

Publishing trends in the *International Journal of Sport Psychology* during the First 50 years (1970-2019), with a particular focus on Asia and Oceania

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To commemorate the 50th anniversary of its first issue, we explored publication trends in the International Journal of Sport Psychology (IJSP), with a particular focus on research contributions from Asia and Oceania. A descriptive analysis of all articles published in IJSP between 1970 and 2019 (N = 1,175) was conducted to identify trends related to first author gender, country, and continent. Also, an analysis of research topics by decade was conducted using Leximancer. Key findings were: (a) female first authors became more prominent over time but remained in the minority; (b) the percentage of articles from Europe and Asia increased and the percentage of articles from North America declined, although the USA and Canada have been the top contributors over the life of the journal; and (c) the focus on particular topics, especially those pertaining to athletes, performance, motor learning, motivation, and teams was sustained throughout the 50-year period. Within Asia and Oceania, the 10 countries publishing the most articles were, in descending order, Australia, Israel, Hong Kong, Taiwan, South Korea, New Zealand, India, Japan, Singapore, and Turkey.

KEY WORDS: Asia, ASPASP, Content Analysis, Exercise, IJSP, ISSP, Oceania, Psychology, Sport.

Introduction

The *International Journal of Sport Psychology* (IJSP) publishes “empirical and theoretical contributions in human movement science from all over the

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world" (IJSP, 2020), although in common with many other journals in the area of sport psychology, most contributions have emanated from North America and Europe. *IJSP* was established in 1970 as the first scientific journal devoted entirely to the study of sport psychology, by the Italian psychiatrist Ferruccio Antonelli, who had also been the driving force and foundation President of the International Society of Sport Psychology (ISSP) from 1965 (Cei, 2011). Nowadays, *IJSP* publishes exclusively in English, although in keeping with its international status, some articles during previous decades were published in French, with abstracts also included in English, Spanish, German, and Italian.

A content analysis of the first seven volumes of *IJSP* (1970-1976) by Groves, Heekin, and Banks (1978) unearthed some early publishing trends. The 67 articles assessed by Groves et al. originated from 20 countries, although a clear North American orientation was evident, with 52.1% of first authors being affiliated with universities in the United States or Canada. European first authors (including those from the United Kingdom) accounted for another 39.4% of articles, meaning that fewer than 10% of articles came from the rest of the world. Asia was represented by only four articles over the 7-year period, authored from just two countries (India and Israel). In terms of author field of specialty, the majority of contributors (53.6%) during the early years of *IJSP* had a physical education background with fewer than a fifth (19.6%) having a psychology background. The topic of investigation during this early period of the journal was quite narrow, with investigations of performance and of personality accounting for about one third of published articles.

Aguerri (1986) extended the content analysis of Groves et al. (1978) by focusing on the first 15 volumes of *IJSP* (1970-1984), examining a total of 218 papers. The strong North American (54.1%) and European (36.7%) influences were still evident, contributions from Asia (6.9%) and Oceania (2.8%) were still infrequent, and contributions from Africa and South America were yet to appear. Aguerri echoed previous calls for broader geographic representation in the journal, arguing that "a more homogeneous distribution of the research throughout the various countries could contribute to the world-wide uniformity of knowledge in the field, and therefore encourage its application" (p. 90). Aguerri highlighted a marked shift in the percentage of first authors whose primary area of expertise was in psychology (59.6%) rather than physical education (38.1%). She also identified a methodological shift from questionnaire designs to a growing experimental approach to sport psychology. The principal topics of investigation were personality, motivation, psycho-sociology, anxiety, motor learning, cognition, sex and

race differences, perception, and psychophysiology. Sports attracting the most interest from researchers were basketball, football (soccer), swimming, tennis, and volleyball.

A third content analysis was conducted by Biddle (1997) in which he chronicled trends between 1985 and 1994 in both *IJSP* (242 articles) and *Journal of Sport and Exercise Psychology* (287 articles). The most frequently investigated topics during this period were motivation, anxiety, imagery, self-confidence, exercise and mental health, and group dynamics. Investigations of school and college students accounted for almost half (48.2%) of the studies. Research designs were typically survey or quasi-experimental, with few studies using qualitative methods or case studies. In *IJSP* specifically, Biddle identified a decline in lead-authored articles from North America, down from 63% during the 1985-1989 quinquennium to 42% during the 1990-1994 quinquennium, with a concomitant rise in articles from Europe (from 30% to 40%) during the same periods.

Development of Sport Psychology in Asia and Oceania

Given that a specific focus of this paper revolves around sport psychology in Asia and Oceania, it is appropriate to provide a brief history of developments in those regions. The Asian-South Pacific Association of Sport Psychology (ASPASP) was formally established in 1989 during the 7th ISSP World Congress in Singapore, with Atsushi Fujita from Japan elected as the society's first president. This landmark development came about following strong encouragement from the ISSP Managing Council, particularly Bob Singer, who was ISSP President at the time. The ASPASP constituency encompasses the whole of Asia from Israel, Iraq, and Saudi Arabia in the west to Korea, Japan, and the Philippines in the east and all points in between, plus Oceania, which encompasses Australia, New Zealand, and the Pacific Islands. ASPASP has held its international congress every three to four years since the inaugural congress in Melbourne, Australia in 1991 through to the most recent congress in Daegu, Korea in 2018.

Among the more developed countries of the ASPASP region, sport psychology has been organised nationally for several decades. Countries including Australia, China, Japan, and Korea, all have well-established processes for accrediting sport psychologists (see Morris, Alfermann, Lintunen, & Hall, 2003; Schinke et al., 2018) and vibrant research communities. Other Asian countries, including Iran, Malaysia, Philippines, Singapore, and Thailand, have made significant strides in recent years to develop sport psycho-

logy as a profession and a credible area of research (see Terry, Zhang, Kim, Morris, & Hanrahan, 2014).

Study Aims

In the current study, we sought to identify chronological trends among articles published in *IJSP* since its inception in 1970 to its 50th year of publication in 2019. Areas of detailed examination were decade of publication, first author gender, country, and continent; and range of research topics. Scrutiny by decade was used to establish societal and academic changes in article characteristics over time. Additionally, a conceptual analysis of the content was conducted to illuminate emergent and shifting research themes, thereby reflecting past and present foci of published articles in *IJSP* specifically, and insight into the broader sport psychology research community more generally, over the past five decades.

Method

Categorization of Data

All articles published in *IJSP* during the 50-year period from 1970 to 2019 were eligible for inclusion in the analyses. All author characteristics were coded according to the first named author of each article.

Publication Decade

The year of publication was used to categorize each article into one of five decades (1970-1979, 1980-1989, 1990-1999, 2000-2009, and 2010-2019).

First Author Gender

First author gender was coded as Male, Female, or in cases where author gender could not be confirmed, as Undetermined.

First Author Country

Country was coded according to the location of the university affiliation of the first author at the time of publication. Countries with ≥ 10 articles were, in alphabetical order, Australia, Belgium, Canada, France, Germany, Greece, Hong Kong, Israel, Italy, New Zealand, Norway, Portugal, Republic of Korea, Spain, Taiwan, The Netherlands, United Kingdom, and United States of America. Countries with < 10 articles were coded as Other, comprising Aus-

tria, Botswana, Brazil, Bulgaria, China, Costa Rica, Croatia, Czechoslovakia (now Czech and Slovak republics), Denmark, Estonia, Finland, Iceland, India, Iran, Japan, Lithuania, Macedonia, Malaysia, Nigeria, Poland, Romania, Russia, Singapore, Slovenia, South Africa, Sweden, Switzerland, Turkey, United Arab Emirates, and Uruguay. The country of origin of one article could not be confirmed and was coded as Undetermined.

First Author Continent

All articles were allocated to a continent (Africa, Asia, Europe, North America, Oceania¹, or South America) according to the country affiliation of the first author. Continent was determined according to the United Nations Statistics Division (United Nations, 2019).

Conceptual Analysis

Leximancer text analytics software was used to conduct an analysis of the conceptual content of the titles of published articles. Leximancer is a software system for performing conceptual analysis of text data, using word-association information to elicit emergent concepts from the text (Smith & Humphreys, 2006), thereby generating a tailored taxonomy for each dataset (Smith, 2003).

Procedure

All articles were downloaded from the journal's online repository. Variables of interest for each article (i.e., article title, publication year and decade, first author gender, country, and continent) were compiled in a datafile for analysis using SPSS version 25. All codings were checked by two members of the research team.

Results

A total of 1,175 articles published in *IJSP* between the years 1970 and 2019 were included in the analysis. Notably, the Orde Wingate Institute for Physical Education and Sport in Israel and the Vrijé University (Free University) Amsterdam, Netherlands have been the most frequent contributors to *IJSP* of institutions globally, each with 19 articles. Other prolific contributors were the University of British Columbia ($n = 15$), Florida State University ($n = 14$), Purdue University ($n = 12$), University of York, Canada ($n = 12$), Katholieke Universiteit Leuven, Belgium ($n = 11$), University of Western Ontario ($n = 11$), University of North Carolina – Chapel Hill ($n = 10$), and the German Sport University, Cologne ($n = 10$).

¹ Oceania is a region that subsumes the continent of Australia, and several South Pacific nations and territories.

Prominent contributors to the journal from Asia include Nanyang Technical University, Singapore ($n = 6$) and Hong Kong University ($n = 5$), with the largest number of contributions in Oceania coming from the University of Western Australia ($n = 8$), La Trobe University ($n = 8$), University of Otago ($n = 7$), Victoria University ($n = 7$), University of Southern Queensland ($n = 6$), and the Australian Institute of Sport ($n = 6$).

First Author Gender

In the period since *IJSP* was first published, a total of 71.6% ($n = 841$) of first authors have been male and 27.0% ($n = 317$) have been female, with 1.4% ($n = 17$) undetermined (see Table 1). Although significant gender inequality was evident throughout the whole 50-year period, the percentage disparity of male to female first authors was shown to have reduced over the decades from 79.8% vs. 18.5% during 1970-1979 to 66.1% vs. 32.6% during 2010-2019 (see Figure 1).

Among the articles from Asia ($n = 98$) the overall gender split was 67.3% male vs. 28.6% female (4.1% undetermined). Across the decades, female representation fluctuated from 42.9% in the 1970s, 12.5% in the 1980s, 40.0% in the 1990s, 21.7% in the 2000s, and 33.3% in the 2010s. A stark gender imbalance was evident within Oceania ($n = 83$), with 81.9% male vs. 18.1% female first authors. Female representation increased over time, from 0% in the 1970s, 12.5% in the 1980s, 16.1% in the 1990s, 18.2% in the 2000s, and 26.3% in the 2010s.

Table 1
First Author Gender and Continent by Decade in *IJSP* 1970-2019 ($N = 1,175$)

Source (%)	1970-1979 ($n = 119$)	1980-1989 ($n = 213$)	1990-1999 ($n = 277$)	2000-2009 ($n = 244$)	2010-2019 ($n = 322$)	Total ($N = 1,175$)
Gender						
Male	95 (79.8)	153 (71.8)	191 (69.0)	189 (77.5)	213 (66.1)	841 (71.6)
Female	22 (18.5)	54 (25.4)	82 (29.6)	54 (22.1)	105 (32.6)	317 (27.0)
Undetermined	2 (1.7)	6 (2.8)	4 (1.4)	1 (<1)	4 (1.2)	17 (1.4)
Continent						
Africa	—	3 (1.4)	5 (1.8)	—	3 (<1)	11 (<1)
Asia	7 (5.9)	16 (7.5)	10 (3.6)	23 (9.4)	42 (13.0)	98 (8.3)
Europe	38 (31.9)	62 (29.1)	97 (35.0)	115 (47.1)	169 (52.5)	481 (40.9)
North America	69 (58.0)	124 (58.2)	133 (48.0)	81 (33.2)	83 (25.8)	490 (41.7)
Oceania	3 (2.5)	8 (3.8)	31 (11.2)	22 (9.0)	19 (5.9)	83 (7.1)
South America	1 (<1)	—	1 (<1)	3 (1.2)	6 (1.9)	11 (<1)
Undetermined	1 (<1)	—	—	—	—	1 (<1)

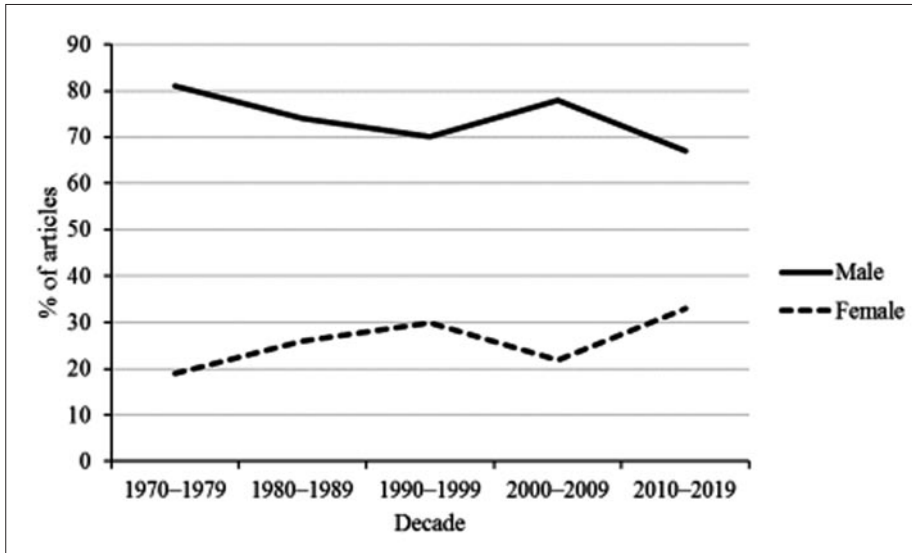


Fig. 1. - *IJSP* publishing trends by gender by decade.

First Author Country

Articles appearing in *IJSP* have emanated from at least 48 countries since the inception of the journal. There has been an increase in the number of countries making contributions to knowledge in the field over time. A total of 21 countries contributed during the 1970s, rising steadily over the decades to a total of 35 countries contributing during the 2010s. The United States of America ($n = 336$; 28.6%), Canada ($n = 153$; 13.0%), and the United Kingdom ($n = 129$; 11.0%) have collectively accounted for more than half of all articles published in *IJSP* over the 50-year period (see Table 2). Significant European contributions to the journal have come, in descending order, from France ($n = 71$), Germany ($n = 49$), Italy ($n = 41$), Belgium ($n = 29$), Netherlands ($n = 28$), Spain ($n = 28$), Greece ($n = 16$), Portugal ($n = 14$), and Norway ($n = 13$). From Africa, contributing countries have been South Africa ($n = 7$), Nigeria ($n = 3$), and Botswana ($n = 1$), whereas contributions from South America have been restricted to Brazil ($n = 9$) and Uruguay ($n = 2$). Within the Asia and Oceania regions, Australia ($n = 72$), Israel ($n = 20$), Hong Kong ($n = 15$), Taiwan ($n = 15$), South Korea ($n = 12$), New Zealand ($n = 11$), India ($n = 7$), Japan ($n = 7$), Singapore ($n = 7$), and Turkey ($n = 6$) have been the top-10 contributors (Table 2).

Table 2
 First Author Country by Decade of All Articles in *IJSP* 1970-2019 (N = 1,175)

Source (%)	1970-1979 (n = 119)	1980-1989 (n = 213)	1990-1999 (n = 277)	2000-2009 (n = 244)	2010-2019 (n = 322)	Total (N = 1,175)
Country						
United States of America	53 (44.5)	98 (46.0)	87 (31.4)	54 (22.1)	44 (13.7)	336 (28.6)
Canada	16 (13.4)	25 (11.7)	46 (16.6)	27 (11.1)	39 (12.1)	153 (13.0)
United Kingdom	7 (5.9)	12 (5.6)	30 (10.8)	29 (11.9)	51 (15.8)	129 (11.0)
Australia	2 (1.7)	5 (2.3)	29 (10.5)	17 (7.0)	19 (5.9)	72 (6.1)
France	1 (< 1)	6 (2.8)	21 (7.6)	22 (9.0)	21 (6.5)	71 (6.0)
Germany	3 (2.5)	11 (5.2)	6 (2.2)	12 (4.9)	17 (5.3)	49 (4.2)
Italy	4 (3.4)	10 (4.7)	8 (2.9)	7 (2.9)	12 (3.7)	41 (3.5)
Belgium	8 (6.7)	8 (3.8)	2 (< 1)	6 (2.5)	5 (1.6)	29 (2.5)
Spain	2 (1.7)	2 (< 1)	1 (< 1)	8 (3.3)	15 (4.7)	28 (2.4)
The Netherlands	—	3 (1.4)	7 (2.5)	7 (2.9)	11 (3.4)	28 (2.4)
Israel	3 (2.5)	11 (5.2)	4 (1.4)	1 (< 1)	1 (< 1)	20 (1.7)
Greece	—	—	7 (2.5)	5 (2.0)	4 (1.2)	16 (1.4)
Hong Kong	—	—	1 (< 1)	9 (3.7)	5 (1.6)	15 (1.3)
Taiwan	—	—	—	1 (< 1)	14 (4.3)	15 (1.3)
Portugal	—	—	1 (< 1)	5 (2.0)	8 (2.5)	14 (1.2)
Norway	—	—	6 (2.2)	2 (< 1)	5 (1.6)	13 (1.1)
South Korea	—	—	1 (< 1)	5 (2.0)	6 (1.9)	12 (1.0)
New Zealand	1 (< 1)	3 (1.4)	2 (< 1)	5 (2.0)	—	11 (< 1)
Other (10 articles)	18 (15.1)	19 (8.9)	18 (6.5)	22 (9.0)	45 (14.0)	122 (10.4)
Undetermined	1 (< 1)	—	—	—	—	1 (< 1)

Analysis by First Author Continent

Europe has shown a strong upward trend in the number of articles published, increasing from 31.9% in 1970-1979 to 52.5% in 2010-2019 (see Figure 2), and hence is now the major contributor to publications in *IJSP*. Conversely, North America has shown a decline in the number of contributions across the decades, from 58.0% in 1970-1979 to 25.8% in 2010-2019. Contributions from Asia have risen from 3.6% during the 1990s to 13.0% during the 2010s, whereas the percentage of articles from Oceania peaked at 11.2% during the 1990-1999 period but declined to 5.9% during 2010-2019. The percentage of articles from South America increased from one in the 1970s to six in the 2010s but, in common with contributions from Africa, accounted for fewer than 1% of articles overall.

Conceptual Analysis

Using Leximancer, we conducted a conceptual analysis of the titles of all 1,175 articles published in *IJSP* between 1970 and 2019. The results are

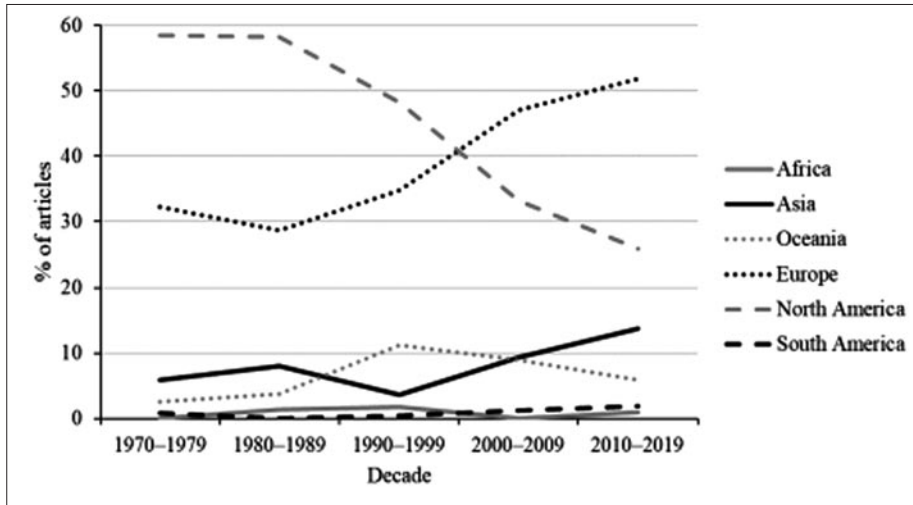


Fig. 2. - *IJSP* publishing trends by continent by decade.

shown in Table 3, with the hit rate column denoting the number of text blocks in the collection of article titles associated with each concept. Through this analysis, we quantified the main research areas included in the journal during each decade and identified conceptual trends across the 50-year history of *IJSP*. We completed this analysis by uploading the title of articles into Leximancer one decade at the time, using the Thesaurus function to eliminate superfluous terms from the analysis, such as investigation, research design, variable, analysis, etc. The results of the Leximancer analysis are also presented in the form of a word cloud in Figure 3, with word size representing the relative popularity of the concept over the 50-year period.

1970-1979. During the 1970s, as the journal found its feet, the main topics of interest were performance aspects of sport, including competition and the specific characteristics of the athletes involved, such as motivation and personality. Interest in teams, coaches, and football was also evident, although limited in comparison to the descriptive characteristics of athletes. Investigations related to physical education, motor learning, and psychometrics also formed the subject of publications in the journal during its first decade, although the relatively narrow range of research topics reflected the limited horizons of the sport psychology world more generally.

1980-1989. In this period, many of the topics covered in the 1970s, especially athletes, performance, and personality, continued to be the primary focus of attention, with minor differences in terms of their relevance. For

Table 3
Conceptual Analysis by Decade of All Articles in IJSP 1970-2019 (N=1,175)

1970-1979 (n = 119)		1980-1989 (n = 213)		1990-1999 (n = 277)		2000-2009 (n = 244)		2010-2019 (n = 322)	
Concept	Hit Rate	Concept	Hit Rate	Concept	Hit Rate	Concept	Hit Rate	Concept	Hit Rate
Performance	20	Athlete	37	Performance	37	Athlete	48	Athlete	57
Personality	19	Performance	37	Athlete	36	Performance	31	Physical Activity	45
Athlete	18	Anxiety	21	Physical Activity	19	Exercise	24	Performance	37
Motivation	11	Personality	17	Exercise	17	Physical Activity	20	Motivation	23
Physical Education	10	Athletic	12	Anxiety	15	Motor Learning	19	Exercise	22
Competition	7	Team	11	Training	15	Anxiety	11	Training	20
Motor Learning	7	Physical Education	10	Stress	12	Elite Sports	10	Mental Toughness	20
Football	6	Motor Learning	8	Basketball	12	Stress	10	Motor Learning	19
Team	6	Motivation	8	Mental Skills	11	Soccer	10	Elite Sports	19
Coaches	4	Training	8	Motivation	11	Team	9	Youth	17
Psychometric	3	Hockey	7	Cognition	10	Coping	8	Soccer	16
—	—	Olympic	5	Team	10	Motivation	8	Anxiety	14
—	—	Tennis	4	Motor Learning	9	Youth	6	Adults	13
—	—	Social	4	Elite Sports	8	Training	5	Team	13
—	—	—	—	Soccer	7	—	—	Physical Education	11
—	—	—	—	Imagery	7	—	—	Children	11
—	—	—	—	Personality	7	—	—	Emotions	8
—	—	—	—	Cross-cultural	7	—	—	—	—



Fig. 3. - Word cloud of concepts evident in *IJSP* publications 1970-2019.

example, performance and athlete characteristics enjoyed joint prominence in the 1980s. In addition, a series of new foci emerged. For example, authors started focusing on specific sports (e.g., tennis and hockey) as well as specific sporting events (e.g., the Olympics). Unsurprisingly, these results align with the findings of Groves et al. (1978) and Aguerri (1986) in their content analyses. This decade also witnessed publication of the first comprehensive review paper to appear in *IJSP*, in the form of Bergandi's (1985) examination of scholarly research on the psychological variables thought to predispose athletes to injury.

1990-1999. In what was something of a golden era for the journal, the number of articles published during this decade ($n = 277$) was more than double the number published during the 1970s ($n = 119$). In addition to the main topics of interest of the previous two decades (e.g., performance, athletes, anxiety), new research areas started to flourish. For example, a shift from physical education to physical activity and exercise is evident, and a decline in the number of investigations of personality is also appar-

ent. Further, a growing interest in specific sports, such as basketball and soccer, as well as in the application of psychological skills in the sport context (e.g., imagery, mental skills) is observable. A number of influential review papers appeared in the journal during the 1990s, on sports leadership (Chelladurai, 1990), exercise and mental health (Berger, Owen, & Man, 1993), self-determination theory (Frederick & Ryan, 1995), exercise and stress management (Rostad & Long, 1996), temporal parameters of movement and reaction time (Temprado & Spijkers, 1996), and theoretical and quantitative research in American football (Freudenberger & Bergandi, 1994). Finally, publication of cross-cultural research developed during this decade, perhaps in response to previous calls (e.g., Groves et al., 1978; Aguerrri, 1986) for a more international approach to sport psychology research.

2000-2009. A reduction in the number of published articles in *IJSP* occurred during this decade ($n = 244$), likely related to the launch of the *International Journal of Sport and Exercise Psychology* in 2003, a rival journal which became the official journal of the ISSP. The foci of research published in *IJSP* also narrowed somewhat during this period. Although previous topics of interest continued to dominate (i.e., athletes, performance, exercise, physical activity), some changes are detectable. For example, research into elite sports becomes more prominent and a renewed interest in motor learning led to an increased number of publications in that area.

2010-2019. In the most recent decade, a resurgence of the journal has seen *IJSP* publish the highest number of articles in its history ($n = 322$). Consistent with the general sport and exercise psychology trends (Lindahl, Stenling, Lindwall, & Colliander, 2014; Rhodes & Nasuti, 2011), a growing number of articles has focused on research into physical activity. Furthermore, during this decade, articles in *IJSP* have focused on investigations of specific sub-sections of the population (e.g., adults, youth, children) within the sport and exercise context. In this decade, the observed emphasis on physical activity and exercise is accompanied by renewed interest in physical education and a shift of the motivational focus from the sport context to the exercise context. Three influential review papers were published during this decade, in the form of a systematic evaluation of video-based methodologies and their effectiveness on perceptual-cognitive skill development (Larkin, Mesagno, Spittle, & Berry, 2015), a revisitation of the nature of the cognitive advantage (Karlinsky, Lohse, & Hodges, 2015), and an overview of research on physical aggression and violence among female athletes (Kerr, 2016).

Conceptual Analysis of Articles from Asia and Oceania

A separate conceptual analysis by decade was conducted on articles from Asia and Oceania (see Table 4). Due to the small number of articles emanating from the Asia-Oceania region during the 1970s and 1980s, those two decades were combined. In common with the overall decadal analysis, the enduring interest in studying athletes has been maintained in the region over time (e.g., Bu, Liu, Zhang, Si, & Chung, 2019; Carpenter & Cratty, 1983; Fung, 1992; Lidor & Lavyan, 2002). A strong focus on personality investigations was prominent during the 1970s/1980s period in the Asia-Oceania region (e.g., Geron, Furst, & Rotstein, 1986; Rushall, 1970; Williams & Parkin, 1980), and this was particularly evident in India (e.g., Bhullar, 1974; Bushan & Agarval, 1978; Thakur & Ojha, 1981; Thakur & Thakur, 1980). This focus largely disappeared thereafter, with just the occasional reappearance in recent years (Li, Hwa Kee, Wang, & Guo, 2018). Another prominent trend in the region has been the increased emphasis on physical activity research during the past decade (e.g., Chatzisarantis et al., 2017; Lubans, Munday, Lubans, & Lonsdale, 2013), making it the dominant focus of investigation. This trend has been particularly apparent in East Asia (e.g., Chen, Fox, Sun, Lo, & Ku, 2014; Dai, Chen, & Liu, 2019; Hu, Morris, & Lyu, 2019; Qi, Wang, & Li, 2019), with some investigations adopting a self-determination perspective (e.g., Chu, Nigg, Wu, & Guo, 2016, Wang, Leng, & Kee, 2015).

Discussion

In the current study, we explored the publishing trends among articles appearing in *IJSP* during its first 50 years. More specifically, we detailed the

Table 4
Conceptual Analysis by Decade of Articles from Asia and Oceania in IJSP 1970-2019 (N =182)

1970-1989 (n = 34)		1990-1999 (n = 41)		2000-2009 (n = 64)		2010-2019 (n = 62)	
Concept	Hit Rate	Concept	Hit Rate	Concept	Hit Rate	Concept	Hit Rate
Personality	9	Athletes	7	Athletes	13	Physical Activity	21
Athletes	9	Coping	6	Performance	3	Athletes	14
Anxiety	4	Mood	3	Decision-Making	2	Motivation	7
Teams	3	Performance	3	Culture	2	Anxiety	5
Mental Practice	2	Anxiety	2	—	—	Youth	3
—	—	—	—	—	—	Self-Determination	2

Note. Articles from the 1970s and 1980s were combined due to small numbers.

gender and geographic affiliations of all first authors, and the evolving research topics of interest. The observed trend of a narrowing gender gap among first authors in *IJSP* from 80% male in the 1970s to 66% in the 2010s, is encouraging and reflects similar historical trends reported in other sport psychology journals. For example, a content analysis of *The Sport Psychologist* and the *Journal of Applied Sport Psychology* showed that the percentage of papers first authored by males fell from 80% during the 1987-1992 period to 60% during the 2005-2009 period (Terry, 2011). It is apparent, however, that gender parity remains elusive.

Numerically, the psychology profession is dominated by females in most countries. For example, females greatly outnumber males in psychology throughout Europe (Olos & Hoff, 2006), North America (Clay, 2017), Southeast Asia (Rich, Jaafar, & Barron, 2020), Australia (Psychology Board of Australia, 2018), and New Zealand (Ministry of Health, 2010). However, this numerical superiority in the profession does not translate into greater research productivity among females; in fact, quite the opposite. The gender disparity in publishing, particularly in the science disciplines remains large, with males producing about 70% of articles, although the disparity in psychology tends to be smaller, with males producing about 55% of articles globally (González Álvarez & Cervera Crespo, 2017).

The longstanding gender imbalance in authorship of sport psychology research may reflect the well-documented struggle for respect and prestige experienced by many females in academia (e.g., Gill & Kamphoff, 2010; Roper, Fisher, & Wrisberg, 2005). Moreover in several Asian countries, including China, Hong Kong, Japan, Korea, and Taiwan, female university academics typically have a higher teaching load than male academics and often experience acute difficulty in balancing professional and domestic responsibilities, which may conspire to limit their research productivity (Aiston, 2014; Tang, 2019). A gender imbalance has also been reported in the world of applied sport psychology (Roper 2002), which may be a reflection of the enduring gender inequality in sports more generally, the resultant barriers to females gaining entry to teams as applied practitioners, or the preference of male athletes, and indeed some female athletes, for performance enhancement coaching to be delivered by male consultants (Roper, 2002, 2008).

From a geographical viewpoint, the present results are consistent with previous studies showing that the North American domination of specific sport and exercise psychology journals had diminished over time and the influence of authors from other parts of the world, Europe and developing countries in particular, had grown (e.g., Papaioannou, Schinke, & Schack, 2019; Terry, 2011). The rising presence of authors from Europe and Asia in

IJSP and the diminishing proportion of articles from North American authors has several possible explanations. This trend might indeed reflect a shifting world order in sport and exercise psychology. Alternatively, the movement away from IJSP by North American authors could be explained by reasons that include the proliferation of alternative publications in the field, or the perceived limited relevance of IJSP for a North American audience. Since IJSP was first published, many other specialized journals in the field have been launched, including *Journal of Sport & Exercise Psychology* (1979), *The Sport Psychologist* (1987), *Journal of Applied Sport Psychology* (1989), *Psychology of Sport and Exercise* (2000), *International Journal of Sport and Exercise Psychology* (2003), *Journal of Clinical Sport Psychology* (2007), *International Review of Sport and Exercise Psychology* (2008), *Journal of Sport Psychology in Action* (2010), and *Sport, Exercise, and Performance Psychology* (2014), offering several additional publication outlets for North American researchers.

Whatever the explanation, the shift towards greater diversity of author affiliation could be viewed as a positive trend for a journal that has international representation at its core. The reduced presence of articles from North America may serve to make IJSP more representative of sport psychology globally. The relatively narrow perspective of psychology research produced in the USA, for example, has been noted by Arnett (2008), who questioned the relevance of findings based on the 5% of the world's population who live in America to the remaining 95% of humanity, who hold a variety of alternative worldviews. Cultural diversity of sport psychology practices has become a prominent area of research over the past decade or so (see Blodgett, Schinke, McGannon, & Fisher, 2015; Hanrahan & Schinke, 2009; Ryba, 2017), giving voice to several narratives of the key features of sport psychology with different cultural groups in Asia and Oceania (e.g., Araki & Balasekaran, 2009; Hanrahan, 2009; Kozuma, 2009).

The increased representation in IJSP of researchers from Asia during the past decade is reflective of parallel developments within the region. For example, to promote the growth of sport psychology throughout the Asia-Pacific region, particularly in those countries where the field is still immature or is yet to gain traction, ASPASP produced two major open access resources, in the form of a free e-book, *Secrets of Asian Sport Psychology* (Terry et al., 2014) and online course *Elite Sport Performance: Psychological Perspectives* (Terry & Martin, 2015). To date, the book has been accessed from 114 countries, while the course has received over 165,000 pageviews from 148 countries, helping to promote sport psychology research and practice. A third major initiative, the launch of ASPASP's official journal, the *Asian Journal of Sport and Exercise Psychology*, is scheduled for later in 2020.

In terms of article content, decadal changes have largely corresponded to the broader evolution of sport psychology research. The trait approach that characterized much research during the 1960s and 1970s (see Morgan 1980) gave way in the 1980s to the emergence of cognitive sport psychology (Straub & Williams, 1986), a sustained interest in group dynamics (Carron, 1988), and the more widespread acceptance of applied practitioners in elite sport (Silva, 1984; Olgivie, 1989). In the 1990s and 2000s, an emerging psychosocial research focus on specific groups was evident, including elite athletes (Cox, Liu, & Yijun, 1996; Ericsson, 2007; Robazza, Bortoli, & Nougier, 2002) and youth sport participants (Gould, 1996; Treasure & Roberts, 1998). Also, a growing emphasis on the psychology of exercise and physical activity occurred during this period, including a special issue of *IJSP* on the subject (Dishman, 2000); an emphasis that continues to this day (see Biddle and Vergeer, 2019). In the past decade, emerging research topics have included mental toughness in sport (e.g., Eubank, Nesti, & Wood, 2017; Morais & Gomes, 2019), use of mindfulness interventions (e.g., Bu et al., 2019; Scott-Hamilton, Schutte, Moyle, & Brown, 2016), and cross-cultural validation of questionnaires into Asian contexts (e.g., Dai et al., 2019; Hsu, Pan, Chou, Lee, & Lu, 2014; Hu et al., 2019).

In summary, our review of the entire collection of articles published in *IJSP* over its 50-year history has expanded on the trends identified in three previous content analyses of the journal (Aguerri, 1986; Biddle, 1997; Groves et al., 1978). In some respects, *IJSP* has defied the odds by not only surviving in the crowded publication domain of sport and exercise psychology, but by thriving during the past decade and publishing a record number of articles. Long may the journal continue, for the next 50 years and beyond.

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