

# **Historiography of Dance Research on the Research Consortium of the American Alliance for Health, Physical Education, Recreation and Dance's Annual Program, 1965-2014**

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*For 50 years (1965-2014) peer-reviewed research on the Research Consortium of the American Alliance for Health, Physical Education, Recreation and Dance's (AAHPERD) annual program was published in abstract form in Abstracts of Research Papers (1965-1991) or the annual abstract supplemental issue of Research Quarterly for Exercise and Sport (1992-2014). Given organizational restructuring that has occurred since 2014, the purpose of this study is to represent and preserve the history of dance scholarship within the Research Consortium for posterity. Following the historiographic paradigm and supported by content analysis methodology, dance research is described over this five decade time period. There were a total of 232 dance research abstracts published, with the peak 10-year interval being 1985-1994. There were 317 unique abstract authors/coauthors representing 153 unique institutions. Representing nearly two-thirds of the abstracts, dance education and dance science/health were the most frequent overarching topics; the majority of studies were aimed at a dance-specific audience, using non-experimental/descriptive research designs, and a balanced blend of qualitative and quantitative methods. Representative research topics are summarized in tabular format, as are the most visible dance researchers and institutions. This study demonstrates the vast contributions dance scholars have made within the Research Consortium toward advancing dance as a discipline in and of itself, as well as its contributions to other sub-disciplinary areas within AAHPERD. Apparent in this work is the depth, breadth, and meanings of dance as more than "just" a physical activity.*

Dance is a centuries old cultural phenomenon. Among other things, it encompasses an array of creative and expressive art and movement forms, which serve diverse purposes. For example, it challenges, conveys, interprets, preserves, and represents social mores. It is an art form, a medium for expression, a means of communication, a source of entertainment, a venue for learning and understanding other subjects and for increasing cognitive abilities, a skill, a physical activity or type of exercise, and a form of therapy. It is also a distinctive academic discipline, a discipline with a long affiliation to the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)<sup>1</sup> (Michiels-Hernandez & Meyer, 2002).

For much of its organizational history, a research section has supported AAHPERD (Cardinal & Claman, 2010; Clarke, 1938).<sup>2</sup> While the research section's name, structure, and function varied over time, in one fashion or another, among other things, it has provided a valuable dissemination outlet for researchers and scholars in various disciplines and sub-disciplines within the organization, including those in dance and those conducting dance-related research.

Beginning in the late 1970s until 2014, the research arm of the organization was called the Research Consortium (Cardinal & Claman, 2010). It was designed as a cross-disciplinary organization aimed at advancing and supporting research within AAHPERD, including the dissemination of peer-reviewed research presentations at AAHPERD national conventions. Starting in 1965, accepted research presentation abstracts on the Research Consortium program were published in either *Abstracts of Research Papers* (1965-1991) or the annual abstract supplement issue of *Research Quarterly for Exercise and Sport* (1992-2014). These publications extended the visibility and permanency of researchers' and scholars' work beyond their presentations at AAHPERD conferences. Adding to the credibility of this collection of published work is that all of the research abstracts on the annual program were deemed sufficiently meritorious to pass through a rigorous peer-review process, with an annual acceptance rate being in the range of ~65-75% (Cardinal, 2007; Cardinal & Claman, 2010; Cardinal & Lee, 2013).

Historiographies of dance scholarship within the Research Consortium have previously been conducted (Cardinal & Cardinal, 2002, 2007). Those studies represented 10- and 15-year time periods (i.e., 1992-2001 and 1992-2006, respectively). The current study extends that work by examining a half-century (i.e., 1965-2014) of dance research within the Research Consortium. Given organizational restructuring that occurred within AAHPERD following the 2014 conference (including the dissolution of the National Dance Association)<sup>3</sup>, the purpose of this study is to represent and preserve the history of dance scholarship within the organization for posterity. It also brings attention to prominent researchers/scholars and their institutions, as well as various research topics and trends. Such information might be beneficial to future generations of dance scholars

and those beyond the dance community. To accomplish these aims, a historiographical method was employed (Salevouris & Furay, 2015).

### Method

#### Data Acquisition

The 50-year collection of *Abstracts of Research Papers* (1965-1991) and the annual abstract supplement issue of *Research Quarterly for Exercise and Sport* (1992-2014) were obtained and reviewed for this study. During the time period encompassed by this review, these publications were produced under the auspices of the Research Consortium and its predecessor groups within the organization known as the “American Association for Health, Physical Education and Recreation” (1938-1974), “American Alliance for Health, Physical Education and Recreation” (1974-1979), or the American Alliance for Health, Physical Education, Recreation and Dance ([AAHPERD] 1979-2014) (Cardinal & Claman, 2010). The organization is now known as the “Society of Health and Physical Educators America” and the Research Consortium is now known as the Research Council.

For each of the 50 years included in this study, every published research abstract contained in every issue was reviewed for dance content and focus by the researchers, and all identified dance research abstracts were extracted and archived. For many of the years, categorical labels such as “Dance” were used to group abstracts; however, categorical labels were not used annually nor were they used consistently. As such, dance research was either unlabeled/unspecified ( $n = 32$ ), or located within one of the following general categories: Biomechanics ( $n = 1$ ), Dance ( $n = 163$ ), Exercise Physiology and Fitness ( $n = 12$ ), History and Philosophy ( $n = 2$ ), Measurement ( $n = 1$ ), Motor Behavior ( $n = 4$ ), Pedagogy ( $n = 13$ ), Physical Activity and Health Promotion ( $n = 1$ ), Psychology ( $n = 1$ ), Sociocultural Aspects of Physical Activity ( $n = 1$ ), and Special Populations ( $n = 1$ ). The presentation types included peer-reviewed free-communication, poster, or symposium, though this information was not always indicated.

#### Delimitations

The research abstracts that were selected for inclusion in this study must have involved dance in a prominent way. Abstracts where dance was not central and that only indirectly related to dance were not selected. Examples of reasons for exclusion included the following: a) studies that listed dance as only one of many physical activities, b) studies that investigated technological methods for increasing physical activity, such as Dance Dance Revolution<sup>®</sup>, c) studies that referred only to aerobic exercise (not aerobic dance), and d) studies that examined creative

movement or movement education in a physical education context (without reference to creative dance specifically).

### **Procedures**

Using the full library of archived materials, both researchers performed content analyses of these original documents using a previously developed coding scheme with 100% consensus being achieved. The coded variables included: Number of dance abstracts per year and overall; abstract title; author's name; author's institutional affiliation; country of origin; research topics (i.e., dance education, dance science/health, sociocultural, research methods, choreography/creative process); audience of interest (i.e., dance-specific, non-dance specific); research design (i.e., experimental/quasi-experimental, non-experimental/descriptive); and research approach (i.e., qualitative, quantitative, mixed methods).

Each abstract was counted once; however, in the case of multi-authored abstracts, each author received equal credit, as did each identified institution. Similar approaches are used in other widely used systems aimed at counting and attributing scholarly contributions (e.g., Google Scholar, Scopus, Web of Science; Cardinal & Lee, 2013).

### **Analysis**

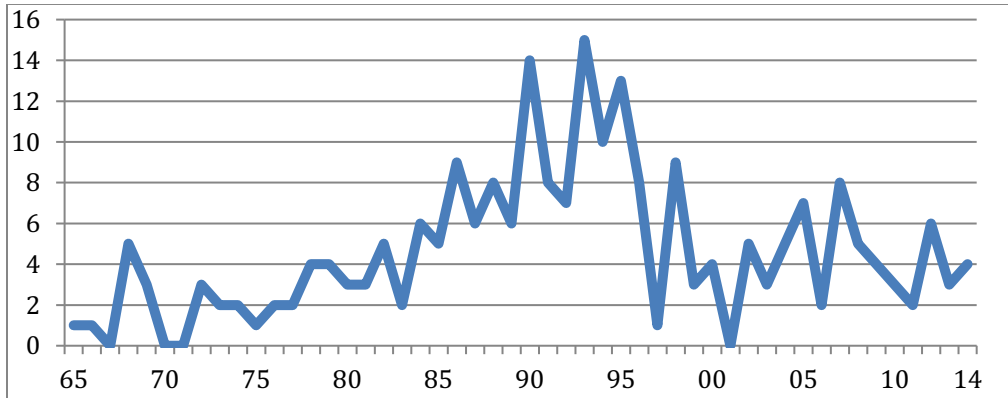
Data were primarily summarized using descriptive statistics (i.e., frequency counts, means [ $M$ ], standard deviations [ $SD$ ], Confidence Intervals [ $CI$ ], and percentages). To examine the distribution of presentation frequency over time, analysis of variance (ANOVA) was used. The distributions for research topics, audience of interest, research design, and research approach were each examined using Chi-square ( $\chi^2$ ) goodness-of-fit tests, with the observed distributions compared to theoretical expectations, or tests of independence.

## **Results and Discussion**

### **Number of Abstracts Per Year and Overall**

There were 232 published abstracts in dance over the 50-year time period, ranging from 0-15 per year ( $M = 4.64$ ,  $SD = 3.52$ , 95%  $CI = 3.64-5.64$ ). In 10-year intervals, there was a significant difference in the number of published abstracts annually,  $F(4, 49) = 9.81$ ,  $p < .001$ . Specifically, the yearly averages by decade were: 1965-1974 ( $M = 1.70$ ,  $SD = 1.64$ ), 1975-1984 ( $M = 3.20$ ,  $SD = 1.55$ ), 1985-1994 ( $M = 8.80$ ,  $SD = 3.36$ ), 1995-2004 ( $M = 5.10$ ,  $SD = 3.93$ ), and 2005-2014 ( $M = 4.40$ ,  $SD = 2.07$ ).

As shown in Figure 1, the top 10 highest frequency years were 1993 ( $n = 15$ ), 1990 ( $n = 14$ ), 1995 ( $n = 13$ ), 1994 ( $n = 10$ ), 1986 ( $n = 9$ ), 1998 ( $n = 9$ ), 1988 ( $n = 8$ ), 1991 ( $n = 8$ ), 1996 ( $n = 8$ ), and 2007 ( $n = 8$ ). There were four years with no dance research abstracts (i.e., 1967, 1970, 1971, and 2001).



**Figure 1.** *Frequency of Research Abstracts by Year, 1965-2014*

The above trends are indicative of the growth of dance within the organization, and particularly from 1979 and beyond, because 1979 was the year when the “D” (representing dance) was added to the organization’s title (i.e., the shift from AAHPER to AAHPERD; Hypes, 1985; Kinderfather & Hearn, 2010)<sup>4</sup>. There were many build-up years leading up to this (Hayes, 1985), with the heyday decade being 1985-1994. Six of the highest frequency years observed in the present study occurred during this decade.

**Authors/Coauthors**

There were 317 unique abstract authors/coauthors, the vast majority of whom contributed one ( $n = 256$ , 80.76%), two ( $n = 28$ , 8.83%), or three ( $n = 16$ , 5.05%) abstracts. Those who contributed four or more abstracts ( $n = 17$ , 5.36%) represent the most active researchers in this dissemination forum (Table 1).

With 10 published research abstracts, Billie Lepczyk, from Virginia Polytechnic Institute and State University, was the leading contributor of dance presentations overall. Four scholars contributed over a timespan of at least 20 years, including Billie Lepczyk (25 years), Lynnette Overby (23 years), Mary Alice “Buff” Brennan (21 years), and Sandra Minton (20 years). Seven of the people identified in Table 1 were at one point in their career recognized by the National Dance Association with the Scholar/Artist Award (i.e., Brennan, M. K. Cardinal, Côté, Hilsendager, Lepczyk, Minton, and Overby).

Five of the top 17 abstract contributors were from countries outside the United States (29.41%), three representing Canada (i.e., Côté, Nielson, and Fortin) and two representing South Korea (i.e., Kang and Yang). Of the 17 contributors identified in Table 1, all but three (i.e., B. J. Cardinal, Kang, and Nielson) are women. Likewise, all but two (i.e., Skrinar and Yang) contributed during one or more of the peak abstract years. Six of the authors were affiliated with more than one institution during the timespan encompassed by this review (35.29%).

**Table 1.** *Top 10 High Visibility Researchers Based on Research Abstract Publication Frequency, 1965-2014*

Rank	Author <sup>a</sup>	Institutional Affiliation(s) During Presentations	Inclusive Years Presenting <sup>b</sup>	Number of Abstracts
1	<b>Billie Lepczyk (a.k.a., Billie Frances Lepczyk)</b>	Virginia Polytechnic Institute and State University (a.k.a., Virginia Tech)	1986-2010	10
2	<b>Marita K. Cardinal</b>	Temple University; Wayne State University; Western Oregon University	1993-2007	7
3 tie	Peggy Brightman	Texas Christian University; National-Louis University-St. Louis	1993-1998	6
3 tie	<b>Paulette Côté (a.k.a., Paulette Côté-Laurence, Paulette C. Côté)</b>	Brock University, Ontario, Canada	1993-2007	6
5 tie	Sang-Jo Kang	Korea National Sport University	2007-2014	5
5 tie	<b>Sandra Minton</b>	University of Northern Colorado	1989-2008	5
5 tie	A. Brian Nielson	University of Alberta, Canada	1989-1997	5
5 tie	<b>Lynnette Overby (a.k.a., Lynnette Young Overby)</b>	University of Maryland, College Park; Howard University; Michigan State University	1986-2008	5

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5 tie	Margaret Skrinar	University of Pittsburgh; Mount Holyoke College	1979-1982	5
10 tie	Boni Boswell (a.k.a., Boni B. Boswell)	Fort Hays State University; Images in Motion, Inc., Boulder, Colorado; East Carolina University	1985-1998	4
10 tie	<b>Mary Alice “Buff” Brennan (a.k.a, Mary Alice Brennan, Mary A. Brennan)</b>	University of Wisconsin, Madison	1968-1988	4
10 tie	Bradley J. Cardinal	Temple University; Wayne State University; Oregon State University	1993-2007	4
10 tie	<b>Sarah A. Hilsendager (a.k.a., Sarah Chapman, Sarah Alberti Chapman)</b>	Temple University	1986-1995	4
10 tie	Sylvie Fortin	University of Quebec, Montreal, Canada (a.k.a., Université du Québec à Montréal)	1989-1996	4
10 tie	Sylvia Moseley	North Georgia College & State University	1998-2005	4
10 tie	Diane Walker	University of Idaho	1993-1996	4
10 tie	Eun Sim Yang	National Korea Sport University	2012-2014	4

<sup>a</sup> Names highlighted in bold are past National Dance Association Scholar/Artist award recipients.

<sup>b</sup> This column denotes the range between the first and last year an abstract was published.

### Institutions and Country of Origin

The abstract authors/coauthors were affiliated with 153 unique institutions or locations, the majority of which were colleges and/or universities ( $n = 129$ , 84.31%), followed by K-12 schools ( $n = 8$ , 5.23%), private businesses ( $n = 4$ , 2.61%), clinics ( $n = 3$ , 1.96%), not-for-profit community service organizations ( $n = 3$ , 1.96%), no affiliations (city and state listed only;  $n = 3$ , 1.96%), state

departments of education/offices of public instruction ( $n = 2$ , 1.31%), and a professional organization ( $n = 1$ , 0.65%). The majority of institutions (or locations) were only represented on the program once ( $n = 97$ , 63.40%), followed by twice ( $n = 22$ , 14.38%), three times ( $n = 15$ , 9.80%), four times ( $n = 6$ , 3.92%), six times ( $n = 4$ , 2.61%), five times ( $n = 3$ , 1.96%) seven times ( $n = 3$ , 1.96%), eight times ( $n = 2$ , 1.31%), or ten times ( $n = 1$ , 0.07%).

Table 2 features the top 10 institutions, seven of which are based in the United States, two in Canada, and one in South Korea. The highest ranked institution, Virginia Polytechnic Institute and State University (a.k.a. Virginia Tech) in Blacksburg, Virginia, was the home of the highest ranked individual abstract author (i.e., Lepczyk) on the Research Consortium program. For all of the other institutions listed in Table 2, more than one person contributed to the institutional ranking.

The majority of presentations were from the United States ( $n = 201$ , 86.64%) followed by Canada ( $n = 20$ , 8.62%), South Korea ( $n = 7$ , 3.02%), and the remaining four (1.72%) were from France, Puerto Rico, Taiwan, and Turkey.

**Table 2.** *Top 10 High Visibility Institutions Based on Research Abstract Publication Frequency, 1965-2014<sup>a</sup>*

Rank	Institution	Number of Abstracts
1	Virginia Polytechnic Institute and State University (a.k.a. Virginia Tech), Blacksburg, Virginia, USA	10
2 tie	University of North Carolina, Greensboro, North Carolina, USA	8
2 tie	University of Wisconsin, Madison (a.k.a., University of Wisconsin), Madison, Wisconsin, USA	8
4 tie	Bowling Green State University, Bowling Green, Ohio, USA	7
4 tie	Brock University, St. Catharines, Ontario, Canada	7
4 tie	Korea National Sport University, Seoul, South Korea	7
7 tie	Temple University, Philadelphia, Pennsylvania, USA	6
7 tie	Texas Woman's University, Denton, USA	6
7 tie	University of Alberta, Edmonton, Alberta, Canada	6
7 tie	University of Northern Colorado, Greeley, Colorado, USA	6

<sup>a</sup> Rank based on the total number of peer-reviewed research abstracts published in *Abstracts of Research Papers* (1965-1991) and/or the annual abstract supplemental issue of *Research Quarterly for Exercise and Sport* (1992-2014).



**Research Topics, Audience of Interest, Design, and Approach**

There was an unequal distribution of research topics,  $\chi^2 (4, N = 232) = 73.13, p < .001$ . The most frequent research topic was dance education ( $n = 82, 35.35\%$ ) followed by dance science/health ( $n = 70, 30.17\%$ ), sociocultural ( $n = 43, 18.55\%$ ), research methods ( $n = 19, 8.19\%$ ), and choreography/creative process ( $n = 18, 7.76\%$ ). Most of the research presented was aimed toward a dance-specific audience ( $n = 171, 73.71\%$ ) rather than a non dance-specific audience ( $n = 61, 26.29\%$ ),  $\chi^2 (1, N = 232) = 52.16, p < .001$ . The majority of research employed a non-experimental/descriptive research design ( $n = 190, 81.90\%$ ) rather than an experimental/quasi-experimental research design ( $n = 42, 18.10\%$ ),  $\chi^2 (1, N = 232) = 94.41, p < .001$ . The research approaches were fairly evenly distributed between quantitative ( $n = 117, 50.43\%$ ) and qualitative ( $n = 107, 46.12\%$ ) methods, with 3.45% ( $n = 8$ ) using mixed methods,  $\chi^2 (2, N = 232) = 1.63, p = 0.44$ .

Examples of the range of dance research topics within the general categories of dance education, dance science/health, sociocultural, research methods, and choreography/creative process can be seen in Table 3. Many of the sample research topics have been combined into similar groupings to save space within this paper.

**Table 3.** *Dance Content Areas with Examples of Research Topics*

<p>Dance Education</p>	<ul style="list-style-type: none"> <li>• Pedagogical content knowledge in dance</li> <li>• Language of dance education</li> <li>• Teaching various aspects of dance (e.g., motor skills, rhythm, expression, body awareness)</li> <li>• Issues in dance education (e.g., abuse vs. democracy in dance classes; teachers’ differential treatment of students; gender-based motivational differences in learning dance, culturally relevant instruction)</li> <li>• Teaching other subjects through dance, effects of “dancing classrooms” on variable such as social development or critical thinking skills</li> <li>• Variety of teaching methods related to different dance genres and for different populations</li> <li>• Variety of learning styles in dance classes; perceptual learning in dance; multiple intelligences and dance</li> <li>• Curricular models for dance education; placement of dance within education curriculum</li> <li>• Performance assessments in dance education; using Laban Movement Analysis for observational analysis of dance students and their movement</li> </ul>
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<p>Dance Education (cont.)</p>	<ul style="list-style-type: none"> <li>• Analyses of various dance teacher behaviors (e.g., location of instruction, use of feedback, individualized instruction, non-verbal instruction); effects on students</li> <li>• Development of systematic observational tool for assessing dance teachers; measuring various competencies of dance teachers and students (e.g., rhythmic competency)</li> <li>• Teaching various forms of dance to students with disabilities, students with behavioral disorders, disadvantaged/at-risk students, older adults</li> <li>• Teaching Physical Education students to teach dance; PE students' perceptions of and attitudes toward dance; PE students' knowledge and teaching abilities in dance</li> <li>• Dance students' perceptions of dance, perceptions of dance training, self-perceptions in dance and effects on learning</li> <li>• Perceptions of classroom teachers who integrate dance in their curriculum</li> <li>• Voices of K-12 dance teachers</li> <li>• Job satisfaction of dance teachers</li> <li>• Framework for educational leadership in dance</li> </ul>
<p>Dance Science/Health</p>	<ul style="list-style-type: none"> <li>• Comparisons between body proportions and anthropometrics of dancers in different genres</li> <li>• Physiological variables and fitness characteristics of a variety of dance populations; comparisons among dancers in different genres (e.g., ballet vs. modern dancers); comparisons of dancers with other populations (e.g., gymnastics, athletes, general population)</li> <li>• Energy expenditure of different dance forms using varied measures; intensity levels of ballet classes vs. rehearsals</li> <li>• Health histories and behaviors of dancers</li> <li>• Nutritional profiles (e.g., dietary practices, caloric intake, eating disorders, bone density, knowledge) of dancers; comparisons between dancers and other populations (e.g., runners)</li> <li>• Body image, eating attitudes of dancers; effects of mirrors in dance environments on dancers' body image</li> <li>• Exercise dependency in dance</li> <li>• Effects of behavioral variables (e.g., mental practice, imagery, auditory feedback, arousal, anxiety) on dance factors (e.g., performance, skill acquisition, body alignment)</li> </ul>

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<p>Dance Science/Health (cont.)</p>	<ul style="list-style-type: none"> <li>• Interactions of behavioral variables (e.g., self esteem, self efficacy, self concept, self-handicapping, empathy) of dancers and other populations</li> <li>• Biomechanical analyses of dance skills (e.g., pirouettes, jump landings)</li> <li>• Motor skill bilateral transfer of dance skills</li> <li>• Supplementary strength and conditioning programs for dancers (e.g., strength training, plyometric training, stretching programs); effects on dancers' fitness and performance and their perceptions of such programs and outcomes</li> <li>• Balance of strength in contralateral muscle groups of dancers and other populations</li> <li>• Somatics re-education practices (e.g., Bartenieff Fundamentals) and effects on dancers' fitness and injury risk</li> </ul>
<p>Sociocultural (includes Sociological, Cultural, Historical, Ethnographic, and Philosophical studies)</p>	<ul style="list-style-type: none"> <li>• Dance roles in society</li> <li>• Influences of society, economics, aesthetics, historical periods on dance</li> <li>• Symbolism in dance choreography</li> <li>• Depictions of dance in different aspects of art and culture</li> <li>• Comparisons among dance and other art forms</li> <li>• Aesthetic similarities and differences between dance and sport</li> <li>• Feminist aesthetic in dance</li> <li>• Different racial dance aesthetics and influences on choreography</li> <li>• Western aesthetic and multiculturalism of dance studies</li> <li>• Laban Movement Analysis and other theoretical frameworks for analyzing dance style</li> <li>• Ethnographies of dance curricula</li> <li>• Historical biographies</li> <li>• Historical reviews of dance research</li> <li>• Gender issues in dance</li> <li>• The relationship between a dancer and her body; body perspectives; somatic embodiment</li> <li>• Philosophical discussion of various approaches to dance scholarship</li> </ul>

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<p>Research Methods (includes Measurement)</p>	<ul style="list-style-type: none"> <li>• Variety of research methods specific to dance</li> <li>• Quantitative research methods</li> <li>• Qualitative research methods</li> <li>• Historical dance reconstruction methodologies</li> <li>• Phenomenological choreographic research (with performance)</li> <li>• Participatory action research</li> <li>• Observational coding in dance research</li> <li>• Data gathering techniques and analysis</li> <li>• Using Laban Movement Analysis in describing dance movement as a research methodology</li> <li>• Measuring/assessing performance variables (e.g., spatial-kinesthetic awareness in dance performance, social dance performance, dance partnership scale); holistic and analytic rating in dance performance assessment</li> <li>• Issues that arise when involving children in research</li> <li>• Research and pedagogy</li> <li>• Boyers' domains of scholarship in dance research</li> <li>• Art as research and research as art</li> <li>• Writing and publishing in dance</li> </ul>
<p>Choreography/ Creative Process</p>	<ul style="list-style-type: none"> <li>• Choreography as research</li> <li>• Descriptions of choreographic works</li> <li>• Choreographic methods during different time periods (e.g., post-modern methods)</li> <li>• Phases of the creative process</li> <li>• Elements of artistic process and performance style</li> <li>• Affecting emotional connotation during performance</li> <li>• Understanding and measuring creative ability</li> <li>• Comparisons of creativity among dance students, theatre students, and physical education students; comparisons between dancers in different genres (e.g., ballet vs. modern dancers)</li> <li>• Using children's literature to affect creative dance responses of children</li> <li>• Integration of somatics with choreography</li> <li>• Dance performances viewed through Laban Movement Analysis</li> </ul>

Representing nearly two-thirds (65.52%) of the abstracts, dance education and dance science/health were the most frequent overarching topics. It is likely that the majority of dance research presentations were within the category of dance

education because dance education was connected to physical education in the early 1900s. The AAHPERD organization originated with a mission to serve the need for quality physical educators in public schools and dance was a part of physical education. As the organization evolved and dance became a more specialized area within the organization, the majority of dance-specific members of AAHPERD remained dance *educators* and the primary focus of NDA was to advance the field of dance education.

The second highest category of dance research topics was dance science/health. This makes sense because of the strong connections to other disciplines within the umbrella of AAHPERD, particularly exercise science and health (Cardinal & Cardinal, 2014). Most of the dance research studies in this category are clearly associated with the sub-disciplines of physiology of exercise, health, nutrition, psychology, motor behavior, and biomechanics. Examples of a variety of integrated research studies can be seen within Table 3. Furthermore, some overlap among categories can be seen which speaks to the wide range of topics researched by dance scholars as well as the interdisciplinary nature of the Research Consortium and of AAHPERD (Cardinal & Lee, 2013).

As has been previously reported (Cardinal & Cardinal, 2007), the decline of dance research presentations that began in the mid- to late-1990s parallels the creation of the National Dance Education Association (soon after renamed the National Dance Education Organization) in 1998 (National Dance Education Organization, 2016) outside the organizational structure of AAHPERD. Though the National Dance Association remained a part of the overall AAHPERD structure through the 2014 conference, many dance scholars did move away from AAHPERD during the late 1990s. After 1998, the prevalence of dance research within the Research Consortium remained, albeit inconsistently, with one more high volume year in 2007. Actively engaged dance scholars who had previously contributed to and supported the Research Consortium and who continued to present their research through the Research Consortium, as well as new presenters, tended to simultaneously align with dance and at least one other discipline within the AAHPERD umbrella (e.g., Health, Exercise Science, Kinesiology, Measurement, Motor Behavior, Recreation, Physical Education)<sup>5</sup>. Analysis of dance research presentations targeted toward dance populations (D) vs. non-dance populations (ND) shows a slight trend toward more non-dance populations during the last 17 years (1998-2014, 34.25% ND) when compared to the first 17 years (1965-1981, 19.44% ND) and the second 16 years (1982-1997, 21.14% ND),  $\chi^2(2, N = 232) = 4.90, p = .09$ .

One of the greatest and perhaps not fully appreciated assets of AAHPERD was the interdisciplinary nature of the organization with affiliations among its associations and sub-disciplines (Cardinal & Lee, 2013). Cross-disciplinary research provides a connecting point for multiple perspectives and expertise from

professionals from different disciplines, in this case within the allied fields represented by AAHPERD, including biomechanics, exercise physiology, health, measurement, motor development, motor learning, pedagogy, psychology, and sociocultural studies (Cardinal & Cardinal, 2014).

The “exodus” of many dance scholars from NDA to join NDEO (or other, dance-specific professional organizations) provided opportunities for dance professionals to pursue stronger affiliations with other art forms. However, with gains, there are sometimes losses; in this case, losses for continued opportunities for interdisciplinary connections within the health and exercise sciences. Possibilities for collaboration can exist between dance faculty in higher education and their professional colleagues in health and exercise science and it is hoped that such connections will continue to be made. Unfortunately, a long-standing chasm between the art of dance and the science of dance (e.g., fear of science diminishing the artistry of dance, differing philosophies, etc.) may sometimes prevent these types of collaborations (Cardinal & Cardinal, 2014).

### **Limitations**

This study does not necessarily represent the full scholarly profile of the researchers identified, nor the scholarly organizations that the discipline of dance is affiliated with, including NDA, which was one of the national associations aligned with AAHPERD from 1974-2014 (Hypes, 1985). Many NDA members presented their scholarship through the NDA conference programs, perhaps to reach a more specific dance audience<sup>6</sup>. There are also many other potential outlets for disseminating one’s scholarly work, and the Research Consortium was but one of them during the time period encompassed by this review. Furthermore, some dance scholars may never have regarded the Research Consortium as the most appropriate or prestigious dissemination venue for their work. Several factors may be related to this including real or perceived differences in philosophies, emphases, and/or systemic changes within AAHPERD and its national associations, as well as the Research Consortium; the emergence and expansion of other scholarly societies and specialty conferences for dance, particularly those affiliated with the arts and/or humanities; finite amounts of travel funding available; among a host of other possibilities. This study clearly demonstrates the development of dance research within the Research Consortium over the decades, as well as its tapering off, particularly toward the close of the 20<sup>th</sup> century when the National Dance Education Organization emerged. Conversely, it doesn’t address the development of dance research within the National Dance Education Organization and within other dance-specific professional organizations. Finally, had the time span of this study been different, no doubt other researchers and scholars would have been included and some of those identified would have been excluded.

## Summary and Conclusions

This is the largest and most ambitious historiography of dance research within the Research Consortium ever published. The study demonstrates the vast contributions dance scholars have made over the past half-century to advancing dance as a discipline in and of itself, as well as its contributions to other sub-disciplinary areas. Apparent in this work is the depth, breadth, and meanings of dance as more than “just” a physical activity or a form of exercise. This is particularly relevant given the organizational changes that have occurred within the organization that is now known as the Society of Health and Physical Educators America (SHAPE America Councils Announced, 2014) that have dissolved NDA (and all other national associations)<sup>7</sup> and demoted dance to being only a part of physical education. As these changes went into effect, Wiedow (2014) stated, “...‘health, physical education and physical activity’ refer to the school setting. Dance and sport are embedded in physical education and physical activity” (p. 2). Although dance scholarship continues to thrive within other, external professional organizations, unfortunately within this arrangement, the breadth, depth, and meaning of dance can easily be lost, including its role and contributions to interdisciplinary studies and the roles and contributions of other disciplines within SHAPE America to dance (Cardinal & Cardinal, 2014; Overby, 2005).

More than 100 years ago within AAHPERD’s organizational history, Lee and Bennett (1985) referred to the time period of 1900-1915 as, “A time of athletics and dancing” (p. 27). Luther Halsey Gulick, M.D., for whom the highest organizational award is named (i.e., the Luther Halsey Gulick Medal, established 1923), promoted dance during his Presidency, which lasted from 1903-1907. In fact, “He felt strongly that physical education was overlooking golden opportunities in not offering dancing in the school curriculum...” (Lee & Bennett, p. 28), so he made the 1905 New York, New York national convention theme, “Dancing” (Conventions, 1985, p. 13). “At the opening general session of the 1905 convention, Dr. Gulick himself gave a paper on dancing and rhythm education. Three entire sessions were devoted exclusively to dance” (Lee & Bennett, p. 28). Now, more than 100 years later, it is unclear how dance scholarship will be sustained in the restructured AAHPERD, known today as the “Society of Health and Physical Educators America.” As such, the present study is one attempt to preserve the unique history of dance scholarship and dance scholars within the organization’s history for posterity.

Beyond posterity, it is important to be mindful of the dangers of the “cut flower syndrome” in research and practice (Banowsky, 1972). When the work of “today” neglects to build upon the work of “yesterday,” multiple issues emerge. The cut flower syndrome serves as a constant reminder of this. Specifically, if one cuts today’s “flowers” from their “roots,” today’s flowers will ultimately die.

Research, scholarship, and educational programs must be built upon prior work to preserve the past, give intellectual attribution to earlier researchers, scholars, and educators, and to stay relevant in an effort to advance disciplinary knowledge.

### Notes

<sup>1</sup> The Association for the Advancement of Physical Education was established in 1885. Since that time, the organization has changed names seven times: American Association for the Advancement of Physical Education (1886-1903); American Physical Education Association (1903-1937); American Association for Health and Physical Education (1937-38); American Association for Health, Physical Education and Recreation (1938-1974); American Alliance for Health, Physical Education and Recreation (1974-1979); American Alliance for Health, Physical Education, Recreation and Dance (1979-2014); and the Society of Health and Physical Educators America (2014-present).

<sup>2</sup> The Research Consortium and its predecessor groups (i.e., the Research Council of the Research Section of the American Association for Health, Physical Education and Recreation; Research Section of the General Division; and the Research Council of the Association for Research, Administration and Professional Councils and Societies) has served as the principal organization fulfilling the research function of the larger organization throughout much of its history, including the time period encompassed by this review. Since 2014, within the Society of Health and Physical Educators (SHAPE) America, it is now known as the Research Council.

<sup>3</sup>Following the 2014 conference, all of the former national associations within AAHPERD were dissolved and, as such, the National Dance Association (NDA) was disbanded. Interestingly, a time span of exactly 50 years occurred between the first year that the Research Consortium program was disseminated beyond the conference attendees and the complete dissolution of NDA. It is hoped that the current study documents and honors the legacy of these researchers who, collectively over 50 years, contributed their work to the field of dance through the AAHPERD Research Consortium.

<sup>4</sup>Although the “D” wasn’t added to the name of the organization (i.e., AAHPERD) until 1979, dance was an integral part of the organization since the early 1900s. In 1931, dance formally became a section of APEA (Miller, 1952) and in 1974, dance formally became an association, i.e., the National Dance Association of AAHPER (Hypes, 1985). These achievements were made possible through the hard work and



preparation of dance leaders within the organization. As Hypes indicated, “The D was in and AAHPERD was a reality. We really did it!” (p. 123). This implies there was some struggle to make dance as prominent within the organization as it had become.

<sup>5</sup>Since 2014, the structure of the Research Council within SHAPE America has changed. The Research Council leadership is no longer comprised of representatives from each of the former national associations (including NDA), since all of the associations were disbanded in 2014. The current representatives of the Research Council are selected from among the general membership of the Research Council of SHAPE America. The following statement identifies the content areas represented by the current Research Council (SHAPE America, n.d.<sup>b</sup>): “The Research Council addresses the areas of curriculum and instruction, exercise science, motivation and psychology, motor behavior and measurement, physical activity and health, sociocultural and social justice, and sport and coaching.”

<sup>6</sup>Scholarly lectures were also included in National Dance Association conference programs. Particularly notable were the NDA Dance Scholar and Scholar-Artist award lectures that were held each year between 1978 and 2014. Beyond the scope of the current study, the majority of these lectures can be found in the National Dance Association NDA Scholar-Artist Collection of Lectures: 1978-2010 (Weeks, 2010) with the remaining four lectures (2011-2014) published in the *Journal of Physical Education, Recreation and Dance*. In the mid 1990s, the various Associations within AAHPERD (including NDA) also began holding their own research poster sessions (separate from the Research Consortium), which meant more opportunities for members to present their scholarship.

<sup>7</sup>All of the former associations of AAHPERD (i.e., American Association for Health Education [AAHE], American Association for Physical Activity and Recreation [AAPAR], National Association for Girls and Women in Sport [NAGWS], National Association for Sport and Physical Education [NASPE], and National Dance Association [NDA]) were dissolved in order to unify the organization and clarify its vision (AAHPERD, n.d.). SHAPE America’s current vision is “Healthy People – Physically Educated and Physically Active!” (SHAPE America, n.d.<sup>a</sup>)

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