a result of the
initial signs. The concept of meaning is realized in the pause between the stimuli stage and the response stage. A view taken has suggested the meanings various people have for identical signs may be diverse enough that their reactions to these signs are different. Osgood, Suci, and Tannenbaum counter this view by asserting that:

Given the essential sameness of human organisms and the stability of physical laws, of course, the meanings of most primary perceptual signs should be quite constant across individuals. (1957, p. 9)

They also stated that likeness in meanings of conventional verbal stimuli will happen due to the constancy of learning environments in a certain culture.

The semantic differential in general consists of a concept and a series of bipolar adjectives, opposite in meaning, with a seven space scale between them. On each of these series of bipolar terms the subject indicates on one of the spaces his/her perception of a concept relative to the terms of that particular scale. As an example, if the concept being considered was "zebra," possible bipolar scales are:

Slow__:_:_:_:_:_:_Fast
Friendly__:_:_:_:_:_:_Unfriendly
Active__:_:_:_:_:_:_Inactive

The subject would enter his perception of the concept "zebra" on each of these descriptive scales. The adjective indicates the subject's perception of the concept "zebra," while the space indicates his/her intensity of that perception on a
scale of one to seven. The Fast—Slow spaces, for example, would be assigned the following values:

1 2 3 4 5 6 7

Where: Space 1 is extremely Slow  Space 7 is extremely Fast  
Space 2 is quite Slow    Space 6 is quite Fast  
Space 3 is slightly Slow  Space 5 is slightly Fast  
Space 4 is neither Slow or Fast  (neutral position)

The developers of the semantic differential asserted that:

To the contrary, it is a very general way of getting at a certain type of information, a highly generalizable technique of measurement which must be adapted to the requirement of each research problem to which it is applied. (Osgood, Suci, and Tannenbaum, 1957, p. 76)

Osgood ascertained that by applying the concept of semantic space to geometry, meaning is described in a functioning way. Each of the scales formed by the bipolar adjectives depicts a straight line function that goes through the origin of "semantic space." A number of these scales then portrays a point in multidimensional space which represents the meaning of a concept.

Thus, the general meaning of a concept in several dimensions of semantic space is determined, as the subject interprets factors equated with the concept. (Buhrer, 1973, p. 50)

This point in space has two important properties—direction from the origin, and distance from the origin. These properties are analogous to the quality and intensity of meaning. The alternative polar adjectives chosen determine the direction
from the origin and the varying spaces of the scale that are checked to determine the distance from the origin (e.g., the more extreme the further from the origin) (Osgood, Suci, and Tannenbaum, 1957, p. 26).

By the use of factor analysis, Osgood discovered that the scales emerged around three groups having three varying types of meaning. These three factors were labelled evaluative, potency, and activity. He found that these three factors have been consistently present in approximately the same order of magnitude. The evaluative factor is first and accounts for such things as attitudes, rewards, judgment and punishment. Second in magnitude is the potency factor which is concerned with power, size, weight, toughness and the like. The activity factor pertaining to things like quickness, excitement, warmth, and agitation is equal to or smaller than the potency factor in magnitude.

The semantic differential was selected to measure the general meaning of the perceptions of concepts in this study because of its capability of determining the meaning of a concept in more than one dimension. Many attitude scales measure attitudes (evaluative factor) as being the only dimension of meaning; whereas, the semantic differential adds the potency and activity factors which give a three dimensional picture of meaning. The semantic differential, therefore, can take into account two individuals who have the same attitude toward a concept, while differing on perceptions of
meaning of the concept (Osgood, Suci and Tannenbaum, 1957, p. 82). The semantic differential also elicits emotional and unconscious responses rather than well-reasoned, logical, socially-acceptable replies. It was the emotional reactions with which this researcher was concerned.

Previous Studies

The semantic differential has been used in a number of different fields of research: social psychology, clinical psychology, experimental psychology, personality and communication research (Snider and Osgood, 1969). Summers (1970) demonstrated the use and value of the semantic differential in attitude measurement. He found high correlations when comparing it with other traditional attitude scales. As a consultant, Osgood administered the semantic differential to a person suffering from a case of triple personality. It proved to be very effective in diagnosing and identifying the three different personalities of the individual (Osgood and Luria, 1954).

In research dealing with perceptions of women in sport, the semantic differential has been used by Bird and McCullough (1977), Buhrer (1973), Griffin (1972), Hall (1972), and Brown (1965). Bird and McCullough (1977) and Griffin (1972) investigated the perception of femininity in women's roles in general and specifically in sport. Their findings both indicated that the "ideal woman" was evaluated most highly by their subjects. In addition, the "ideal woman" was considered to be
low in potency factors and somewhat active. Brown (1965) obtained similar findings. Bird and McCullough found the "woman athlete" high in evaluative factors and low in activity factors which is in contrast to the results obtained by Griffin (1972) and Brown (1965) for the "woman athlete." Their research indicated that athletic roles for women were perceived to be high in activity and low in evaluative factors. Buhrer's (1973) results implied that the evaluative factor has the most saturation of meaning, followed by activity, and then potency factors for the concepts "woman athlete" and "woman coach." Hall (1972) ascertained that her sample of British athletes and non-athletes did not identically perceive the concept of femininity within athletes. Her results supported the existence of a larger discrepancy between the "feminine woman" and the "athletic woman" within non-athletes as compared to athletes.

Format

Osgood suggested that fifteen to twenty scales are sufficient to accurately measure the meaning of a concept. It was also suggested that there be an equal number of scales for each of the three factors: evaluative, potency and activity. It is desirable to use several scales to represent each factor since it is difficult to find just one scale that will totally measure a factor. In addition, Osgood recommends that the scales representing each factor be mixed with the other scales to avoid predetermined judgments.
The numbers assigned to the spaces in the scales in this study were numbered one through seven for purposes of analysis. It is important to note that these numbers are not a representation of which bipolar adjective has positive value. Their function is to indicate intensity and direction. Answers on the semantic differential are not value judgments. They do not show which perception is better. Rather, the results indicate if perceptions are the same or different among groups.

In this study, the following were measured: (a) "girl athlete" as perceived by Canadian and American high-school students; (b) "girl athlete" as perceived by Canadian and American high-school female athletes; (c) "girl athlete" as perceived by Canadian and American high-school female non-athletes; (d) "girl athlete" as perceived by Canadian and American high-school male athletes; (e) "girl athlete" as perceived by Canadian and American high-school male non-athletes; and (f) "girl scholar" and "girl cheerleader" as perceived by Canadian and American high-school students.

**Griffin's Semantic Differential**

The scales used in Griffin's research (1972) to study the meaning of the following concepts: "woman athlete," "woman professor," "ideal woman," "girlfriend," "mother," and "housewife" were adapted to measure the meaning of the concepts in the present investigation. The fifteen pairs of polar adjectives used in Griffin's study adhere to the criteria
as stipulated by Osgood. All the pairs of polar adjectives except one, sexually attractive—sexually unattractive, were previously tested by factor analysis. Griffin (1972, p. 39) considered the sexually attractive—sexually unattractive scale to be consistent with the other evaluative scales.

Buhrer (1973) applied the fifteen scales developed by Griffin to the concepts "woman athlete" and "woman coach." This instrument was then administered to a selected sample of college women athletes and women coaches. Buhrer assumed that "the mean score of the three factors and their five scales for each factor represented on Griffin's semantic differential defined the desired perceptions" for her study (p. 55). The five scales for each factor in Griffin's and Buhrer's studies were appropriate for the concepts studied in this investigation. The scales used are as follows:

### Evaluative

- Affectionate--Cold
- Attractive--Unattractive
- Interesting--Boring
- Nice--Awful
- Sexually Attractive--Sexually Unattractive

### Potency

- Hard--Soft
- Heavy--Light
- Intelligent--Unintelligent
- Masculine--Feminine
- Thick--Thin

### Activity

- Competitive--Cooperative
- Experimental--Conservative
- Fast--Slow
- Loud--Soft
- Tense--Relaxed
Griffin (1972, p. 29) tested and retested to determine the reliability of her instrument. A Pearson $r$ was used to test the reliability of the perceptions of the concepts. Pearson $r$ scores ranged from .72 to .94 for her concepts. The instrument was accepted on face validity in line with Osgood's statement that the instrument could be validated with common sense (Griffin, 1972, p. 39). Griffin argued that her instrument is objective because "its operation and means of arriving at results are explicit and reproducible" (Griffin, 1972, p. 39). These scales comprised the first part of the test packet for this study.

**Background Questionnaire**

Part two of the test packet consisted of a background questionnaire. (See Appendix C.) This questionnaire was used to collect needed demographic data on each subject. It sought to obtain the following information: school attended, sex, age, grade in school, parents' education, parents' sport involvement, participation on athletic teams, type of sport involvement and past athletic experience.

**Analysis of Data**

Having collected the data, the results of the semantic differential and the background questionnaire were coded onto IBM Fortran Statement sheets and then key punched onto computer cards and subjected to a computerized program. In utilizing the computer printout in the analysis of data, the
following steps were taken: (a) the determination of profiles of "girl athlete," "girl scholar," and "girl cheerleader" by Canadian and American high school female athletes, female non-athletes, male athletes, and male non-athletes; (b) comparison of evaluative, potency, and activity responses of the groups with regard to the concepts of "girl athlete," "girl scholar," and "girl cheerleader"; and (c) comparison of the inter-distances of the three concepts by the groups by calculation of D matrices and D models.

Profile Analysis

In this procedure, the means of each of the fifteen bipolar scales were calculated for each concept. This was done for the entire Canadian sample and American sample and then for each subgroup: Canadian female athletes, female non-athletes, male athletes and male non-athletes; American female athletes, female non-athletes, male non-athletes and male athletes. The mean scores were then plotted on a blank form of the semantic differential and connected to develop a profile of each concept as viewed by the various groups. A visual comparison of the roles was possible, which demonstrated the relationship of the concepts. As a result, scores which were either extremely X or extremely Y, or quite X or quite Y, furnished evidence on the scales which indicated extreme trends in the perceptions of the concepts.
D Matrix and D Model

A collection of check-marks against bipolar scales is the raw data collected by the semantic differential. Each of these positions on the scales was assigned a digit ranging from one to seven. The number "4" is seen as the neutral position and the origin or center of semantic space. A subject's score on an item is the digit corresponding to the scale position he/she checks. A matrix of scores can be generated in the form of number of scales x number of concepts x number of subjects.

Providing that: (a) intervals in all scales were equal; (b) the scales were independent of each other in meaning; and (c) each factor had an equal number of scales, then all the scales of the three factors can be examined as a whole concept. A matrix of semantic space illustrating the concepts' distance from each other in three dimensions can then be calculated. Semantic space is then defined as the space surrounding the axes of the three factors. As Osgood has stated the meaning of a concept can be thought of as "that point in semantic space identified by its coordinates on several factors" (Osgood, Suci, and Tannenbaum, 1957, p. 89).

Osgood employed the generalized distance formula of solid geometry to study the relationship of concepts to each other. It was argued that the correlation coefficient fails to give a valid picture of semantic relationships. It not only misrepresents information, but may be inappropriate in
a number of cases. Therefore, a D score is determined by "taking the difference between the scores of two concepts on each factor, squaring this difference, summing these squares, and taking the square root of the sum" (Osgood, Suci, and Tannenbaum, 1957, p. 91). Osgood believed that this three-dimensional procedure of investigating concepts avoided distorting the results of the relations among concepts.

The mean scores for the evaluative, potency, and activity factors for each concept were then calculated. Using these mean scores, the D scores were found and put into a D matrix. The scores from the D matrix were then used to draw a D model which showed the relationships and distances of the concepts to each other. An origin or point of "meaningfulness" was plotted to add clarity to comparisons by observing the distance of each concept from the origin. The farther the concept is from the origin, the stronger the meaning. The inclusion of an origin allows the researcher to ascertain if any of the concepts are opposite in meaning to the groups or independent in meaning, e.g., "at 90-degree angles to each other through the space" (Osgood, Suci, and Tannenbaum, 1957, p. 97).
CHAPTER IV.
DATA AND ANALYSIS

The six questions asked in the introduction of this study were answered by the methods described in Chapter III. These answers are the results of this investigation and comprise this chapter.

Perceptions of "Girl Athlete" by Canadian and American High-School Students

Profile Analysis

The means of each of the fifteen bipolar scales were calculated to determine the perceptions held by the Canadian and American students for the concept "girl athlete." (See Table 2 and Table 3.) These means were then plotted to form profiles. (See Figures 2 through 6.) To aid interpretation, the series of values given in Figure 1 were assigned to the means (Buhrer, 1973).

Figure 2 illustrates that American high-school students perceive "girl athlete" to be neither or equally X or Y in reply to the scales attractive-unattractive (evaluative), thick-thin (potency), sexually attractive-sexually unattractive (evaluative), soft-loud (activity), feminine-masculine (potency), cold-affectionate (evaluative), soft-hard (potency) and heavy-light (potency). These scales do not contribute any real clarity to the meaning of "girl athlete" as perceived
Table 2
Scale Means of Canadian Sample for Concept "Girl Athlete"

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Att(7)-Unatt(l)</td>
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<td>5.7</td>
<td>5.6</td>
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<td>Bor(1)-Inter(7)</td>
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<td>5.4</td>
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<td>5.6</td>
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<td>3.4</td>
<td>3.3</td>
<td>3.4</td>
</tr>
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<td>2.6</td>
<td>2.8</td>
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<td>4.7</td>
<td>4.4</td>
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<td>3.1</td>
<td>4.1</td>
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<td>Comp(7)-Coop(1)</td>
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<td>Exp(7)-Cons(1)</td>
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<td>4.5</td>
<td>5.1</td>
<td>4.9</td>
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<td>Slow(1)-Fast(7)</td>
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<td>5.8</td>
<td>5.5</td>
<td>6.1</td>
<td>6.0</td>
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</table>

Note. Means were calculated in one thousandths and rounded into one-tenths.
Table 3  
Scale Means of American Sample  
for Concept "Girl Athlete"  

<table>
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<tr>
<th>Scale and Number of Direction</th>
<th>Total Amer. Smpl. n=532</th>
<th>Amer. Male Aths. n=128</th>
<th>Amer. Male Non-ath. n=158</th>
<th>Amer. Fem. Aths. n=75</th>
<th>Amer. Fem. Non-ath. n=171</th>
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<tr>
<td>Att(7)-Unatt(1)</td>
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<td>4.7</td>
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<td>Sex Sex</td>
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<tr>
<td>Att(7)-Unatt(1)</td>
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<td>4.2</td>
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<td>Nice(7)-Awful(1)</td>
<td>5.4</td>
<td>5.4</td>
<td>5.3</td>
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<tr>
<td>Soft(1)-Loud(7)</td>
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<td>4.1</td>
<td>4.1</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Fem(l)-Mas(7)</td>
<td>4.0</td>
<td>4.1</td>
<td>3.8</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Unintell(1)-Intell(7)</td>
<td>5.1</td>
<td>5.0</td>
<td>5.1</td>
<td>5.3</td>
<td>5.1</td>
</tr>
<tr>
<td>Cold(1)-Affect(7)</td>
<td>4.4</td>
<td>4.3</td>
<td>4.7</td>
<td>4.6</td>
<td>4.2</td>
</tr>
<tr>
<td>Soft(1)-Hard(7)</td>
<td>3.8</td>
<td>4.0</td>
<td>3.6</td>
<td>4.1</td>
<td>3.8</td>
</tr>
<tr>
<td>Comp(7)-Coop(1)</td>
<td>4.7</td>
<td>5.0</td>
<td>4.7</td>
<td>4.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Heavy(7)-Light(1)</td>
<td>3.9</td>
<td>4.2</td>
<td>3.8</td>
<td>3.7</td>
<td>3.8</td>
</tr>
<tr>
<td>Exp(7)-Cons(1)</td>
<td>4.6</td>
<td>4.3</td>
<td>4.6</td>
<td>5.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Slow(1)-Fast(7)</td>
<td>5.3</td>
<td>4.9</td>
<td>5.2</td>
<td>5.5</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Note. Means were calculated in one thousandths and rounded into one-tenths.
Figure 1

Assigned Values for Interpretation of Scale Means

X 1: 2: 3: 4: 5: 6: 7 Y

1.00 to 1.5 = Extremely X
1.6 to 2.5 = Quite X
2.6 to 3.5 = Slightly X
3.6 to 4.5 = Neither X nor Y
    and/or
    Equally X and Y
4.6 to 5.5 = Slightly Y
5.6 to 6.5 = Quite Y
6.6 to 7.00 = Extremely Y
Figure 2

Comparison of Profiles of Total Canadian and American High-School Samples for the Concept "Girl Athlete"

Note. Canadian Sample Profile = 
American Sample Profile =
by the American subjects. Four of the bipolar terms belong to the potency factor, which does not necessarily assist in the interpretation of the meaning of the concept held by the American students, but three of the scales are part of the evaluative factor, which suggests that American high-school students have an indifferent attitude towards the "girl athlete." They further perceived the "girl athlete" to be slightly interesting, relaxed, nice, intelligent, competitive, experimental, and fast. These scale items indicated a firmer conceptualization of meaning than did the sets of adjectives with neutral response means. The series of values examined as in Figure 1, did not exhibit Extreme or Quite values of X or Y for "girl athlete."

In comparison, Table 2 and Figure 2 indicate the Canadian high-school students were neither or equally X or Y to "girl athlete" on the bipolar terms soft-loud (activity), and soft-hard (potency). They perceived "girl athlete" to be slightly attractive, interesting, thin, relaxed, sexually attractive, feminine, intelligent, affectionate, competitive, light, and experimental. "Girl athlete" was also perceived as quite nice and fast. There were no extreme values of X or Y given to "girl athlete." Canadian students had six fewer neutral mean responses than had the American students which indicates they held a stronger conceptualization of meaning for "girl athlete." This is further supported by the Canadian omission of neutral response means in evaluative factor scales.
Tables 2 and 3 and Figure 2 give a visual comparison of "girl athlete" held by American and Canadian students. The profiles are similar except the American profile has more neutral response means. Neither profile has any extreme scores. Both profiles have neutral responses on the same scales, i.e., soft-loud, and soft-hard. They also coincided in their perception of "girl athlete" as slightly interesting, relaxed, intelligent, competitive and experimental.

The bipolar terms with the most variation in means were attractive-unattractive (1.0), sexually attractive-sexually unattractive (.9), feminine-masculine (.7), and cold-affectionate (.7). This suggests Canadian students perceived "girl athlete" to be considerably more attractive, sexually attractive, feminine and affectionate than did the American students. In addition three of these scales, attractive-unattractive, sexually attractive-sexually unattractive, and cold-affectionate, are part of the evaluative factor. On the other two scales of this factor, the "girl athlete" was perceived to be more interesting and nicer by the Canadian sample. Thus, the Canadian high-school students held a more favorable attitude toward "girl athlete" than did the American high-school students. It should be noted that Osgood, Suci, and Tannenbaum (1957) found that the evaluative factor is the most defined of the three factors and contributes one-half to three-quarters of the variation in meaning of a concept.
On the potency scales, the Canadian subjects perceived "girl athlete" to be thinner, more feminine, lighter, slightly more intelligent and softer.

On the activity scales, the Canadian subjects perceived the "girl athlete" to be slightly more relaxed, louder, experimental and faster. Both groups viewed "girl athlete" as slightly competitive to the same degree.

Differences Among Factors on the Perceptions of "Girl Athlete"

An examination of Tables 4 to 8 illustrates that the total Canadian and American samples, as well as the subgroups studied, viewed the evaluative factors as the highest when considering "girl athlete." Next was the activity factor and last was the potency factor.

In each instance, the Canadian subjects perceived "girl athlete" to be higher on the evaluative factor than did the American subjects. This is especially evident in the difference in the evaluative factor for the Canadian and American high-school male athletes. Also, in each instance the Canadian subjects perceived "girl athlete" to be lower on the potency factor than did the American subjects. Once again, this is most evident in the difference in the potency factor for the Canadian and American high-school male athletes.

The importance of the origin helps to clarify the interpretation of these results. A concept with neutral responses checked on all of its scales, would fall into the origin of semantic space. This origin is a hypothetical point of
Table 4
Factor Means for the Concept "Girl Athlete" as Held by the Total Canadian and American High-School Samples

<table>
<thead>
<tr>
<th>Perceptions Held by Canadian High-School Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions Held by American High-School Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>
Table 5
Factor Means for the Concept "Girl Athlete" as Held by Canadian and American High-School Female Athletes

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluative</td>
<td>5.297</td>
</tr>
<tr>
<td>Potency</td>
<td>3.991</td>
</tr>
<tr>
<td>Activity</td>
<td>4.675</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluative</td>
<td>4.813</td>
</tr>
<tr>
<td>Potency</td>
<td>4.216</td>
</tr>
<tr>
<td>Activity</td>
<td>4.501</td>
</tr>
</tbody>
</table>
Table 6

Factor Means for the Concept "Girl Athlete" as Held by Canadian and American High-School Female Non-athletes

<table>
<thead>
<tr>
<th>Perceptions Held by Canadian High-School Female Non-athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor</strong></td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions Held by American High-School Female Non-athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor</strong></td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>
Table 7
Factor Means for the Concept "Girl Athlete" as Held by Canadian and American High-School Male Athletes

<table>
<thead>
<tr>
<th>Perceptions Held by Canadian High-School Male Athletes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
<td>Mean</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td>Evaluative</td>
<td>5.614</td>
</tr>
<tr>
<td>Potency</td>
<td>3.624</td>
</tr>
<tr>
<td>Activity</td>
<td>4.258</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions Held by American High-School Male Athletes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
<td>Mean</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td>Evaluative</td>
<td>4.534</td>
</tr>
<tr>
<td>Potency</td>
<td>4.327</td>
</tr>
<tr>
<td>Activity</td>
<td>4.342</td>
</tr>
</tbody>
</table>
Table 8
Factor Means for the Concept "Girl Athlete" as Held by Canadian and American High-School Male Non-athletes

<table>
<thead>
<tr>
<th>Perceptions Held by Canadian High-School Male Non-athletes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
<td>Mean</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>Evaluative</td>
<td>5.500</td>
</tr>
<tr>
<td>Potency</td>
<td>3.567</td>
</tr>
<tr>
<td>Activity</td>
<td>4.193</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions Held by American High-School Male Non-athletes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
<td>Mean</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>Evaluative</td>
<td>4.766</td>
</tr>
<tr>
<td>Potency</td>
<td>4.003</td>
</tr>
<tr>
<td>Activity</td>
<td>4.382</td>
</tr>
</tbody>
</table>
"meaninglessness" situated in the heart of semantic space. A concept has more "saturation" or distinctiveness in meaning the further away it is from the origin in any direction (Osgood, Suci, and Tannenbaum, 1957).

This suggests the total Canadian sample, as well as the Canadian subgroups, perceived "girl athlete" to be further from the origin (4.0) on the evaluative factor than did their American counterparts. "Girl athlete" had more distinctiveness of meaning for the Canadians on the evaluative factor, which accounts for the majority of the measurement of meaning of a concept. All the Canadian subjects, as well as the subgroups, had a more well-defined and favorable attitude toward "girl athlete."

Although the potency factor values were lower for all the Canadian subjects, as well as the subgroups, than they were for the Americans, they were not always further from the origin. Therefore, it is not possible to make a definite statement in relationship to the distinctiveness of meaning of the potency factor. But, in general, it appears that the Canadians perceived "girl athlete" to be less powerful than did the Americans.

The same is true for the activity factor. The total Canadian sample, and the Canadian female athletes and non-athletes perceived "girl athlete" to be more active than did their American parallels. The American male athletes and non-athletes perceived the "girl athlete" to be more active
than did the Canadian male athletes and non-athletes.

The D Matrices and D Models aid in giving a clearer picture of the perceptions of the concept as they are situated in semantic space.

D Matrices and D Models in Semantic Space

To facilitate a comparison of meaning of the concept "girl athlete" to the various Canadian and American groups and to compare the meaning of the three concepts to the total American and Canadian samples, the following procedure was taken. The D formula (see Appendix D) was computed to form D matrices. From these matrices, and with the means of the factors, D models were constructed. A D matrix and D model were constructed for each of the questions put forth in the statement of the problem.

The D matrix in Table 9 shows the distances of the perceptions of "girl athlete" from each other, and from the origin, or center of semantic space by American and Canadian high-school students. The D models in Figure 3 and Figure 4 represent the perceptions of "girl athlete" and origin on a three-dimensional grid.

From Figure 3, two clusters of perceptions of "girl athlete" are apparent. The cluster closest to the origin, indicating less distinctiveness of meaning held for the concept (Osgood, Suci, and Tannenbaum, 1957, p. 97), was the perceptions of the American high-school students. The cluster furthest from the origin, indicating more saturation of meaning
for the concept, was the perceptions of the Canadian high-school students. The perceptions of "girl athlete" by the total Canadian and American high-school students are in the center of each of the clusters. Figure 4 clearly shows the distance from the origin of the two perceptions of "girl athlete" as well as from each other. It is evident "girl athlete" had more meaning for the Canadian high-school students than it did for the American high-school students.

Table 9
D Matrix of the Concept "Girl Athlete" as Held by the Total Canadian and American Samples

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Canadian H.S. students</th>
<th>American H.S. students</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Canadian High-School Students</td>
<td></td>
<td>.784</td>
<td>1.458</td>
</tr>
<tr>
<td>(2) American High-School Students</td>
<td></td>
<td></td>
<td>.804</td>
</tr>
<tr>
<td>(3) Origin</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Through the techniques of profile analysis, differences among factors, a D matrix and D models, an answer to the question: "What is the perceived status of the American high-school female athlete as compared to the perceived status of the Canadian high-school female athlete?" was found. It appeared that the American high-school female athlete is
Figure 3

D Model on a Three-Dimensional Grid of the Perceptions of "Girl Athlete"

(1) Canadian High-School Students
(2) American High-School Students
(3) Canadian High-School Female Athletes
(4) American High-School Female Athletes
(5) Canadian High-School Female Non-athletes
(6) American High-School Female Non-athletes
(7) Canadian High-School Male Athletes
(8) American High-School Male Athletes
(9) Canadian High-School Male Non-athletes
(10) American High-School Male Non-athletes
(X) Origin
Figure 4

Constructed D Model of Canadian and American High-School Students' Perceptions of "Girl Athlete" (Lifted off the Grid)

(1) Canadian High-School Students
(2) American High-School Students
(X) Origin
perceived less favorably and in a less extreme manner than is the Canadian high-school female athlete.

**Perceptions of "Girl Athlete" by Canadian and American High-School Female Athletes**

**Profile Analysis**

American high-school female athletes, as seen in Figure 5 and Table 3, perceive "girl athlete" to be neither or equally X or Y in response to the scales attractive-unattractive (evaluative), thick-thin (potency), sexually attractive-sexually unattractive (evaluative), soft-loud (activity), feminine-masculine (potency), soft-hard (potency) and heavy-light (potency). These scales do not add distinctiveness to the meaning of the concept. Four of the scales are part of the potency factor which again suggests little influence of these items on the female athletes' perception of the "girl athlete." They perceived the "girl athlete" to be slightly interesting, relaxed, intelligent, affectionate, competitive, experimental, and fast. "Girl athlete" was also viewed as quite nice. These scale items contribute more to the conceptualization of meaning than do the items with neutral responses. Once again there were no mean scores which fell in the extreme categories.

Canadian high-school female athletes, as seen in Table 2 and Figure 5, perceived "girl athlete" to be neither or equally X or Y in response to the scales feminine-masculine (potency) and soft-hard (potency). These scales, being
Figure 5

Comparison of Profiles of Canadian and American High-School Female Athletes for the Concept "Girl Athlete"

Note. Canadian Female Athletes =
American Female Athletes =
neutral and part of the potency factor, contribute little to the meaning of the concept. "Girl athlete" was seen as slightly attractive, thin, relaxed, sexually attractive, loud, intelligent, affectionate, competitive, light, and experimental. They also perceived "girl athlete" to be quite nice and fast. There were no extreme categories.

In comparison, the fewer number of neutral responses and the lack of any evaluative factor scales in the neutral area indicate that "girl athlete" had more clarity of meaning and distinctiveness for the Canadian than for the American high-school female athletes.

The profiles illustrate the higher frequency of neutral replies by the American high-school female athletes. Figure 5 also shows that the Canadian high-school female athletes were the same or more extreme in their perceptions on every scale than were their American counterparts.

The scales with the greatest amount of spread between the means were attractive-unattractive (.9) and sexually attractive-sexually unattractive (.7). The Canadian high-school female athletes perceived the "girl athlete" to be considerably more attractive and sexually attractive. Both of these scales belong to the evaluative factor. "Girl athlete" was perceived to be slightly more nice, interesting and affectionate on the remaining evaluative factor scales by the Canadian high-school female athletes. They held a more favorable opinion of "girl athlete" than did the American high-school female athletes.
On the potency scales, the "girl athlete" was perceived to be thinner, more feminine, and lighter by the Canadian high-school female athletes. Both groups viewed the "girl athlete" as being neither soft nor hard and slightly intelligent to the same degree.

On the activity scales, they perceived "girl athlete" to be lighter, faster, louder, more competitive, and more relaxed. These subgroups were perceiving a concept which they themselves were experiencing and therefore were involved in self-perception.

**D Matrix and D Models in Semantic Space**

The D matrix in Table 10 shows the distances of the perceptions of "girl athlete" from each other, and from the origin by Canadian and American high-school female athletes. The D models in Figure 3 and Figure 6 represent the perceptions of "girl athlete" and the origin on a three-dimensional grid.

Table 10, Figure 3 and Figure 6 show that the perception of "girl athlete" by Canadian high-school female athletes is further from the origin, or center of semantic space, than the American high-school female athletes' perception of "girl athlete." Table 10 and Figure 6 also show that the distance between the perceptions is greater than the distance from the origin to the American female athletes' perception of "girl athlete." This indicates "girl athlete" had considerably more meaning for the Canadian high-school female athletes than it did for American high-school female athletes.
Table 10
D Matrices of the Concept "Girl Athlete" as Held by
Canadian and American High-School Students

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Can. fem. athletes</th>
<th>Amer. fem. athletes</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) Canadian female athletes</td>
<td>_____</td>
<td>1.201</td>
<td>1.462</td>
</tr>
<tr>
<td>(4) American female athletes</td>
<td>_____</td>
<td>_____</td>
<td>.980</td>
</tr>
<tr>
<td>(X) Origin</td>
<td>_____</td>
<td>_____</td>
<td>_____</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Can. fem. non-aths</th>
<th>Amer. fem. non-aths</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Canadian female non-aths</td>
<td>_____</td>
<td>.471</td>
<td>1.224</td>
</tr>
<tr>
<td>(6) American female non-aths</td>
<td>_____</td>
<td>_____</td>
<td>.787</td>
</tr>
<tr>
<td>(X) Origin</td>
<td>_____</td>
<td>_____</td>
<td>_____</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Can. male athletes</th>
<th>Amer. male athletes</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>(7) Canadian male athletes</td>
<td>_____</td>
<td>1.291</td>
<td>.764</td>
</tr>
<tr>
<td>(8) American male athletes</td>
<td>_____</td>
<td>_____</td>
<td>.713</td>
</tr>
<tr>
<td>(X) Origin</td>
<td>_____</td>
<td>_____</td>
<td>_____</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Can. male non-aths</th>
<th>Amer. male non-aths</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>(9) Canadian male non-aths</td>
<td>_____</td>
<td>.873</td>
<td>1.573</td>
</tr>
<tr>
<td>(10) American male non-aths</td>
<td>_____</td>
<td>_____</td>
<td>.856</td>
</tr>
<tr>
<td>(X) Origin</td>
<td>_____</td>
<td>_____</td>
<td>_____</td>
</tr>
</tbody>
</table>
Figure 6

Constructed D Model of Canadian and American High-School Female Athletes' Perceptions of "Girl Athlete" (Lifted off the grid)

(3) Canadian High-School Female Athletes
(4) American High-School Female Athletes
(X) Origin
The analysis of data techniques found an answer to the question: "What is the self-perceived status of the high-school female athlete?" They indicated that Canadian high-school female athletes have a more well defined and more favorable view of themselves than do the American high-school female athletes.

**Perceptions of "Girl Athlete" by Canadian and American High-School Female Non-Athletes**

**Profile Analysis**

Table 3 and Figure 7 indicate that American high-school female non-athletes were indifferent in their perception of "girl athlete" on the bipolar terms attractive-unattractive (evaluative), thick-thin (potency), sexually attractive-sexually unattractive (evaluative), soft-loud (activity), feminine-masculine (potency), cold-affectionate (evaluative), soft-hard (potency), competitive-cooperative (activity), heavy-light (potency), and experimental-conservative (activity). They viewed "girl athlete" as slightly interesting, relaxed, nice, intelligent and fast. No mean scores were in the Quite X or Y or Extremely X or Y categories. The ten neutral responses indicate that the American high-school female non-athletes do not have a strong conceptualization of meaning for the "girl athlete." Neutral responses on three evaluative factor scales further supports this assertion. This implies that American high-school female non-athletes have a neutral attitude towards "girl athlete."
Table 2 and Figure 7 illustrate that Canadian high-school female non-athletes perceived "girl athlete" to be neither or equally X or Y in response to the scales sexually attractive- sex ually unattractive (evaluative), feminine-masculine (potency), soft-hard (potency), and heavy-light (potency). Three of these scales are part of the potency factor which does not necessarily contribute to the meaning of the concept. "Girl athlete" was perceived to be slightly attractive, thin, relaxed, loud, intelligent, affectionate, competitive and experimental. They also viewed "girl athlete" to be quite interesting, nice and fast. No mean scores were in the extreme category.

The fewer number of neutral choices, only one of which was part of the evaluative factor, and the inclusion of three mean scores in the Quite X or Y category imply that "girl athlete" has more clarity of meaning and distinctiveness for the Canadian than the American high-school female non-athletes.

Figure 7 shows the higher number of neutral choices by the American high-school female non-athletes. The profiles also demonstrate that the Canadian high-school female non-athletes were more extreme in their perceptions on every scale except one. The exception was soft-hard.

There was not a great deal of spread between the profiles across the scales. The scale with the most variance was attractive-unattractive (.7) which indicates the Canadian high-school female non-athletes viewed "girl athlete" to be
Figure 7

Comparison of Profiles of Canadian and American High-School Female Non-athletes for the Concept "Girl Athlete"

Note. Canadian Female Non-athletes =
American Female Non-athletes =
considerably more attractive. On the remaining evaluative factor scales, they perceived "girl athlete" to be nicer, more interesting, sexually attractive and affectionate.

On the potency scales, "girl athlete" was perceived to be thinner, harder, lighter, more feminine and slightly more intelligent by the Canadian high-school female non-athletes.

On the activity scales, they viewed "girl athlete" to be more relaxed, competitive, experimental, louder and faster.

D Matrix and D Models in Semantic Space

The D matrix in Table 10 shows the distances of the perceptions of "girl athlete" from each other, and from the origin by Canadian and American high-school female non-athletes. The D models in Figure 3 and Figure 8 depict these perceptions on a three-dimensional grid.

Table 10, Figure 3 and Figure 8 illustrate the perception of "girl athlete" by Canadian high-school female non-athletes is further from the center of semantic space, and therefore more saturated with meaning than the American high-school female non-athletes' perception of "girl athlete."

Therefore, the techniques of data analysis, in answer to the question: What is the status of the high-school female athlete as perceived by high-school female non-athletes?", indicated that Canadian high-school female non-athletes have a more favorable and more sharply defined perception of the high-school female athlete than do their parallels in the United States.
Figure 8

Constructed D Model of Canadian and American High-School Female Non-athletes' Perceptions of "Girl Athlete" (Lifted off the grid)

(5) Canadian High-School Female Non-athletes
(6) American High-School Female Non-athletes
(X) Origin
Profile Analysis

Table 3 and Figure 9 show that American high-school male athletes perceived "girl athlete" as neither or equally both in choosing the scales attractive-unattractive (evaluative), thick-thin (potency), sexually attractive-sexually unattractive (evaluative), soft-loud (activity), feminine-masculine (potency), cold-affectionate (evaluative), soft-hard (potency), heavy-light (potency), and experimental-conservative (activity). They viewed "girl athlete" to be slightly relaxed, interesting, nice, intelligent, competitive, and fast. No mean scores were in the Quite X or Y or Extremely X or Y categories. The large number of neutral responses, three of them being evaluative factor scales, indicate that the concept "girl athlete" lacks clarity and distinctiveness of meaning for the American high-school male athletes. They possess a neutral opinion of "girl athlete."

Table 2 and Figure 9 illustrate that Canadian high-school male athletes did not have any neutral mean scores for the fifteen scales. They definitely had a well defined perception of meaning for the concept. They perceived "girl athlete" to be slightly interesting, thin, relaxed, soft, feminine, intelligent, affectionate, competitive, light, and experimental. "Girl athlete" was also thought to be quite attractive, sexually attractive, nice and fast. There were no mean scores in the extreme categories. The favorable direction of the
Figure 9

Comparison of Profiles of Canadian and American High-School Male Athletes for the Concept "Girl Athlete"

Note. Canadian Male Athletes = 
American Male Athletes = 

mean scores of all the evaluative factor scales, especially attractive-unattractive, sexually attractive-sexually unattractive, and nice-awful, indicate that Canadian high-school male athletes have a favorable opinion of the "girl athlete."

Figure 9 clearly shows the large number of neutral responses by the American high-school male athletes and the deficiency of similar responses by their Canadian counterparts. It can be observed from the profiles that the Canadian high-school male athletes were more extreme in their perceptions on every scale except one: competitive-cooperative.

There was a substantial amount of spread between the profiles on certain scales. The scales with the most variance were attractive-unattractive (1.5), boring-interesting (.7), thick-thin (1.1), relaxed-tense, (.8), sexually attractive-sexually unattractive (1.6), feminine-masculine (1.2), cold-affectionate (1.0), soft-hard (.7), heavy-light (1.0), and slow-fast (.9).

On the evaluative scales, the Canadian high-school male athletes perceived "girl athlete" to be considerably more attractive, interesting, sexually attractive, and affectionate. "Girl athlete" was also viewed as being nicer.

On the potency scales, they perceived "girl athlete" to be considerably thinner, softer, lighter and considerably more feminine. "Girl athlete" was also viewed as being more intelligent.
On the activity scales, "girl athlete" was perceived as considerably faster and more relaxed. In addition, the Canadian high school male athletes viewed "girl athlete" as softer, more cooperative and more experimental.

**D Matrix and D Models in Semantic Space**

The D matrix in Table 10 shows the distances of the perceptions of "girl athlete" from each other and from the origin by Canadian and American high-school male athletes. The D models in Figure 3 and Figure 10 represent these perceptions on a three-dimensional grid.

Table 10, Figures 3 and 10 show the Canadian high-school male athletes' perception of "girl athlete" was slightly further from the origin than their American parallels' perception of "girl athlete." It is also evident that there is a substantial distance between the perceptions of "girl athlete" by the high-school male athletes of each country. This indicated that "girl athlete" had slightly more and different meaning for the Canadian high-school male athletes than it did for American high-school male athletes.

As a result of the techniques of data analysis, an answer to the question: "What is the status of the high-school female athlete as perceived by high school male athletes?" was discovered. It appeared that Canadian high-school male athletes have a much more favorable and well-defined perception of the high-school female athlete than do American high-school male athletes.
Figure 10

Constructed D Model of Canadian and American High-School Male Athletes' Perceptions of "Girl Athlete"
(Lifted off the grid)

(7) Canadian High-School Male Athletes
(8) American High-School Male Athletes
(X) Origin
Perceptions of "Girl Athlete" by Canadian and American High-School Male Non-Athletes

Profile Analysis

Table 3 and Figure 11 indicate that American high-school male non-athletes were indifferent in their perception of "girl athlete" on the scales thick-thin (potency), sexually attractive-sexually unattractive (evaluative), soft-loud (activity), soft-hard (potency), heavy-light (potency), and feminine-masculine (potency). Four of these are potency factor scales which do not necessarily contribute strongly to the meaning of the concept. They perceived "girl athlete" to be slightly attractive, interesting, relaxed, nice, intelligent, affectionate, competitive, experimental and fast. There were no mean scores in the Quite X or Y or Extremely X or Y categories.

Table 2 and Figure 11 show Canadian high-school male non-athletes perceived "girl athlete" to be neither or equally both in response to three scales: soft-loud (activity), competitive-cooperative (activity), and experimental-conservative (activity). These are activity factor scales and have the least influence on meaning of a concept when also considering the evaluative and potency factors. "Girl athlete" was viewed to be slightly interesting, thin, relaxed, feminine, intelligent, affectionate, soft, light and fast. They further perceived "girl athlete" to be quite sexually attractive and quite nice. There were no mean scores in the extreme categories.
Comparison of Profiles of Canadian and American High-School Male Non-athletes for the Concept "Girl Athlete"

Note. Canadian Male Non-athletes = _________
American Male Non-athletes = _________
Once again, the smaller number of neutral responses all of which were activity factor scales, and the inclusion of mean scores in the quite X or Y categories indicate Canadian high-school male non-athletes have a more well-defined conceptualization of meaning of "girl athlete" than do American high-school male non-athletes.

The profiles illustrate that the Canadian high-school male non-athletes were more extreme in their perceptions of "girl athlete" on all the scales except competitive-cooperative and experimental-conservative. On certain scales, there was a fair degree of spread between the profiles. These were attractive-unattractive (.9), boring-interesting (.7), sexually attractive-sexually unattractive (1.1), and feminine-masculine (1.0). Three of these are evaluative factor scales which implies Canadian high-school male non-athletes perceived "girl athlete" to be considerably more attractive, interesting and sexually attractive. On the remaining evaluative factor scales "girl athlete" was seen as nicer and more affectionate.

On the potency scales, they perceived "girl athlete" to be considerably more feminine, thinner, softer, lighter and more intelligent.

On the activity scales, "girl athlete" was viewed to be softer, faster, more relaxed, more cooperative, and more conservative.
D Matrix and D Models in Semantic Space

The D matrix in Table 10 shows the distances of the perceptions of "girl athlete" from each other, and from the origin by Canadian and American high-school male non-athletes. The D models in Figure 3 and Figure 12 depict these perceptions on a three-dimensional grid.

Table 10, and Figures 3 and 12 show the perception of "girl athlete" by the Canadian high-school male non-athletes was considerably further from the center of semantic space than the perception of "girl athlete" by the American high-school male non-athletes. This indicates that "girl athlete" had more saturation of meaning for the Canadian high-school male non-athlete than it did for the American high-school male non-athletes.

The methods of data analysis found an answer to the question: "What is the status of the high-school female athlete as perceived by high-school male non-athletes?" They indicated that Canadian high-school male non-athletes have a more well defined and more favorable perception of the high-school female athlete than do their American counterparts.

Perceptions of the Three Concepts by the Total American High-School Sample

Profile Analysis

As mentioned earlier, "girl athlete" was perceived by the American high-school students to be neither or equally X or Y in response to the scales attractive-unattractive
Figure 12

Constructed I Model of Canadian and American High-School Male Non-athletes' Perceptions of "Girl Athlete" (Lifted off the grid)

(9) Canadian High-School Male Non-athletes
(10) American High-School Male Non-athletes
(X) Origin
(evaluative), thick-thin (potency), sexually attractive-
sexually unattractive (evaluative), soft-loud (activity),
feminine-masculine (potency), cold-affectionate (evaluative),
soft-hard (potency), and heavy-light (potency). They further
perceived "girl athlete" to be slightly interesting, relaxed,
nice, intelligent, competitive, experimental, and fast. There
were no Quite or Extreme values of X or Y given to "girl
athlete." The large number of neutral responses, three of
which were evaluative factor scales, and the lack of mean
scores in the Quite or Extreme X or Y categories imply that
"girl athlete" lacks clarity and distinctiveness of meaning
for the American high-school students. Further, they appear
to possess a rather neutral opinion of "girl athlete."

"Girl scholar," as seen in Table 11 and Figure 13, was
perceived by the American high-school students to be neither
or equally both in response to the scales thick-thin (potency),
sexually attractive-sexually unattractive (evaluative), com-
petitive-cooperative (activity), heavy-light (potency), and
conservative-experimental (activity). They perceived "girl
scholar" to be slightly attractive, interesting, relaxed,
nice, soft, feminine, affectionate, soft, and fast. They
further perceived "girl scholar" to be quite intelligent.
There were no extreme mean values. The fewer number of neu-
tral responses, only one of which was an evaluative factor
scale, and the presence of a mean score in the Quite X or Y
category indicate that "girl scholar" had more saturation
Table 11
Scale Means of American Sample for Concept "Girl Scholar"

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<tr>
<th>Scale and Number of Direction</th>
<th>Total Amer. Smpl. n=532</th>
<th>Amer. Male Aths. n=128</th>
<th>Amer. Male Non-ath. n=158</th>
<th>Amer. Fem. Aths. n=75</th>
<th>Amer. Fem. Non-ath. n=171</th>
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<td>4.6</td>
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<td>4.2</td>
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<td>4.4</td>
<td>5.3</td>
<td>4.9</td>
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</tbody>
</table>

Note. Means were calculated in one thousandths and rounded into one-tenths.
Figure 13

Comparison of Profiles of the Three Concepts as Held by the Total American High-School Sample

Note. Girl Athlete =
     Girl Scholar =
     Girl Cheerleader =
and distinctiveness of meaning for the American high-school students than did "girl athlete."

They perceived "girl cheerleader," as seen in Table 12 and Figure 13, to be neither or equally both in response to the scales soft-loud (activity), and competitive-cooperative (activity). "Girl cheerleader" was seen to be slightly interesting, thin, relaxed, intelligent, affectionate, soft, light, experimental and fast. They also viewed "girl cheerleader" to be quite attractive, sexually attractive, nice, and feminine. There were no neutral responses in which all three profiles coincided. There were no extreme values. The fewer number of neutral responses, none of which were evaluative factor scales, the presence of four mean scores in the Quite X or Y category, three of which were evaluative factor scales suggest that "girl cheerleader" had a stronger conceptualization of meaning for the American high-school students than did either "girl scholar" or "girl athlete."

Figure 13 shows that the perception of "girl cheerleader" by the American high-school students was more extreme than the perceptions of "girl scholar" and "girl athlete" on all but four of the bipolar terms. The exceptions were soft-loud, unintelligent-intelligent, competitive-cooperative, and slow-fast. Not one of these scales is part of the evaluative factor. This means "girl cheerleader" was perceived to be nicer, more affectionate, more sexually attractive, more interesting, and more attractive than either "girl scholar"
<table>
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<tr>
<th>Scale and Number of Direction</th>
<th>Total Amer. Smpl. n=532</th>
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<td>5.1</td>
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<td>5.2</td>
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</table>

Note. Means were calculated in one thousandths and rounded into one-tenths.
or "girl athlete" by the American high-school students. They held a more positive and favorable attitude towards "girl cheerleader."

There was a substantial amount of variation among the three profiles on certain scales. On the attractive-unattractive scale there was a difference of 1.6 between "girl cheerleader" and "girl athlete" and a difference of 1.3 between "girl cheerleader" and "girl scholar." The sexually attractive-sexually unattractive scale had a variance of 1.5 between "girl cheerleader" and "girl athlete" and a variance of 1.2 between "girl cheerleader" and "girl scholar." A difference of 1.4 existed between "girl athlete" and "girl scholar" and a difference of .8 between "girl scholar" and "girl cheerleader" on the soft-loud scale. The feminine-masculine scale had a variance of 1.7 between "girl cheerleader" and "girl athlete" and a difference of 1.4 between "girl scholar" and "girl athlete." A variance of 1.3 was found between "girl cheerleader" and "girl scholar" and a variance of .9 between "girl scholar" and "girl athlete" on the unintelligent-intelligent scale. The competitive-cooperative scale had a difference of 1.1 between "girl scholar" and "girl athlete" and a difference of .7 between "girl scholar" and "girl cheerleader." These spreads indicate that: "girl cheerleader" was perceived to be considerably more attractive and sexually attractive than "girl athlete" or "girl scholar"; "girl athlete" and "girl cheerleader" were perceived to be
considerably louder than "girl scholar"; "girl cheerleader" and "girl scholar" were seen to be considerably more feminine than "girl athlete"; "girl scholar" was viewed as considerably more intelligent and cooperative than "girl athlete" and "girl cheerleader."

In comparing the concepts, "girl cheerleader" received the most extreme evaluative scale scores, especially on the attractive-unattractive and sexually attractive-sexually unattractive scales where the mean score spreads were considerable.

Perceptions of the Three Concepts by the Total Canadian High-School Sample

Profile Analysis

As previously stated, "girl athlete" was perceived by the Canadian high-school students to be neither or equally X or Y in response to the scales soft-loud (activity), and soft-hard (potency). They viewed "girl athlete" to be slightly attractive, interesting, thin, relaxed, sexually attractive, feminine, intelligent, affectionate, competitive, light, and experimental. "Girl athlete" was also seen as quite nice and fast. There were no extreme values of X or Y given to "girl athlete." The inclusion of only two mean scores as neutral responses and the exclusion of any evaluative factor scales in the neutral area imply Canadian high-school students have a strong conceptualization of meaning for "girl athlete."
Table 13 and Figure 14 show "girl scholar" was perceived by the Canadian high school students to be neither or equally X or Y in response on the scales attractive-unattractive (evaluative), thick-thin (potency), relaxed-tense (activity), sexually attractive-sexually unattractive (evaluative), heavy-light (potency), and experimental-conservative (activity). They perceived "girl-scholar" to be slightly interesting, nice, soft, affectionate, cooperative and fast. "Girl scholar" was also viewed as quite feminine and quite intelligent. The larger number of mean scores in the neutral area, two of which were evaluative factor scales, indicate "girl scholar" was less well defined and had less distinctiveness of meaning for the Canadian high-school students than did "girl athlete."

"Girl cheerleader," as seen in Table 14 and Figure 14, was perceived as indifferent in response to the scales soft-loud (activity) and competitive-cooperative (activity). They perceived "girl cheerleader" to be slightly interesting, thin, relaxed, intelligent, affectionate, soft, light, experimental, and fast. "Girl cheerleader" was also viewed as quite attractive, sexually attractive, nice and feminine. There were no extreme values. Both "girl cheerleader" and "girl athlete" had two mean scores in the neutral area, neither of them being evaluative scale scores; but, "girl cheerleader" had two more evaluative scale mean scores in the Quite X or Y category. This implies "girl cheerleader" had a slightly
### Table 13

Scale Means of Canadian Sample for Concept "Girl Scholar"

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*Note. Means were calculated in one thousandths and rounded into one-tenths.*
Figure 14
Comparison of Profiles of the Three Concepts as Held by the Total Canadian High-School Sample

Note. Girl Athlete =
Girl Scholar =
Girl Cheerleader =
Table 14
Scale Means of Canadian Sample for Concept "Girl Cheerleader"

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<td>2.4</td>
<td>2.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Sex Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Att(7)-Unatt(1)</td>
<td>5.9</td>
<td>6.4</td>
<td>6.3</td>
<td>5.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Nice(7)-Awful(1)</td>
<td>5.8</td>
<td>6.2</td>
<td>6.1</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Soft(1)-Loud(7)</td>
<td>4.3</td>
<td>3.4</td>
<td>3.7</td>
<td>5.4</td>
<td>5.0</td>
</tr>
<tr>
<td>Fem(1)-Mas(7)</td>
<td>2.2</td>
<td>1.9</td>
<td>2.0</td>
<td>2.4</td>
<td>2.5</td>
</tr>
<tr>
<td>unintell(1)-intell(7)</td>
<td>4.7</td>
<td>4.9</td>
<td>5.0</td>
<td>4.3</td>
<td>4.5</td>
</tr>
<tr>
<td>Cold(1)-Affect(7)</td>
<td>5.4</td>
<td>5.7</td>
<td>5.6</td>
<td>5.2</td>
<td>5.1</td>
</tr>
<tr>
<td>Soft(1)-Hard(7)</td>
<td>3.1</td>
<td>2.6</td>
<td>2.7</td>
<td>3.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Comp(7)-Coop(1)</td>
<td>4.1</td>
<td>4.0</td>
<td>4.3</td>
<td>4.1</td>
<td>4.0</td>
</tr>
<tr>
<td>Heavy(7)-Light(1)</td>
<td>3.1</td>
<td>3.0</td>
<td>3.2</td>
<td>3.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Exp(7)-Cons(1)</td>
<td>4.9</td>
<td>5.1</td>
<td>4.9</td>
<td>4.7</td>
<td>4.8</td>
</tr>
<tr>
<td>Slow(1)-Fast(7)</td>
<td>5.1</td>
<td>5.0</td>
<td>5.1</td>
<td>4.9</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Note. Means were calculated in one thousandths and rounded into one-tenths.
firmer conceptualization of meaning for the Canadian high-
school students than did "girl athlete." This also indicates
"girl cheerleader" was more sharply defined and had more
distinctiveness of meaning than did "girl scholar" for the
Canadian sample.

Figure 14 shows that the perception of "girl cheerleader"
was as extreme or more extreme than the perceptions of "girl
scholar" and "girl athlete" on all but three of the scales.
The exceptions were unintelligent-intelligent, competitive-
cooperative, and slow-fast. These scales are not part of
the evaluative factor. On the evaluative scales, "girl
cheerleader" was perceived to be more attractive, more sex-
ually attractive, and more affectionate than either "girl
scholar" or "girl athlete." "Girl cheerleader" and "girl
athlete" were viewed to be equally as interesting and nice.
This suggests the Canadian high-school students held a more
positive and favorable attitude towards "girl cheerleader"
than towards the other concepts. An examination of the pro-
files on these scales also shows that they held a more fav-
orable attitude towards "girl athlete" than to "girl scholar."

There was a large amount of spread among the profiles
on certain scales. On the attractive-unattractive scale
there was a variance of 1.7 between "girl cheerleader" and
"girl scholar," a difference of .9 between "girl scholar"
and "girl athlete" and a difference of .8 between "girl
cheerleader" and "girl athlete." A difference of .8 was
found between "girl scholar" and the other concepts on the boring-interesting scale. The thick-thin scale had a variance of .8 between the "girl scholar" and "girl cheerleader." The relaxed-tense scale had a difference of 1.9 between "girl cheerleader" and "girl scholar" and a difference of 1.8 between "girl scholar" and "girl athlete." A variance of 1.5 was found between "girl cheerleader" and "girl scholar," a difference of .8 between "girl cheerleader" and "girl athlete," and a difference of .7 between "girl scholar" and "girl athlete" on the sexually attractive-sexually unattractive scale. The soft-loud scale had a variance of 1.5 between "girl cheerleader" and "girl scholar" and a variance of 1.3 between "girl athlete" and "girl scholar." The feminine-masculine scale yielded a difference of 1.1 between "girl cheerleader" and "girl athlete" and a 1.0 difference between "girl athlete" and "girl scholar." A difference of 1.8 was found between "girl scholar" and "girl cheerleader" and a difference of 1.2 between "girl scholar" and "girl athlete" on the unintelligent-intelligent scale. The competitive-cooperative scale had a variance of 1.3 between "girl scholar" and "girl athlete" and a variance of .7 between "girl scholar" and "girl athlete." On the experimental-conservative scale a difference of 1.0 was found between "girl scholar" and "girl cheerleader" and a difference of .9 between "girl scholar" and "girl athlete." A variance of .8 existed between "girl scholar" and "girl athlete" and a variance of .7 between
"girl athlete" and "girl cheerleader" on the slow-fast scale. These spreads indicate that: "girl cheerleader" was perceived to be considerably more attractive and sexually attractive than the other concepts; "girl cheerleader" was viewed to be considerably thinner, more relaxed, more interesting, louder, more feminine, less intelligent, and more experimental than "girl scholar"; "girl cheerleader" was perceived to be considerably more attractive, more sexually attractive, more feminine and slower than "girl athlete"; and "girl athlete" was perceived to be considerably more attractive, more interesting, more relaxed, more sexually attractive, louder, less feminine, less intelligent, more competitive, more experimental, and faster than "girl scholar."

In comparing the concepts, "girl cheerleader" received the most extreme evaluative scale scores, especially on the attractive-unattractive and sexually attractive-sexually unattractive scales where the mean score spreads were considerable.

Differences Among Factors on the Perceptions of the Three Concepts by American and Canadian High-School Students

Tables 15 to 17 show both the Canadian and American students perceived "girl cheerleader" to be the highest on the evaluative factor. This concept had the most saturation of meaning for the students of both countries. "Girl athlete" also had more distinctiveness of meaning for the Canadian students than for the Americans. It ranked second on the
Table 15
Factor Means of the Three Concepts as Held by the Total Canadian High-School Sample

<table>
<thead>
<tr>
<th>Perceptions of the Concept &quot;Girl Athlete&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions of the Concept &quot;Girl Scholar&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions of the Concept &quot;Girl Cheerleader&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>
Table 16

Factor Means of the Three Concepts as Held by the Total American High-School Sample

<table>
<thead>
<tr>
<th>Perceptions of the Concept &quot;Girl Athlete&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions of the Concept &quot;Girl Scholar&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions of the Concept &quot;Girl Cheerleader&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Evaluative</td>
</tr>
<tr>
<td>Potency</td>
</tr>
<tr>
<td>Activity</td>
</tr>
</tbody>
</table>
Table 17
Concepts Ranked According to Factor Means for the Total Canadian and American High-School Samples

<table>
<thead>
<tr>
<th>Evaluative</th>
<th>Mean</th>
<th>Potency</th>
<th>Mean</th>
<th>Activity</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian High-School Students (N = 531)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girl Cheerleader</td>
<td>5.775</td>
<td>Girl Scholar</td>
<td>3.845</td>
<td>Girl Athlete</td>
<td>4.410</td>
</tr>
<tr>
<td>Girl Athlete</td>
<td>5.382</td>
<td>Girl Athlete</td>
<td>3.783</td>
<td>Girl Cheerleader</td>
<td>4.185</td>
</tr>
<tr>
<td>Girl Scholar</td>
<td>4.751</td>
<td>Girl Cheerleader</td>
<td>3.192</td>
<td>Girl Scholar</td>
<td>3.736</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluative</th>
<th>Mean</th>
<th>Potency</th>
<th>Mean</th>
<th>Activity</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>American High-School Students (N = 532)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girl Cheerleader</td>
<td>5.495</td>
<td>Girl Athlete</td>
<td>4.147</td>
<td>Girl Athlete</td>
<td>4.390</td>
</tr>
<tr>
<td>Girl Scholar</td>
<td>4.759</td>
<td>Girl Scholar</td>
<td>3.802</td>
<td>Girl Cheerleader</td>
<td>4.097</td>
</tr>
<tr>
<td>Girl Athlete</td>
<td>4.688</td>
<td>Girl Cheerleader</td>
<td>3.312</td>
<td>Girl Scholar</td>
<td>3.758</td>
</tr>
</tbody>
</table>
evaluative factor, much closer to "girl cheerleader" than it was for the American sample. "Girl athlete" ranked last on the evaluative factor for the American students. "Girl scholar" was perceived almost identically by both samples but it placed third in rank by the Canadians and second by the Americans on the evaluative factor. This concept had the same distinctiveness of meaning for both the Canadian and American subjects.

On the potency factor, "girl scholar" was perceived to be the most powerful, "girl athlete" was next and "girl cheerleader" was last for the Canadian students. For the American students, "girl athlete" was the most potent, "girl scholar" was second, and "girl cheerleader" was the least potent. "Girl scholar" was perceived almost identically by both samples on this factor. "Girl athlete" was viewed to be more powerful by the Americans than by the Canadians. They also perceived "girl cheerleader" to be slightly more potent.

On the activity factor, both samples viewed "girl athlete" to be most active, "girl cheerleader" next most active and "girl scholar" the least active. Once again, "girl scholar" was perceived almost identically on this factor by both Americans and Canadians. "Girl athlete" was viewed as quite equally active by both samples and the same was true for "girl cheerleader."

The D Matrices and D Models give a clearer comparison of the perceptions of the concepts as they are located in semantic space.
D Matrices and D Models in Semantic Space for the Perceptions of the Three Concepts by Canadian and American High-School Students

The D matrices in Tables 18 and 19 show the distances of the perceptions of "girl athlete," "girl scholar," and "girl cheerleader" from each other, and from the origin by Canadian and American high-school students. The D models in Figures 15 to 17 depict the perceptions of the three concepts and the origin on a three dimensional grid.

Figure 15 sharply illustrates three pairs of perceptions. "Girl scholar" was perceived to be very close in distinctiveness and saturation of meaning by the students of both countries. The perceptions of "girl cheerleader" were also relatively similar in saturation of meaning by American and Canadian high-school students. The obvious discrepancy was the perceptions of "girl athlete" by the two samples. This was more apparent when the D matrices and D models of the three concepts for each country were examined.

Table 18 and Figure 16 show the perception of "girl cheerleader" was the furthest from the origin and therefore had the strongest saturation of meaning for the Canadian high-school students. Next strongest in saturation of meaning was the perception of "girl athlete." "Girl scholar" was the concept with least amount of meaning for the Canadian high-school students. "Girl athlete" was closer to "girl cheerleader" than to "girl scholar" in conceptualization and saturation of meaning.
Table 18

D Matrix of Concepts as Held by the Total Canadian Sample

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Concepts</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girl Athlete</td>
<td>Girl Scholar</td>
<td>Girl Cheerleader</td>
<td>Origin</td>
</tr>
<tr>
<td>(A) Girl Athlete</td>
<td></td>
<td>.925</td>
<td>.744</td>
<td>1.458</td>
</tr>
<tr>
<td>(B) Girl Scholar</td>
<td></td>
<td></td>
<td>1.295</td>
<td>.811</td>
</tr>
<tr>
<td>(C) Girl Cheerleader</td>
<td></td>
<td></td>
<td></td>
<td>1.959</td>
</tr>
<tr>
<td>(X) Origin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 19

D Matrix of Concepts as Held by the Total American Sample

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Concepts</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girl Athlete</td>
<td>Girl Scholar</td>
<td>Girl Cheerleader</td>
<td>Origin</td>
</tr>
<tr>
<td>(D) Girl Athlete</td>
<td></td>
<td>.723</td>
<td>1.197</td>
<td>.804</td>
</tr>
<tr>
<td>(E) Girl Scholar</td>
<td></td>
<td></td>
<td>.947</td>
<td>.821</td>
</tr>
<tr>
<td>(F) Girl Cheerleader</td>
<td></td>
<td></td>
<td></td>
<td>1.648</td>
</tr>
<tr>
<td>(X) Origin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 15
D Model on a Three-Dimensional Grid of the Perceptions of the Three Concepts

(A) "Girl Athlete" by Canadian High-School Students
(B) "Girl Scholar" by Canadian High-School Students
(C) "Girl Cheerleader" by Canadian High-School Students
(D) "Girl Athlete" by American High-School Students
(E) "Girl Scholar" by American High-School Students
(F) "Girl Cheerleader" by American High-School Students
(X) Origin
Figure 16
Constructed D Model of Canadian High-School Students' Perceptions of the Three Concepts
(Lifted off the grid)

(A) "Girl Athlete"
(B) "Girl Scholar"
(C) "Girl Cheerleader"
(X) Origin
Table 19 and Figure 17 show the perception of "girl cheerleader" was the farthest from the center of semantic space and therefore had the firmest saturation of meaning for the American high-school students. Next strongest in saturation of meaning for the American high-school students was the perception of "girl scholar." "Girl athlete" was closer to "girl scholar" than to "girl cheerleader" in conceptualization and saturation of meaning.

Therefore, the methods of data analysis provided an answer to the question: "How does the perceived status of the high-school female athlete compare to the perceived status of the high-school female scholar and the high-school female cheerleader?" The high-school female cheerleader had the most favorable and well defined perception of meaning for the American high-school students. The high-school female scholar was next with the female athlete having the weakest definition of meaning for the American subjects.

The high-school female cheerleader also had the most well defined and favorable perception of meaning for the Canadian high-school students. The high-school female athlete was next with the female scholar having the weakest definition of meaning for the Canadian subjects.

Summary of Findings

The findings of the analyses in this chapter show that:

1. "Girl athlete" was perceived to have less distinctiveness of meaning and was viewed less favorably by the American
Figure 17

Constructing D Model of American High-School Students' Perceptions of the Three Concepts
(Lifted off the grid)

(D) "Girl Athlete"
(E) "Girl Scholar"
(F) "Girl Cheerleader"
(X) Origin
than by the Canadian high-school students. The American sample perceived "girl athlete" to be slightly interesting, relaxed, nice, intelligent, competitive, experimental and fast. There were no mean scores in the quite X or Y category. The Canadians perceived "girl athlete" to be slightly attractive, interesting, thin, relaxed, sexually attractive, feminine, intelligent, affectionate, competitive, light, experimental, and quite nice and fast. This infers that the American high-school female athlete is perceived in less extreme terms and less favorably than is the Canadian high-school female athlete.

2. "Girl athlete" was perceived in a less extreme manner and less favorably and was viewed to have considerably less meaning by the American than by the Canadian high-school female athletes. American high-school female athletes viewed "girl athlete" to be slightly interesting, relaxed, intelligent, affectionate, competitive, experimental, fast, and quite nice. Their Canadian parallels perceived "girl athlete" to be slightly attractive, thin, relaxed, sexually attractive, loud, intelligent, affectionate, competitive, light, experimental, and quite nice and fast. This suggests that the American high-school female athlete has a less well defined and less favorable self-perception than does the Canadian high-school female athlete.

3. "Girl athlete" was perceived to have less saturation of meaning and was viewed less favorably by the American than
by the Canadian high-school female non-athletes. American high-school female non-athletes viewed "girl athlete" to be slightly interesting, relaxed, nice, intelligent, and fast. They had no mean scores in the quite category. Their Canadian counterparts perceived "girl athlete" to be slightly attractive, thin, relaxed, loud, intelligent, affectionate, competitive, experimental, and quite interesting, nice and fast. This indicates that the high-school female athlete is perceived in a less extreme manner and less favorably by the American than by the Canadian high-school female non-athletes.

4. "Girl athlete" was seen to have less distinctiveness of meaning and was viewed less favorably by the American than by the Canadian high-school male athletes. American high-school male athletes perceived "girl athlete" to be slightly relaxed, interesting, nice, intelligent, competitive, and fast. They had no mean scores in the quite category. Male athletes in the Canadian high schools perceived "girl athlete" to be slightly interesting, thin, relaxed, soft, feminine, intelligent, affectionate, competitive, light, experimental, and quite attractive, sexually attractive, nice, and fast. This infers that the American high-school male athletes have a less well defined and considerably less favorable perception of the high-school female athlete than have the Canadian high-school male athletes.

5. "Girl athlete" was perceived to have less strength of meaning and was viewed less positively by the American
than by the Canadian high-school male non-athletes. American high-school male non-athletes perceived "girl athlete" to be slightly attractive, interesting, relaxed, nice, intelligent, affectionate, competitive, experimental and fast. They had no mean scores in the quite category. Their Canadian counterparts perceived "girl athlete" to be slightly interesting, thin, relaxed, feminine, intelligent, affectionate, soft, light, fast, and quite sexually attractive and nice. This indicates that the American high-school male non-athletes have a less well defined and less favorable perception of the high school female athlete than have the Canadian high-school male non-athletes.

6. "Girl cheerleader" had the most favorable and sharply defined perception of meaning for the American high-school students. "Girl scholar" was next and "girl athlete" had the least conceptualization of meaning. "Girl cheerleader" was perceived to be slightly interesting, thin, relaxed, intelligent, affectionate, soft, light, experimental, fast, and quite attractive, sexually attractive, nice and feminine. "Girl scholar" was seen to be slightly attractive, interesting, relaxed, nice, soft, feminine, affectionate, fast, and quite intelligent. They perceived "girl athlete" to be slightly interesting, relaxed, nice, intelligent, competitive, experimental, and fast. There were no mean scores in the quite category. This indicates that the high-school female athlete is perceived lowest in status when compared with the
high-school female scholar and cheerleader by the American high-school students.

"Girl cheerleader" also had the most positive and well defined perception of meaning for the Canadian high-school students. "Girl athlete" was next with "girl scholar" having the least conceptualization of meaning. They perceived "girl cheerleader" to be slightly interesting, thin, relaxed, intelligent, affectionate, soft, light, experimental, fast, and quite attractive, sexually attractive, nice and feminine. "Girl athlete" was viewed to be slightly attractive, interesting, thin, relaxed, sexually attractive, feminine, intelligent, affectionate, competitive, light, experimental and quite nice and fast. "Girl scholar" was seen to be slightly interesting, nice, soft, affectionate, cooperative, fast, and quite feminine and intelligent. This infers that the high-school female athlete is perceived above the female scholar and slightly below the female cheerleader in status by the Canadian high-school students.

Discussion

The findings of this study necessitate a number of important observations. First, taken as a whole as well as each of their subgroups, the Canadian high-school students perceived "girl athlete" to be higher on all the evaluative factor scales than did their American parallels. This implies that the high-school female athlete is more highly evaluated in Canada than in the United States. This is further
suggested by the higher number of neutral responses, covering more evaluative scales, made by the American sample. "Girl athlete" was perceived to be much more neutral by the American than by the Canadian high-school students. Griffin (1972) also found the "woman athlete" was a role which was characterized in a very neutral manner by American subjects. She suggested that this neutral attitude toward "woman athlete" was an indication of a feeling of ambivalence toward this particular role. Beisser (1967) and Weiss (1969) both considered women in sport as an oddity in American society. Felshin (1974) also stated that the athletic woman in American society is viewed as a social irregularity. In addition, Hall (1977) asserted that sports participation serves an important positive function in the development of masculine identity but a negative function in the development of feminine identity. This negative attitude and ambivalence toward the woman athlete does not appear to be present to the same degree in Canada as indicated by the findings of this study. The Canadian subjects appear to agree more with Boslooper (1968) in that the acceptance of physical talent and femininity are compatible concepts.

Second, all findings indicated that the Canadian high-school students had a more well defined and more favorable perception of the high-school female athlete than did the American high-school students. A possible explanation is that girls' athletics is more important in the status system
of the Canadian high-school than of the American high school. Coleman (1961a, 1965) observed that athletic competition helps to win status in the eyes of other teenagers, and Eitzen (1975) stated that athletic participation is still a dominant criterion for status among adolescent males. Also, Friesen (1975) asserted that students viewed athletics as having immediate worth as status within their referent peer group. The findings of the present study suggested that in Canada girls' athletic participation may be a criterion for status among her adolescent peers. This suggestion is in line with the findings of Buhrmann and Bratton (1977). They found in an investigation of Alberta high schools that high-school girl athletes achieve significantly higher levels of status and are more frequently members of the leading crowd than their non-athletic peers. Similar results were found by Buhrmann and Jarvis (1971) and Gilbert and Williamson (1973) for girls' athletics in the state of Iowa. The present findings suggested that the findings of Buhrmann and Jarvis (1971) and Gilbert and Williamson (1973) are atypical of other parts of the United States.

One would assume that more emphasis on athletics in the schools, better community support, better media coverage of women's sports, the more apparent changing role of women and the legal mandate for equality in athletics would result in the American high-school girl athlete being perceived more favorably than the Canadian high-school girl athlete. The
findings of this study indicate the opposite. This may be explained by a number of possibilities:

1. The added attention given to women in sport in the United States has just recently occurred.

2. The girls' athletic program in one of the American high schools had just been developed and improved.

3. The legal mandate of Title IX has not had time to be completely implemented.

4. Canada has been viewed as and thinks of itself as a nation of sports participants; therefore, Canadians view sports involvement as a more acceptable part of female behavior than do Americans. As Downey (1968) stated, the easy way of life is not as much a part of Canada as it is of the United States.

5. The British influence on Canadian society, especially in education, dictated the importance of physical activity for boys and girls. Historically, the British school girl athlete has been given more attention and recognition by her society than has her American counterpart.

6. The girl athlete has been tolerated by American society only to a certain age (Tyler, 1973; Bardwick, 1971; Rector, 1972; and Ziegler, 1972). As a result physical activity and skill of adolescent girls are not important criteria in the structure of the American high-school status system (Horrocks, 1969). An indication of this is Downey's (1965) observation that adolescent boys value athletics, whereas adolescent girls appear to value social success.
7. The stereotypical view of the girl athlete being masculine may be more prevalent in the United States than in Canada. Canadian adolescent girls have fewer female athlete role models to emulate (Cosentino, 1973). Therefore, the deficiency of women athletes as role models may also lead to a less stereotypical view of the female athlete in Canada. If such is the case, then sport participation would be considered to be acceptable female behavior. In the United States, there are many more women athletes recognized by the adolescent society. Some of them may reinforce the masculine stereotypical view of the female athlete as had been purported by facets of American society.

Third, the evaluative factor was the highest in the perception of "girl athlete" by all groups from both countries. The activity factor was the next highest and potency the lowest. Buhrer (1973) also found that the evaluative factor received the highest score in the perception of "woman athlete." These results differ from the findings of Griffin (1972) who found the "woman athlete" to be the most potent and active and the least highly evaluated role for women of the roles she investigated.

Fourth, all the Canadian groups perceived "girl athlete" lower on the potency factor than did the American groups. Griffin (1972) stated that the "ideal woman" was perceived as one of the least potent, fairly active, and the most highly evaluated role. Surprisingly, Berlin (1973) found that the "ideal woman" had a higher activity score than the "woman
athlete." The results of the present study indicated that the Canadian high-school female athlete is closer to the "ideal woman" than is the American high-school athlete. This difference in perception of "girl athlete" by the students of the two countries on the semantic differential was apparent for a number of reasons: (a) Canadians were more extreme on a large majority of the scales; (b) Canadians had a smaller number of neutral responses; (c) Canadians had fewer evaluative scales in the neutral area; (d) Canadians were higher on the evaluative scales; and (e) Canadians were more towards the feminine end of the feminine-masculine scale.

Fifth, Canadians appear to view "girl athlete" as a role that is more appropriate for girls than do the Americans. The leaning of the students from both countries toward the feminine end of the masculine-feminine scale and high evaluative scores indicated an acceptance of women in sport. These scores follow a pattern similar to the ones obtained for "ideal woman" by Brown (1965) and Griffin (1972).

The closer proximity of "girl athlete" to "girl cheerleader" by the Canadians than by the Americans, also indicated that the Canadians view "girl athlete" to be more akin to "ideal woman." This is indicated by the perception of "girl cheerleader" as the least potent, moderately active, and most highly evaluated concept, which closely parallels the perception of "ideal woman" found by Griffin (1972). Bird and McCullough (1977) arrived at similar results. They
found the role of "athlete" was evaluated second only to that of "ideal woman." In considering all factors the female "athlete" was nearest to "ideal woman" in exhibiting feminine traits. Their research was conducted in California which has a much more liberal and open view of women and the roles they adopt.

Sixth, it was found that the Canadian high-school female athletes have a better self-perception than do the American high-school female athletes. They perceived "girl athlete" to be slightly attractive, sexually attractive, affectionate, and quite nice and interesting on the evaluative scales. The American high-school female athlete perceived "girl athlete" to be slightly interesting, affectionate, and quite nice but had neutral mean responses on the attractive-unattractive and sexually attractive-sexually unattractive evaluative scales. They both had neutral responses on the feminine-masculine scale with the Canadian female athletes closer to the feminine extremity. This more positive self-perception is reinforced and perpetuated by the favorable perceptions held of the female athlete by her peers and possibly by her country. This does not appear to occur for the American high-school female athlete. She may be exposed to a more stereotypical view of the female athlete as held by her peers and American society.

Seventh, all the Canadian groups held a more favorable opinion of "girl athlete" than did the American groups. Therefore, the Canadian high-school female athlete is
perceived to have a higher position in the Canadian high-school status system than does the American high-school female athlete in her high school status system.

Eighth, "girl cheerleader" was seen by students of both countries to be the most highly evaluated role. They perceived "girl cheerleader" to be slightly interesting, affectionate, and quite attractive, sexually attractive, nice and feminine. "Girl scholar" is perceived to be more highly evaluated than "girl athlete" by the Americans. "Girl scholar" was seen by Americans to be slightly attractive, interesting, nice, affectionate, and neutral on the sexually attractive-sexually unattractive evaluative scales. They also perceived "girl scholar" to be slightly feminine. "Girl athlete" was seen to be only slightly nice and interesting, and neutral on the attractive-unattractive, sexually attractive-sexually unattractive, and cold-affectionate evaluative scales. They perceived "girl athlete" to be neutral on the feminine-masculine scale.

In similar findings, Brown (1965) found that "cheerleader" rated high in both evaluative and activity factors. The girl cheerleader was perceived as active in a very feminine way and therefore was a preferred role for women. The present study also suggested that the girl cheerleader is high in the status system of the high school. As mentioned earlier, Kovar (1968) stated that being a cheerleader was a means of attaining status.
"Girl athlete" is perceived to be more highly evaluated than "girl scholar" by the Canadians. "Girl athlete" did not receive any neutral mean responses on the evaluative scales. They perceived "girl athlete" to be slightly attractive, interesting, sexually attractive, affectionate, and quite nice on the evaluative scales. They also viewed "girl athlete" to be slightly feminine. "Girl scholar" was viewed to be slightly nice, interesting, affectionate and neutral on the attractive-unattractive and sexually attractive-sexually unattractive evaluative scales. They also perceived the "girl scholar" to be quite feminine.

Friesen's research (1976) ranked the priority of values for American adolescents as athletics, popularity, and academic achievement, and for Canadian adolescents as academic achievement, popularity, and athletics. These results suggest that American adolescents would evaluate "girl athlete" more highly than "girl scholar" and Canadian adolescents would evaluate "girl scholar" more highly than "girl athlete." This investigation found the reverse to be true. It should be noted that in Friesen's study (1976) athletics was primarily thought of as boys' athletics by the subjects whereas in this study the concept was "girl athlete" as opposed to "athlete."

Lastly, there were sets of bipolar terms that frequently received neutral response mean scores, e.g., soft-loud, soft-hard, heavy-light, and thick-thin. This suggested that these
scales may have had no connotation of meaning for the majority of the subjects. These same scales also elicited many questions from the subjects concerning their meaning during the administration of the test. The large number of neutral responses on these scales verifies the ambiguity those particular bipolar words held for the subjects.
CHAPTER V
SUMMARY AND CONCLUSIONS

Summary

Purpose

The purpose of this study was to investigate the perceived status of American and Canadian adolescent female athletes. The questions to be answered were:

Primary. What is the perceived status of the American high-school female athlete as compared to the perceived status of the Canadian high-school female athlete?

Secondary. 1. What is the self-perceived status of the high-school female athlete?

2. What is the status of the high-school female athlete as perceived by high-school female non-athletes?

3. What is the status of the high-school female athlete as perceived by high-school male athletes?

4. What is the status of the high-school female athlete as perceived by high-school male non-athletes?

5. How does the perceived status of the high-school female athlete compare to the perceived status of the high-school female scholar and the high-school female cheerleader?

Procedures

Review of literature. A close examination of literature pertinent to this investigation produces evidence supporting the following statements:
1. Women are forced to fulfill the stereotyped female role or suffer the social consequence of pity for having failed to meet role expectations (Sheriffs and Jarrett, 1953; Steinmann, 1963, 1964, and 1966; and McKee and Sheriffs, 1959).

2. Society is beginning to accept behavior by women that is atypical of the traditional feminine image (Chesler, 1971; and McKee and Sheriffs, 1959).

3. The concept of self develops as a result of and response to the reactions of significant others (Kipnis, 1961; Reeder, Donahue, and Biblarz, 1960).


5. Boys' athletics hold a high rank in the status system of the adolescent (Coleman, 1961 and 1965; Eitzen, 1965; and Friesen, 1976).

6. Athletics may or may not contribute to high adolescent status for girls (Downey, 1965; Horrocks, 1969; Buhrmann and Bratton, 1977; and Gilbert and Williamson, 1973).

7. Female athletes are perceived in a very stereotypic way (Felshin, 1974; Harris, 1971; Hart, 1972; and Ulrich, 1973).

9. Society's changing attitude toward the contemporary woman athlete is slowly eliminating this conflict (Watts, 1960; Gerber, 1971; and Bird and McCullough, 1977).


12. Women in sport in the United States have a brighter future than women in sport in Canada (Cosentino, 1973; Keyes, 1974; and Zeigler, 1978).

Selection of subjects and data gathering. The subjects for this study were 531 students from two high schools in Thunder Bay, Ontario, Canada and 532 students from two high schools in Greensboro, North Carolina, U.S.A. The subjects completed a two-part test packet. The first part consisted of the semantic differential and the second part a background questionnaire.

The semantic differential, as developed by Osgood, Suci, and Tannenbaum (1957), was chosen as the instrument to best perceive the concepts studied in this research. Specifically, the one used and originated by Griffin (1972) was selected as a valid, reliable, tested and appropriate instrument for this study.
The data was personally collected by the researcher at the four high schools involved in the investigation. It was collected during December, 1977 and January, 1978.

Analysis of data. Three analytic methods were used to find the answers to the questions involved in this study. These techniques were: profile analysis, to ascertain American and Canadian perceptions of the concepts; calculation of D matrices by means of the geometric general distance formula; and thirdly, the construction of D models from these matrices, to give a visual comparison of perceptions of the concepts.

Conclusions

The data examined by the analytic techniques outlined in the procedures, yield the following answers to the questions that are the basis of this study.

Of primary concern was the question "What is the perceived status of the American high-school female athlete as compared to the perceived status of the Canadian high-school female athlete?" The concept "girl athlete" was perceived to have less distinctiveness of meaning and was viewed less favorably by the American than by the Canadian high-school students. The American sample perceived "girl athlete" to be slightly interesting, relaxed, nice, intelligent, competitive, experimental, and fast. There were no scores in the quite category. The Canadians perceived "girl athlete" to be slightly attractive, interesting, thin, relaxed, sexually attractive, feminine, intelligent, affectionate, competitive, light,
experimental, and quite nice and fast. This infers that the American high-school students have a less well defined and less favorable perception of the high-school female athlete than do Canadian high-school students.

The following questions were of secondary concern to this investigation. "What is the self-perceived status of the high-school female athlete?" The concept "girl athlete" was perceived less favorably and was viewed to have considerably less meaning by the American than by the Canadian high-school female athletes. American high-school female athletes viewed "girl athlete" to be slightly interesting, relaxed, intelligent, affectionate, competitive, experimental, fast, and quite nice. Their Canadian parallels perceived "girl athlete" to be slightly attractive, thin, relaxed, sexually attractive, loud, intelligent, affectionate, competitive, light, experimental, and quite nice and fast. This suggests that the American high-school female athlete has a less well defined and less favorable self-perception than does the Canadian high-school female athlete.

"What is the status of the high-school female athlete as perceived by high-school female non-athletes?" The concept "girl athlete" was perceived to have less meaning and was viewed less favorably by the American than by the Canadian high-school female non-athletes. American high-school female non-athletes viewed "girl athlete" to be slightly interesting, relaxed, nice, intelligent, and fast. They had no mean scores
in the quite category. Their Canadian counterparts perceived "girl athlete" to be slightly attractive, thin, relaxed, loud, intelligent, affectionate, competitive, experimental, and quite interesting, nice and fast. This indicates that the American high-school female non-athletes have a less well defined and less favorable perception of the high-school female athlete than do the Canadian high-school female non-athletes.

"What is the status of the high-school female athlete as perceived by high-school male athletes?" The concept "girl athlete" was seen to have less distinctiveness of meaning and was viewed less favorably by the American than by the Canadian high-school male athletes. American high-school male athletes perceived "girl athlete" to be slightly relaxed, interesting, nice, intelligent, competitive, and fast. They had no mean scores in the quite category. Male athletes in the Canadian high schools perceived "girl athlete" to be slightly interesting, thin, relaxed, soft, feminine, intelligent, affectionate, competitive, light, experimental, and quite attractive, sexually attractive, nice and fast. This infers that the American high-school male athletes have a less well defined and a considerably less favorable perception of the high-school female athlete than have the Canadian high-school male athletes.

"What is the status of the high-school female athlete as perceived by high-school male non-athletes?" The concept
"girl athlete" was perceived to have less saturation of meaning and was viewed less positively by the American than by the Canadian high-school male non-athletes. "Girl athlete" was seen by American high-school male non-athletes to be slightly attractive, interesting, relaxed, nice, intelligent, affectionate, competitive, experimental and fast. They had no mean scores in the quite category. Their Canadian counterparts perceived "girl athlete" to be slightly interesting, thin, relaxed, feminine, intelligent, affectionate, soft, light, fast and quite sexually attractive and nice. This indicates that the American high-school male non-athletes have a less well defined and less favorable perception of the high-school female athlete than have the Canadian high-school male non-athletes.

"How does the perceived status of the high-school female athlete compare to the perceived status of the high-school female scholar and the high-school female cheerleader?"
The concept "girl cheerleader" had the most favorable and sharply defined perception of meaning for the American high-school students. "Girl scholar" was next and "girl athlete" had the least conceptualization of meaning. "Girl cheerleader" was perceived to be slightly interesting, thin, relaxed, intelligent, affectionate, soft, light, experimental, fast, and quite attractive, sexually attractive, nice and feminine. "Girl scholar" was seen to be slightly attractive, interesting, relaxed, nice, soft, feminine, affectionate, fast, and
quite intelligent. They perceived "girl athlete" to be slightly interesting, relaxed, nice, intelligent, competitive, experimental, and fast. There were no mean scores in the quite category. This indicates that the high-school female athlete is perceived lowest in status, when compared with the high-school female scholar and cheerleader, by the American high-school students.

"Girl cheerleader" also had the most favorable and sharply defined perception of meaning for the Canadian high-school students. "Girl athlete" was next with "girl scholar" having the least conceptualization of meaning. They perceived "girl cheerleader" to be slightly interesting, thin, relaxed, intelligent, affectionate, soft, light, experimental, fast and quite attractive, sexually attractive, nice and feminine. "Girl athlete" was viewed to be slightly attractive, interesting, thin, relaxed, sexually attractive, feminine, intelligent, affectionate, competitive, light, experimental and quite nice and fast. "Girl scholar" was seen to be slightly interesting, nice, soft, affectionate, cooperative, fast, and quite feminine and intelligent. This infers that the high-school female athlete is perceived above the female scholar and slightly below the female cheerleader in status by the Canadian high-school students.

Suggestions for Future Study

Much more research is needed in the area of women in sport and especially in the area of adolescent girls'
athletics. Women's changing role in society alone is enough to warrant such endeavors. The additional influence of Title IX and increased media recognition further support the need for more research in this area. A replication of the present study in five or ten years' time is recommended in order to ascertain the effects, if any, of Title IX on the perceptions of the female athlete. Similar research should also be conducted in other parts of the United States and Canada to discover if there are geographical differences in perception of the female athlete within each country. The studies on the female athlete in Iowa, as compared to other parts of the country, would suggest that this is true. In addition, more cross-cultural investigations on women in sport need to be undertaken between Canada and the United States in order to develop an understanding and knowledge of the similarities and differences of experiences. Lastly, cross-cultural studies extended to other countries would prove helpful in examining the effect of different cultures and school systems on the status of the female athlete.

The following recommendations are made in relation to future research employing the same procedures used in this study. First, every effort needs to be made to procure a small classroom for testing when using tape-recorded instructions. In a gymnasium there are too many distractions as well as too much noise.
Second, scales of the semantic differential developed by Griffin (1972), particularly, soft-hard, soft-loud, thick-thin, and heavy-light, need to be revised to alleviate the ambiguity as experienced by a number of subjects in this study as indicated by the large number of neutral responses on these scales.

Third, provisions should be made to test a more representative cross section of the total high school population than may be available by testing physical education classes.
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APPENDIX A

Correspondence
Ms. Mary Hoyle  
Greensboro Public School System  
712 North Eugene St.  
Greensboro, N.C. 27401

Dear Ms. Hoyle:

My name is Roy Holman and I am currently a doctoral candidate in Physical Education at UNC-G. This letter is to inform you of dissertation research I am hoping to pursue. The research will tentatively be entitled "The Perceived Status of Female Athletes by Male and Female Athletes and Non-athletes in Canada and U.S.A." I am excited about doing this investigation as there has been little done concerning the status of the high school female athlete and as well it is a badly needed cross-cultural study. Dr. Celeste Ulrich, my dissertation adviser, is encouraging and guiding me in this venture.

Being cognizant of the number of studies being conducted in the Greensboro Public School System, I would like to ask your permission to undertake my study. It is well designed and worthy of consideration. It would be necessary to test in 2 high schools in Greensboro. I would very much like to meet with you to further explain the study and discuss the possibilities of conducting it.

Your attention and consideration of this matter will be greatly appreciated. I hope to hear from you in the near future.

Sincerely yours,

Roy P. Holman
Dr. William Truelove  
Superintendent of Education  
2135 Sills Street  
Thunder Bay "F", Ont., Canada  
P7E 5T2  

November 1, 1977  

Dear Mr. Truelove:

My name is Roy Holman and I am a resident of Thunder Bay and was a graduate of PACI in 1967. Currently, I am a doctoral candidate in Physical Education at the University of North Carolina at Greensboro. I received my masters' degree at the University of Montana in 1973. This letter is to inform you of dissertation research I am hoping to pursue. The research will tentatively be entitled "The Perceived Status of Female Athletes by Male and Female Athletes and Non-athletes in Canada and the U.S.A." I am excited about doing this research as there has been little done concerning the status of the high school female athlete and as well it is a badly needed cross-cultural study.

Permission has been sought to conduct my research in two high schools here in Greensboro, N.C. and I am asking for your permission to do the same in two high schools in Thunder Bay. If permission is granted, the study would be conducted in two of the following high schools: Lakeview, Hammarskjold, Westgate, or Winston Churchill. Procedurally, the testing involves a twenty minute pen and pencil test which would be conducted primarily during physical education class time.

It is a well designed study and worthy of consideration. I am hoping to conduct the research as soon as possible.

Please find enclosed a synopsis of the research proposal as well as the proposal itself. Your attention and consideration of this matter will be greatly appreciated. I hope to hear from you in the near future.

Sincerely yours,

Roy P. Holman  
Roy P. Holman  
Office Ph: 919-379-5258  
Dept. of HPER  
University of N. Carolina at Greensboro  
Greensboro, N.C. 27412  
Enc. 2
December 14, 1977

Mr. ________
Principal, _________ High School
Thunder Bay, Ontario, Canada

Dear Mr. ________:

This letter is in reference to doctoral research that I am hoping to conduct at _________ High School. I believe the Lakehead Board of Education has contacted you concerning my research. A brief description of my investigation may further your understanding of my need for your help. The study is tentatively entitled "The Perceived Status of Female Athletes by Male and Female Athletes and Non-athletes in Canada and the United States." It is a badly needed cross-cultural study aimed at ascertaining the status of the high school female athlete ascribed to her by her peers.

Permission has been sought to conduct this investigation in two high schools in Greensboro, North Carolina and by the Lakehead Board of Education to do the same in two high schools in Thunder Bay. I am hoping to do the testing in Hammarskjold and Lakeview High Schools. Procedurally, the testing involves a twenty minute paper and pencil test. (Please find a sample packet enclosed.) The test would be administered by myself or an assistant with pre-recorded instructions during physical education classes. If necessary, athletes will be contacted during practice times.

I am asking for your permission to conduct the research at _________ High School beginning the week of January ___. The success of my study hinges on the cooperation and permission of many people, and I would appreciate your support of my request. The physical education department heads are also being contacted describing the study and requesting their assistance.
Mr. __________, thank you for your attention and consideration of this matter. The enclosed self-addressed post card could serve as an expeditious means to notify me of your approval. A response as soon as possible would be greatly appreciated.

Sincerely yours,

Roy P. Holman

School of HPER
UNC-G
Office Phone: 379-5213
Home Phone: 272-2998

Enclosure
December 14, 1977

Mr. __________________
Principal, ____________ High School
Greensboro, North Carolina

Dear ____________:

This letter is in reference to doctoral research that I am hoping to conduct at ____________ High School. I believe Mary Hoyle of the Greensboro Public School System has contacted you concerning my research. A brief description of my investigation may further your understanding of my need for your help. The study is tentatively entitled "The Perceived Status of Female Athletes by Male and Female Athletes and Non-athletes in Canada and the United States." It is a badly needed cross-cultural study aimed at ascertaining the status of the high school female athlete ascribed to her by her peers.

Permission has been sought to conduct this investigation in two high schools in Thunder Bay, Ontario, Canada and by the Greensboro Public School System to do the same in two high schools in Greensboro. I am hoping to do the testing in Grimsley and Smith High Schools. Procedurally, the testing involves a twenty minute paper and pencil test. (Please find a sample packet enclosed). The test would be administered by myself or an assistant with pre-recorded instructions during physical education classes. If necessary, athletes will be tested during practice times.

I am asking for your permission to conduct the research at ____________ High School beginning the week of January ____. The success of my study hinges on the cooperation and permission of many people, and I would appreciate your support of my request. The physical education department heads are also being contacted describing the study and requesting their assistance.
Mr. ________, thank you for your attention and consideration of this matter. The enclosed self-addressed post card could serve as an expeditious means to notify me of your approval. A response as soon as possible would be greatly appreciated.

Sincerely yours,

Roy P. Holman

School of HPER
Office Phone: 379-5213
Home Phone: 272-2998

Enclosure
Dear Mr. Holman:

Permission is granted/not granted (circle one) to administer your questionnaire at (high school) by (Principal).

If necessary, you may contact me at by telephone to discuss further any of the procedures concerning your investigation.

Sincerely yours,

Principal
December 13, 1977

Mr. (Ms.) ___________________
Department Head of Boys' (Girls') Physical Education
High School
Greensboro, North Carolina or Thunder Bay, Ontario, Canada

Dear Mr. (Ms.) __________________:

This letter is in reference to doctoral research that I am hoping to conduct at ________ High School. The title of the study is "The Perceived Status of Female Athletes by Male and Female Athletes and Non-athletes in Canada and the United States." It is a badly needed cross-cultural study aimed at ascertaining the status of the high school female athlete ascribed to her by her peers.

Permission has been sought to conduct this investigation in two high schools in Thunder Bay, Ontario, Canada and in two high schools in Greensboro, N.C. I am hoping to do the testing in ________ and ________ High Schools. Mr. ________ (principal) has been contacted to ask his permission to undertake my study.

Procedurally, the testing involves a twenty minute paper and pencil test. (Please find a sample packet enclosed.) The test would be administered by myself or an assistant with pre-recorded instructions during physical education classes. If necessary, athletes will be tested during practice times. I am hoping to do the testing the week beginning January ______.

Thank you for your attention and consideration of my particular needs. The enclosed self-addressed post card could serve as an expeditious means to notify me of your approval. Without your assistance I would certainly not be able to pursue my dissertation. A reply as soon as possible would be greatly appreciated.

Sincerely yours,

Roy P. Holman

School of HPER
UNC-G
Greensboro, N.C. 27412

Enclosure
Dear Mr. Holman:

Permission is granted/not granted (circle one) to administer your questionnaire to physical education classes at ________ (high school) by ________ (Dept. Head of Boys Physical Education).

Interscholastic athletic team rosters and P.E. class schedules are/are not (circle one) being forwarded to you.

Please contact me at ________ by telephone to discuss further the testing during P.E. classes.

Sincerely,

Dept. Head of Boys Phys. Ed.
Dear Mr. Holman:

Permission is granted/not granted (circle one) to administer your questionnaire to physical education classes at _______ (high school) by _______ (Dept. Head of Girls Physical Education).

Interscholastic athletic team rosters and P.E. class schedules are/are not (circle one) being forwarded to you.

Please contact me at _______ by telephone to discuss further the testing during P.E. classes.

Sincerely yours,

Dept. Head
Girls' Phys. Ed.
THANK YOU LETTER MAILED TO THE
PHYSICAL EDUCATION DEPARTMENT HEADS

March 21, 1978

Mr. (Ms.)
Head of Girls' (Boys') Physical Education
High School
Greensboro, N.C. or Thunder Bay, Ontario

Dear Mr. (Ms.):

I would like to thank you very much for the cooperation you and the other members of the physical education staff extended towards me during my visit to your high school. Without your assistance I most certainly would not have been able to collect my data and now I can work diligently towards completing the research.

When the study is finished and the results tabulated, I will be very glad to share them with you. Hopefully that will be sometime later this spring. I have just received the computer analysis and am in the process of interpreting the results. Thank you once again and please extend my thanks to the other staff members.

Sincerely yours,

Roy P. Holman

Roy P. Holman
School of HPER
UNC-G
Greensboro, N.C. 27412
APPENDIX B

Sample Tally Sheet
TALLY SHEET
for

___________ High School

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APPENDIX C

Sample Test Packet
INFORMED CONSENT FORM

I hereby agree to participate as a volunteer in this investigation, a part of an educational and research program of the University of North Carolina at Greensboro. My participation will involve completing an attitude questionnaire and a background questionnaire.

I understand that my identity will remain anonymous and that all answers will be confidential. I also understand that the questionnaires have no right or wrong answers.

I am free to ask questions when necessary, to increase my understanding of my part in this investigation and I am free to withdraw my consent and terminate my participation at any time.

Subject's Signature  ____________________  Date  __________

Grade  ______
APPENDIX D

Generalized Distance Formula for D Matrix and D Model
APPENDIX E

Instrument for Scoring Purposes