**The social patterning of sport:
Regular sports participation and stratification in Canadaⁱ**

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Abstract

The participation in different forms of leisure has often been ascribed the power to reflect and reproduce social inequalities. While some came before, this intellectual endeavor increased substantially with the seminal work of Pierre Bourdieu's *Distinction*. While Bourdieu's writings on culture did not neglect sports, sport is often neglected in subsequent studies of culture. Most of the subsequent theoretical and empirical work on culture has focused upon music and the arts, many also arguing that Bourdieu's work is now dated. This paper seeks to provide an updated and comprehensive re-examining of sports participation. For these investigations, I use large-scale survey data and various statistical methods to test the relevance of the Pierre Bourdieu's foundational theories and explain these patterns. The findings show direct sports participation relying primarily on dispositions towards the body which are stratified by education and income, especially for the most elite sports. These results therefore highlight the contemporary relevance of Bourdieu's theories of the relationship between sports, social class, and the stratification thereof.

Keywords: Bourdieu, Canada, cultural consumption, social class, sports participation

The social patterning of sport:

Dispositions towards regular sports participation in Canada

Introduction

Sport is a pervasive aspect of contemporary societies. The sporting infrastructure in North America is particularly large and developed. This paper seeks to analyze the landscape of sport with respect to socio-economic and demographic differentiation in sports participation, with a particular interest in the dispositions towards sports for various groups. It does this through the lens of prevailing theories of Pierre Bourdieu and his theories of the relationships between social position and sporting disposition. Therefore, I specifically examine the salience of these theories for the sports participation in Canada.

Direct sports participation in this paper refers to the regular and active physical engagement in a sport. A crucial consideration for assessing markers of distinction are the judgements that are drawn on the basis of physical lifestyle and bodily appearance. Indeed, physical appearance provides the most immediate and universal location for human judgements and classification and “differential health status is probably the most enduring and incontrovertible indication of class” (Bennet et al, 2009: 152). These physical components supply a key component of embodied cultural capital for Bourdieu’s assessment of sport (Bourdieu, 1978; 1984). Not only does physical appearance more readily reveal social location than other elements of embodied cultural capital such as Bourdieu’s disinterested aesthetic, but direct participation in sport is also a location to conspicuously consume and outwardly display social location in a deployment of objectified cultural capital. Therefore, sport is a location where people can more readily activate simultaneously elements of embodied and objectified cultural capital. Bourdieu argues that people’s leisure engagement

is more easily able to express social differences than many other areas of life. Because the physical presentation of bodies is perhaps the most readily observable characteristic by which to create ready distinctions, the study of sport is of perhaps more importance than is often afforded it in scholarly works to date.

This paper's contribution to existing knowledge comes primarily from the fact that it is the most recent and most comprehensive large scale examination of the stratification of sports participation in Canada. Being both updated and comprehensive in the analysis of cultural fields is important because, as Bourdieu (1978: 833) asserts, various new sports and the passing of time can cause "more or less complete redefinition of the meaning attached to various practices." While some scholars have considered the participation of some sports in Canada (e.g. Gemar, 2020a; Veenstra, 2010), and in other contexts (e.g. Stempel, 2005; Widdop and Cutts, 2013; Widdop et al, 2016; Wilson, 2002), this paper seeks to analyze a greater number of sports, from a more recent data set, to contribute to the literature of consumption, especially in Canada. It also tests the theories of Bourdieu to assess their continued relevance for explaining contemporary patterns of sporting behaviour. Specifically innovative in this analysis is the focus upon dispositions towards the body as structuring elements of population wide patterns in sports participation. With specific respect to Canada, this analysis seeks to add to the growing amount of work done in characterizing consumption patterns in this national context. It also seeks to fill a sizeable gap in quantitative sociological work on sports engagement in Canada. Pursuant to all of these aims, I ask the following basic research questions:

1. What is the social patterning of direct sports participation in Canada?
2. Which factors most contribute to this patterning?

3. Is there a discernible role for dispositions towards the body in the patterning of sports participation?

Sport and social stratification

Leisure behaviour is informed by life experience, social class upbringing, and education. Pierre Bourdieu was a prominent proponent of analyzing leisure behaviour in this manner. For instance, he found that those of higher occupational and class status, and higher educational qualification, engaged in 'legitimate', or 'highbrow' - culture and 'high' art forms in his studies of France (Bourdieu, 1984). Those higher forms of culture are also those that are consecrated in societies as requiring high intellect and/or refined taste – for example, going to the theatre or the opera. Bourdieu (1984: 171) describes that:

In cultural consumption, the main opposition, by overall capital value, is between the practices designated by their rarity as distinguished, those of the fractions richest in both economic and cultural capital, and the practices socially identified as vulgar because they are both easy and common, those of the fractions poorest in both these respects.

The group that decides upon the objects of consecration are thus the elites of a society. Societal elites argue that these cultural forms are more difficult to do, more intellectual, and therefore access to them is limited. This access is limited because of the perceived skill involved, along with more formal barriers. This is contrasted to the cultural engagement of the lower, less educated classes who engaged in less consecrated markers of legitimate taste, or 'lowbrow' cultural forms (Bourdieu, 1984). These are the cultural forms consumed by the largest segments of a society. They are therefore also 'mass' forms of culture, or more commonly, 'popular' culture. They are perceived to be easier to do, easier to access, and less intellectual.

Cultural capital

Bourdieu (1984) argued that cultural capital was first accessed through the primary socialisation of childhood. This is a process whereby children from families of elevated social position develop in their children aptitudes in more 'legitimate' forms of culture within their home environments. Knowledge of these cultural objects that are consecrated within educational systems, in turn, was often misconstrued by the education system as natural intelligence (Bourdieu, 1984; Bourdieu and Wacquant, 1992). This is what Bourdieu terms 'embodied cultural capital'.

Bourdieu (1984) also describes an 'aesthetic distancing' or 'disinterested aesthetic' in forming and displaying cultural capital. This is another manifestation of embodied cultural capital. These concepts represent a more detached disposition towards culture and a more intellectualized style of appreciation and participation. Aesthetic distancing is the style of upper class fractions that possess higher levels of cultural capital, as displayed through this more intellectualized appreciation. Because of its intellectualized nature and its close ties with institutionalized knowledge of the consecrated cultural objects of educational systems, education has become a primary operationalized measure of cultural capital in empirical research.

The other part of cultural capital is its objectified state. It is how those of higher social position display more conspicuously (e.g. Veblen, [1899]1934) their embodied cultural capital. This more conspicuous consumption, then, are symbolic markers of status and implicit in their consumption is the embodied cultural capital to deftly navigate their spaces and 'properly' discuss them. Sport, as both an eminently 'embodied' (Bourdieu, 1986) domain of culture, and one that necessarily involves a type of physical performance, is one of

the areas of leisure that most closely intertwines these related elements of cultural capital (Gemar, 2020b).

Capital and sport

Formal barriers to access these cultural activities include access to educational opportunities. Educational barriers are constructed from the relative primary socialisation of children from different class backgrounds (Bourdieu, 1984). These barriers are also constructed through the concentration of legitimate cultural forms and activities in members only clubs and organisations (Bourdieu, 1984). These institutions require high levels of economic capital to physically access, and high levels of cultural capital to successfully navigate and fully participate.

With respect to sport, this can include health clubs and golf courses (Bourdieu, 1978; 1984). Initially, access is perhaps most limited by the type of economic resources necessary for their engagement. However, among the higher classes, this economic consideration is intertwined with the first two considerations of necessary ‘natural’ skill and intellect in a process that pathologizes those with lower economic (and cultural) capital as unable to engage in these forms for lack of intelligence or skill.

For an example of the interplay between cultural and economic capital in constructing barriers to entry, take the case of golf in Canada. Indeed, Bourdieu often used golf as the sporting example *par excellence* for his theories (e.g. Bourdieu, 1978; 1984). If one wants to become a member at a ‘middle of the road golf course in a typical Canadian community’, the average membership fee is about CAD\$3,000 (Robinson, 2012). This costing does not include the cost of clubs, which at minimum will be in the hundreds of dollars. Additionally,

because golf clubs are size specific, they are hard to share amongst a family. There are also cultural barriers to entry that accompany these financial barriers. Much of these cultural barriers revolve around visual performance and dress. In a 2014 blog post in response to negative press coverage about the cost of golf, Golf Canada finishes by writing:

And don't worry about having the latest golf apparel. Many courses are relaxing their dress codes and, in any case, outlet stores such as Winners have great golf-appropriate clothing at discounted pricing. (Golf Canada, 2014)

While these sentences sound reassuring, a deeper dive into what they are actually saying possibly reveal otherwise. First, Golf Canada admits in this passage that many golf courses are yet to relax their requirements of dress and still have dress codes. Therefore, one still must buy the appropriate clothing for these courses. While perhaps they do not have to worry about 'having the *latest* golf apparel', those wanting to play on these courses will still have to buy clothing that fit these dress codes and that are 'golf-appropriate', as well as know and adhere to historically crafted rules of etiquette (Ceron-Anaya, 2010). Second, if many golf courses are just now relaxing their dress codes, this suggests that those who regularly frequent these courses will indeed have these latest styles of apparel or at least clothing that fit the previous dress code that has just been relaxed. Therefore, those who now go and play in their more casual clothes may feel out of place and as though they do not belong in this environment. Ultimately then, the economic and the cultural are both bound up in potential barriers to entry for golf. Golf's connection to both forms of capital, especially economic, is also bolstered by its historical and contemporary symbolic and physical links with the business world (Ceron-Anaya, 2010). It has also been suggested that the current decline in golf, leading to many of these attempts to bring people in who had previously not had access to the sport, is a function of declining free time, an element of economic capital (Sorensen, 2014).

Habitus and homology

Bourdieu argued that leisure choices are structured by a series of dispositions. He argued that embodied cultural capital exists in the form of long-lasting dispositions of the body (1986) and that engagement in sports was able to reflect social class in the same way as other areas of culture for Bourdieu (1984). It was all a part of ones 'habitus' – a term Bourdieu used for the organization of these dispositions. Bourdieu's habitus is thus the class-based organization that subsequently structures taste and social action of individuals (Bourdieu, 1984). It is also relatively unified and easily transposable to all social and cultural situations. Bourdieu thus asserted the existence of cultural homologies as a product of this unified habitus. Homologies are the result of these dispositions that inform tastes and behaviors in each part of life, including sport.

These homologies are thus a product of the habitus in that if the habitus is socialized and internalized as by class position, and a function of class-based constitutions, then homologies of taste are also a function of these class-based processes. For instance, a higher class habitus that informs a taste for higher status forms of art also informs commensurate tastes in the realm of music, food, etc. Because the classes are defined against each other, so too is the habitus of the individual and the homologies of taste that structure their cultural consumption. 'Lowbrow' cultural forms are thus negative referents by which the dominant class defines and constitutes their taste and cultural behavior (Bourdieu, 1984; Swartz, 1997; Veenstra, 2015). They are, then, not necessarily defined by the inherent properties of the element of culture that is consumed. While these lowbrow forms may be described as 'easy' and/or 'common' by the higher classes, these denotations may not be able to be objectively supported in all cases. Rather, the most important element is not the culture itself, but rather the social space that they occupy. This is to say, the most important element for producing

distinction in cultural consumption is who consumes what. This can be illustrated by the fluid processes in which various forms of culture become consecrated into the realms of the higher class fractions. Given sport's existence as an autonomous cultural field that operates in a similar fashion, we should expect these dynamics to function in a similar way and potentially be distinguished by markers of legitimacy along a highbrow/lowbrow spectrum. This is to say, we would expect differences between sports, with some sports being more socio-culturally legitimized than others. These dynamics would thus follow Bourdieu's theorizations of culture. But we do not have to make this leap ourselves. Bourdieu, while often admitting his relative ignorance of sport, explicitly connects his theory to sport.

Bourdieu and sport

Arising out of colonial relationships with Great Britain, the earliest organized sports in modern Canada were bound up with the idea (or ideal) of amateurism. Early codes of amateurism in Canada sought to ultimately 'reproduce the social hierarchies of Victorian England and the British Empire and to maintain the primacy of sports as an expression of manly honor and elegant display' (Kidd, 1996: 27). The Canadian Association of Amateur Oarsmen, in 1880 set out their own definition of amateurism:

An amateur is one who has never assisted in the pursuit of athletic exercises as a means of livelihood, who rows for pleasure and recreation only during his leisure hours, and does not abandon or neglect his usual business or occupation for the purpose of training for more than two weeks during the season.

(Morrow and Wamsley, 2010: 66)

Amateurism in sport thus explicitly separated legitimate physical activity from the more vulgar. These more vulgar actions were those included in the general course of a laborer's work. By definition, then, the working classes were precluded from amateurism. It is within

this type of genealogy that Bourdieu conceptualizes the relationship of sport to social class. Bourdieu finds similarity in the move away from this upper class conception of amateurism, and the introduction of professionalism, to arguments made by the Frankfurt School, and others, in terms of their lamentation of mass production. Bourdieu (1978: 30) asserts that, “denunciation of the vices of mass production – in sport as in music – is often combined with aristocratic nostalgia for the days of amateurism.” Bourdieu thus sees a criticism of mass production coming from both sides of the political spectrum.

This concept of amateurism in sport goes to how the different classes view the general activity of sport itself. Bourdieu (1978: 838) asserts an ‘instrumental relation’ of a working class habitus to the body and to how the body engages in sport. This often manifests itself in more physically risky, painful, even violent forms for sport for this habitus. In contrast, for the habitus of the privileged classes, Bourdieu (1978: 838) posits a relation to the body that treats it as ‘an end to itself’. This habitus manifests in physical pursuits that focus upon the intrinsic health and functioning of the body as an ‘organism’ and focus upon the off the field benefits to sports participation, not having the same kind of emphasis upon the vulgar values of ‘wins’, ‘titles’, or ‘records’, which were emblematic of the shift away from amateurism to professionalism (Bourdieu, 1978). Ultimately, then, “class habitus defines the meanings conferred on sporting activity, the profits expected from it; and not the least of these profits is the social value accruing from the pursuit of certain sports by virtue of the distinctive rarity they derive from their class distribution” (Bourdieu, 1978: 835).

There are numerous studies that support Bourdieu’s theories of a more structural patterning of sports participation (e.g. Jarvie, 2011; Scheerder et al., 2002; Scheerder et al., 2005, Stempel, 2005; Taks et al., 1995). Collins (2003, 2014) describes how poverty and a lack of economic resources serve as strong exclusionary factors for sports participation, highlighting

the persistence of class-based difference. Wilson (2002) analyzed a ‘paradox’ where those who possessed higher levels of cultural capital were less likely to take part in so called ‘prole’ sports, even as those with higher levels of cultural and economic capital were more likely to take part in sports generally. Prole sports were those that were those associated with lower class strata (Wilson, 2002). These findings are consistent with Bourdieu’s theorizations around how privileged classes objectify their cultural capital by using certain forms of culture as negative referents, and therefore in which they will not engage.

Data and methods

This paper utilizes data from the 2010 Time Use Survey of Canada’s General Social Survey (GSS). This survey program is undertaken by Statistics Canada, a department of the Federal Government of Canada, and is purposed with capturing how Canadian’s use their time, in both work and leisure. The specific question that the analysis in this paper relies upon entailed the GSS interviewers asking, ‘Did you regularly participate in any sports during the past 12 months?’ (Statistics Canada, 2012). The survey is very specific in defining this question. The interviewer goes on to specify the further parameters of this question as follows:

Participate means as an athlete/participant – not as a coach, official or administrator.

Regularly means at least once a week during the season or for a certain period of the year.

An affirmative response to this question would then trigger the interviewer to ask about which sports the respondent participated in. These rather narrow parameters substantially contrast with previous studies that have used similar approaches as this paper employs.

Because theories of cultural consumption are concerned with cultural ‘lifestyles’, this high frequency threshold of participation is appropriate for capturing this concept. However, none of these prevailing theories generally define the parameters of how frequently one must participate in the consumption of a cultural good for it to be a meaningful denotation of lifestyle. Indeed, much of this is because these foundational theorists were primarily concerned with taste, rather than behavior. This paper adopts the approach used by others (e.g. Gemar, 2019a, 2019c, 2020b; Widdop and Cutts, 2013) in using actual sports participation data rather than sporting tastes.

The total survey sample used in the analysis of this paper is 6,863. This number includes all those who responded to the questions about sports participation and were at least 25 years of age (to allow for a highest level of education to be reached). I employ the method of latent class analysis (LCA), popular in recent work on sport (e.g. Gemar, 2019b, 2020c; Widdop and Cutts, 2013; Widdop et al., 2016). In the case of this analysis this is direct sports participation Binomial logistic regression analysis is then performed to identify the general socio-economic and/or demographic make-up of each cluster. The relative frequencies of the socio-economic and demographic variables used in the regression analysis of this paper are in Table 1.

[Insert Table 1 here]

Results

Model summary results from the latent class modelling are included here in Table 2. To choose a model, I utilize log likelihood statistics of model fit. From these statistics, the Bayes Information Criterion (BIC) suggests a 2 latent class model solution as the optimal solution. The Akaike Information Criterion (AIC), however, suggests the 4 latent class model as the

model of best fit. This can be seen as both of these models reach their optimal (lowest) value for these respective models (Nylund et al, 2007). The AIC is defined as $AIC = 2p - 2 \log L$ (Akaike, 1987). The BIC is defined as $BIC = p \log(N) - 2 \log L$. In these equations, p is the number of model parameters and N is the number of observations. Therefore, in more complex models, the BIC will likely choose a model solution with fewer latent class groups, while the AIC will choose one with a higher number of class groupings (Dziak et al, 2012). Describing the differences in these models, Akaike (1987: 319) states that in the AIC, “the concept of parameter estimation is replaced by the estimation of a distribution and the accuracy is measured by a universal criterion, the expected log likelihood of the fitted model.”

[Insert Table 2 here]

The AIC fit statistic thus better approximates the complex relational approach of such methods such as multiple correspondence analysis (MCA), which have often been undertaken in other analyses of taste and behavior (e.g. Bennett et al, 2009; Bourdieu, 1984). It is for this reason that omnivorism is not as concretely observed within the data and I interpret these results more through the lens of these sports as associated with each other, rather than asserting that those within each latent class group are likely to consume all of them. Indeed, with the strict circumscription of the survey question used in this analysis, this is almost certainly not the case. However, at the same time I also benefit from latent class modelling that provides better definition and delimitation of sporting groups, which is more elusive with the aggregate relational approach of MCA. The BIC value being optimal for the two-class model thus makes sense. In this case, the two-class model solution describes one group that participates in sports and one that does not. This is of limited value for ascertaining social differentiation between sports or groups. For all of these reasons, I choose the 4 latent class model solution for examination in this paper and interpret it as I do.

Latent Class Profile

As seen in Table 5.3, this four latent class solution divides the data into latent classes that constitute about 82%, 7%, 6%, and 5%, respectively. The first latent class here is by far the largest group. This group is defined by people who have comparatively very low probabilities of regularly participating in any of these sports. I thus label this latent class group the ‘sports inactive’ group. This is because generally, people in this latent class do not participate in any of these sports. The relatively large size of this group is most likely a function of the narrow parameters of the survey question that strictly circumscribed regular sports participation. It could also reflect the high age cut off of age 25, which is necessary to fully capture educational attainment and crucial for an analysis of Bourdieu.

[Insert Table 3 here]

Unlike the first group, the second latent class includes many sports. Because it is relatively difficult to define the overall groupings of sports in each cluster, I focus here mostly upon the characteristics of the sports that have their highest probabilities for each cluster, and upon those sports that have their only occurrence in each class. Three sports, curling, golf, and five pin bowling, are included in this second cluster with their highest probabilities. This is the lowest number of such sports among the three latent classes from Table 3 that include a plethora of sports. Another three sports, curling, 10 pin bowling, and again 5 pin bowling, have their only occurrence in the second latent class. That is to say, these three sports have probabilities that are higher than their overall relative frequencies for the sample. All five of these sports are ones that are usually done in small groups, do not involve contact, and are generally low intensity in terms of sheer physical taxation. Indeed, these are the only five sports from this data that fit this description. While all five are, and can be played

competitively, they are often done primarily for recreation. Therefore, this group is the ‘golf and recreation sports’ group.

Of the sports included in the third latent class, fifteen have their highest probability of inclusion in this cluster. The primary characteristics of these fifteen sports are two-fold. First, with few exceptions, they are mostly team sports. Indeed, there is only one exclusively team sport included in the group of sports that is not included in this group. This sport is curling, a sport with generally smaller teams than others. However, even curling fits into the second characteristic of the sports that are not included in this group. All of the sports not included are non-contact sports. In contrast to both of these characteristics, those sports included in this cluster are mostly team sports and/or have elements of contact to them. For those sports that are included in this third group with their highest probabilities, these dynamics occur to an even greater degree. Likewise, the three sports that are only included in this cluster are the contact sports *par excellence* of football, rugby, and in-line hockey. These three sports have a zero probability of appearing in any other cluster. For all these reasons, this latent class is the ‘team and contact sports’ group.

If latent class three is the team and contact sports group, the fourth latent class is the ‘individual and non-contact sports’ group. With very few exceptions, the sports included in this fourth latent class are either individual sports or have little to no contact within the normal playing of those sports, or both. Particularly among those sports that are included with their highest probabilities in this group, this is the case. There are sixteen sports that have their highest probabilities for this cluster. Of these sixteen, ‘martial arts’ is the only combat sport. However, martial arts do not necessarily have to be physically combative. Likewise, while some of these sixteen sports *can* be played in small teams, most are generally done individually. Likewise, of the nine sports not included in this latent class, the eminently

combative sports of boxing, rugby, football, ball hockey, and in-line hockey are all included. Other sports included are those less physically demanding sports of 5-pin bowling, 10-pin bowling, and curling. Therefore, this grouping of sports is mostly characterized by their aversion to contact, while still preferring physically demanding individual sports. In Table 4, I have offered a summary of the characteristics of the four latent class groups that can be used as a reference point of these groups for the remainder of the paper.

[Insert Table 4 here]

Social make-up of latent class groups

From the first binomial regression analysis (Table 5), the first latent class, the sports inactive group, shows the lowest levels of both economic and cultural capital possession. Those with the lowest levels of education and income are both most likely to be in this group. Members of this group are also more likely to be in the youngest age category and to live in Quebec. These demographic variables are less predictive than cultural and economic capital and no other demographic variables show statistically significant net effects. Therefore, in Canada, it appears that not playing any sports is most associated with low levels of capital possession. None of the three sports participation latent class groups show a similar relationship to lower levels of income and education. Indeed, all three of the sports participation groups are predicted by higher levels of economic capital, cultural capital, or both.

Those with elevated levels of education are more likely to be in the second latent class group, the golf and recreational sports group. Likewise, this group is predicted by elevated levels of income. Demographically, those in the oldest age group is most likely to be in this second latent class group. Males are also more likely to be in the golf and recreation sports group than females. Independent variables for race and the size of the population center within

which respondents reside showed no statistically significant predictive results for this second latent class group.

The third latent class group, the team and contact sports group, has slightly fewer statistically significant parameters when the full model is applied than the golf and recreation sports group. While the bivariate gross effects show that measures of increased economic and cultural capital by themselves are predictive of membership in this group, when the full model is applied, education does not appear to be predictive of membership in this group. Income, however, is still predictive of membership in this latent class group. Those with the highest levels of income are most likely to be in this group. This group however, shows the most powerful predictors coming from the demographic variables of age and sex. Those in the youngest age category and males are many times more likely to be included in this group, compared to those in older age categories and females, respectively.

In the fourth latent class group, the individual and non-contact sports group, the results show a group that is structured first and foremost by cultural capital in the form of personal education. Personal education is the greatest independent variable predictor for membership in this fourth latent class. Those who have graduate education are many times more likely than those with less than a high school diploma to be in this group, while those with bachelor's degrees are likewise so. Additionally, those in the highest income category are more likely than those in the lowest income category to be in this group, although this is the only statistically significant comparison for income. Therefore, economic capital also structures this group between the highest and lowest income levels.

Demographically, age and sex are again strong predictors, while race and population center again show no statistically significant values for predicting this group. Region shows one predictive parameter, but otherwise this variable likewise does not show a strong statistically

significant relationship. Those in the youngest and middle age groups are also more likely to be in this fourth latent class group, the individual and non-contact sports group, than those in the oldest age category. Males are also more likely to be in this group than females. This, however, is the smallest gap between males and females in any of the latent class groups.

Overall, these results show that this fourth latent class group is most structured by cultural capital possession, as captured by education, followed by income (between high and low), age, and sex. Therefore, this group does generally adhere to Bourdieu's assertions of distinction around the relative status of sporting lifestyles. Therefore, this group also highlights Bourdieu's homology thesis. This is because this group circumscribes a set of sports that are of elevated social status and those who participate in these sports possess elevated levels of cultural capital, likewise suggesting an attendant habitus of social privilege. This patterning of sports participation contrasts to the other two latent class groups that include sports of both higher and lower social status and are more delimited by economic capital, age, and sex.

[Insert Table 5 here]

Discussion and conclusion

The aim of the analysis of this first results paper is to provide an updated and comprehensive analysis of the relationship between sports participation and social stratification in Canada.

The first thing gleaned from the analysis is that there are indeed distinct groupings of sports.

One is a group that does not participate in any sports (LC1=sports inactive group), while there are three groupings of sports. Of the three primary groupings of sports participation, there is one characterized by primary participation in sports requiring limited physical intensity and dominated by golf, and secondarily more recreational sports (LC2=golf and

recreation sports group). There is yet another that is characterized by team sports and those sports that involve contact, potential for injury, and even violence as inherent to their rules of play (LC3=team and contact sports group). Finally, the last grouping is characterized by individual sports that do not involve physical contact or high risk of bodily injury, many of which are done for personal fitness (LC4=individual and non-contact sports group). I interpret the resulting latent class groups primarily through the lens of Bourdieu's theorizations of the relationship between sport and social class dispositions towards the body.

The first latent class group of sports participation (the golf and recreation sports group) is most predicted by economic capital. It is also an older group. The age of this group likely accounts for the nature of the characteristic sports. With the high inclusion of golf, this group contains one of the most socially distinctive sports (Bourdieu, 1978). With the exception of golf, the other characteristic sports for this cluster do not necessitate high amounts of capital for participation. Therefore, those within this group may be omnivorous if they consumed both golf and bowling (another prominent sport of lower status in this group). While Bourdieu argues that economic obstacles may serve as the initial barrier to entry, he also outlines that "it is the hidden entry requirements, such as family tradition and early training, and also the obligatory clothing, bearing and techniques of sociability which keep these sports closed to the working classes and to individuals rising from the lower-middle and even upper-middle classes" (Bourdieu, 1978: 838). However, cultural capital is only able to be employed within a space of possibilities of action. Bourdieu argues that "economic constraints define the field of possibilities and impossibilities without determining within it an agent's positive orientation towards this or that particular form of practice" (Bourdieu, 1978: 838). The operationalized measure of cultural capital, personal education, suggests that this group is not particularly structured by the possession of cultural capital. Rather, when other variables are controlled for, the importance of the high school education parameter

shows the highest odds ratio, and the importance of graduate education falls away. Therefore, while this cluster possesses the economic capital resources for a broad space of possible sports, cultural capital resources are likely a limiting factor for this group. This would only apply to that space of possible sports that are available or physically able to be participated in by this group as the oldest of the three sports participation clusters.

The second latent class group of sports participation, the team and contact sports group, is primarily structured by age. While there is some suggestion of slightly increased cultural and economic capital of this group, the lack of distinctions in this area makes sense through the lens of Bourdieu's theories. This is because of two competing phenomena that are likely taking place within this group. The first is Bourdieu's assertions that those of working class backgrounds are more likely to participate in these sports. They are more likely to participate because of the functional relation to the body that they employ (Bourdieu, 1978). Also, Bourdieu theorizes how mass and popular consumption links to sports participation in lower classes. For Bourdieu (1978), this happens because the consumption of mass spectacle and the consumption of popular culture is more attractive to larger social classes, ultimately a product of the habitus and resulting homologies for these groups. In an application of the homology thesis, this group also consumes mass spectacle and popular sport. Previous studies have also supported a homology thesis for this group with regards to how they consume outside of the sporting realm. Because mass spectacle and popular sport are generally team sports, this informs the taste for these sports among larger class groups. This is the first phenomena that may be presented in this group. It is how I explain the inclusion of lower class strata in the participation of the sports characteristic to this group. It is also possible that the those who participate in the sports of this group of higher social status (e.g. ice hockey), also participate in those at the lower end of the status spectrum (e.g. basketball).

There is also an explanation for the inclusion of higher class strata in the team and contact sports cluster beyond potential omnivorism amongst team and contact sports. This argument is primarily one that presents in the regression results because of the large bivariate gross effects for economic and cultural capital resources that mostly disappear in favor of the age variable (as well as sex) within the full regression model. This supports Bourdieu's (1978) assertions regarding the type of relationship that the privileged classes have with these sports.

The most important property of the 'popular sports' is the fact that they are tacitly associated with youth, which is spontaneously and implicitly credited with a sort of *provisional license* expressed, among other ways, in the squandering of an excess of physical (and sexual) energy, and are abandoned very early (usually at the moment of entry into adult life, marked by marriage). By contrast, the 'bourgeois' sports, mainly practiced for their functions of physical maintenance and for the social profit they bring, have in common the fact that their age-limit lies far beyond youth and perhaps comes correspondingly later the more prestigious and exclusive they are (e.g. golf).

In this way, the young can be of a higher class position while still participating in sports that Bourdieu and others have identified as more characteristic of lower classes. I argue that a main reason that this group presents the regression results that it does. The higher classes of society in Canada may represent a similar relationship to Bourdieu's assertions above with the sports that are found within this third latent class group. This is to say, youth are allowed to act in a more reckless manner, but are expected to forego these sports in favor of sports more appropriate for their social position later in life. Likewise, the emphasis on violence and the release of 'sexual' energy is a virtue and luxury more often afforded to boys generally, and perhaps even more so boys of higher social standing. This was the case with the origins of the physical game of rugby, originating in all-male fee paying schools in England (Bourdieu, 1978; Collins, 2016) and represents the general morality of early Canadian sport, which emphasized the similar ideals of Victorian masculinity in sport (Morrow and

Wamsley, 2010). The contemporary Canadian equivalent may be minor hockey, a blanket term for youth hockey. While female minor hockey exists, the apparatus of female minor hockey lags far behind the established structure of minor hockey for young males.

Participating in minor hockey is monetarily expensive, requires high levels of free time and travel, and occasionally private academic tutors. In all of these ways minor hockey in Canada, that is still more prominent for boys, mimics the elite all male fee paying schools of the past – even as this paradigm is not prevalent in Canada today. These dynamics would account for the regression results of this group, vis-à-vis a Bourdieusian reading of them, because they show that while in absolute terms this group has elevated levels of capital, age and sex are the primary predictors of membership.

Both of the dynamics that affect the make-up of the third latent class group can also be seen in reverse within the fourth latent class. This individual and non-contact sports group is most structured by economic, and particularly cultural capital resources. While it is also structured somewhat by region, and to a much lesser extent sex, personal educational attainment and household income are the most predictive of membership in this group. According to the full regression model, this group is minimally predicted by age. This group shows all of the traits that Bourdieu suggests are characteristic for this type of socio-economic composition. It shows a preference for sports that aid individual cultivation of the body, as an organism, and as a ‘body for others’, by which social position can be shown through physical presentation of the body (Bennett et al, 2009; Bourdieu, 1978). Towards the first preference, this group particularly shuns contact sports. Towards the second preference, they present a particular affinity for individual fitness sports. These results are consistent with previous assertions regarding the patterning of privileged classes to sport (e.g. Bourdieu, 1978), as well as empirical findings that find the same (e.g. Bourdieu, 1984; Scheerder et al, 2005; Stempel, 2005).

Conclusion

Limitations of the study include its inability to account for the distribution of these sports among various socio-economic and demographic groups, it cannot fully capture all of the internal mechanisms by which “the affinity between the ethical and aesthetic dispositions characteristic of each class or class fraction and the objective potentialities of ethical or aesthetic accomplishment which are or seem to be contained in each sport” (Bourdieu, 1978: 836). While this paper makes theoretically and empirically informed inferences in this area, it is ultimately hard to capture these dynamics within a large-scale quantitative examination.

In conclusion, these results support the existence of distinct groupings of sports. These groupings generally support Bourdieu’s theorizations of the relationship between different class fractions and patterning of sports participation in Canada. These relationships are bound up in different (classed) relations to the body, different teleologies of sport, and show support for consumption of sport that is based upon theories of habitus and homology. At the same time, however, it supports Wilson’s (2002) broad assertion that those with higher levels of capital possession participate in sports generally, while at the same time, elevated levels of capital, and particularly cultural capital, also stratify participation in most of the traditionally elite sports.

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ⁱA version of this article has now been accepted for publication in *World Leisure Journal* published by Taylor & Francis.

Table 1. Relative frequencies of socio-economic and demographic variables

Variable	GSS (n=6863)
Personal Education	
Graduate/Professional School	8.0%
Bachelor's degree	19.0%
Diploma/community/technical college	29.6%
Some uni/community college	13.5%
High school diploma	14.1%
Some secondary/elementary/none	15.8%
Household Income (C\$/year)	
<30,000	19.6%
30 – 59,999	26.8%
60 – 99,999	27.5%
>100,000	26.1%
Home ownership	
No	22.4%
Yes	77.6%
Age Group	
25 – 39	22.9%
40 – 59	40.6%
60 +	36.5%
Sex	
Male	43.2%
Female	56.8%
Aboriginal status	
Aboriginal person	4.0%
Not an aboriginal person	96.0%
Minority status (other than Aboriginal)	
Visible minority	8.9%
Not visible minority	91.1%
Region	
British Columbia	14.8%
Prairie Region	21.8%
Ontario	27.7%
Atlantic Region	21.4%
Quebec	14.8%
Population center	
Smaller/rural population centers	23.3%
Larger/urban population centers	76.7%

Table 2. Latent class analysis summary report

	BIC(LL)	AIC(LL)
1-Class	19813.9944	19561.1401
2-Class	19324.5776	18812.0351
3-Class	19512.8691	18740.6384
4-Class	19726.5388	18694.6199
5-Class	19991.7577	18700.1506

Table 3. LCA Profile with conditional probabilities of inclusion for each sport¹

	LC 1	LC 2	LC 3	LC 4	Sample relative frequencies
Cluster Size	0.8164	0.0737	0.0581	0.0519	
Indicators					
Golf	0.0173	0.4747	0.0742	0.1166	0.059
Ice Hockey	0.0003	0.1551	0.2416	0.0327	0.027
Downhill Skiing	0.0000	0.0497	0.0002	0.2101	0.015
Swimming	0.0069	0.0135	0.0023	0.1145	0.013
Curling	0.0058	0.1161	0.0000	0.0001	0.013
Baseball	0.0016	0.0715	0.1168	0.0002	0.013
Cycling	0.0005	0.0404	0.0048	0.1622	0.012
Soccer	0.0006	0.0000	0.1591	0.0318	0.011
Tennis	0.0022	0.0243	0.0493	0.0663	0.010
Volleyball	0.0025	0.0124	0.0961	0.0127	0.009
Softball	0.0036	0.0285	0.0524	0.0041	0.008
Basketball	0.0008	0.0029	0.0821	0.0199	0.007
10-pin Bowling	0.0054	0.0278	0.0000	0.0020	0.007
Badminton	0.0010	0.0000	0.0541	0.0358	0.006
5-pin Bowling	0.0048	0.0245	0.0000	0.0000	0.006
XC Skiing	0.0000	0.0190	0.0000	0.0713	0.005
Canoe Kayaking	0.0000	0.0000	0.0080	0.0667	0.004
Equestrian	0.0029	0.0001	0.0061	0.0180	0.004
Other Alt./Extreme Sports	0.0014	0.0037	0.0206	0.0192	0.004
Ball Hockey	0.0002	0.0126	0.0308	0.0000	0.004
Other Snow/Ice Sports	0.0000	0.0027	0.0157	0.0432	0.003
Other Combat Sports	0.0012	0.0047	0.0158	0.0101	0.003
Martial Arts	0.0023	0.0000	0.0069	0.0070	0.003
Weightlifting	0.0005	0.0037	0.0228	0.0145	0.003

Squash	0.0000	0.0000	0.0161	<i>0.0241</i>	0.002
Snowboarding	0.0000	0.0064	<i>0.0144</i>	0.0112	0.002
Mountain Boarding	0.0007	0.0032	0.0052	<i>0.0126</i>	0.002
Football	0.0000	0.0000	<i>0.0376</i>	0.0000	0.002
Sailing Yachting	0.0000	0.0025	0.0000	<i>0.0329</i>	0.002
Triathlon	0.0002	0.0000	0.0000	<i>0.0275</i>	0.002
Rugby	0.0000	0.0000	<i>0.0125</i>	0.0000	0.001
Boxing	<i>0.0010</i>	0.0000	0.0000	0.0000	0.001
Rowing	0.0013	0.0000	0.0000	<i>0.0071</i>	0.001
Figure Skating	0.0006	0.0000	0.0000	<i>0.0191</i>	0.001
In-line Hockey	0.0000	0.0000	<i>0.0145</i>	0.0000	0.001
Other Water Sports	0.0001	0.0089	0.0000	<i>0.0109</i>	0.001
Racquet/Hand Sports	0.0003	0.0012	0.0083	<i>0.0103</i>	0.001

¹Values in boldface type represent those probabilities that exceed the overall relative frequencies for the sample. Those values that are in boldface type and italicized represent those probabilities that are the highest for that sport.

Table 4. Summary table of latent class group titles and formative characterizing sports

Latent Class One ‘Sports Inactive’	Latent Class Two ‘Golf and Recreation’	Latent Class Three ‘Team/contact’	Latent Class Four ‘Individual/non-contact’
Characterized by not directly participating in sport.	Characterized by golf and other non-physically demanding sports generally done for recreation. It includes both high and low sports of golf, curling, and bowling.	Characterized by team sports and/or sports involving bodily contact. It includes both high and low sports such as ice hockey and basketball.	Characterized by individual and sports involving no physical contact but are more physically demanding. These include elite sports such as downhill skiing, tennis, equestrian, sailing and yachting.

Table 5. Log odds coefficients from binomial logistic regression of latent class groups

	Sport Inactive		Golf and Recreation Sports		Team and Contact		Individual and non-contact	
	Bivariate gross effects	Model net effects	Bivariate gross effects	Model net effects	Bivariate gross effects	Model net effects	Bivariate gross effects	Model net effects
Personal Education								
Grad/Professional School	-1.449***	-.742***	.465	-.256	1.171***	1.676	3.070***	2.480***
Bachelor's degree	-1.349***	-.744***	.816***	.511*	1.155***	.287	2.563***	1.907***
Diploma Comm/Tech college	-.970***	-.535**	.714***	.609*	.849***	.141	1.811***	1.113*
Some uni/comm. College	-.886***	-.350	.810***	.516	.731**	.009	1.331**	.607
High school diploma	-.737***	-.313	.831***	.634*	.577*	-.035	.296	-.414
Some secondary/element./none	---	---	---	---	---	---	---	---
Household Income (C\$/year)								
>100,000	-1.959***	-1.344***	1.677***	1.592***	1.757***	.908**	2.201***	1.118*
60 – 99,999	-1.436***	-.605***	1.174***	1.029***	1.328***	.631*	1.800***	1.162*
30 – 59,999	-1.035***	-.371***	.931***	.831**	.963**	.520	1.195**	.718
<30,000	---	---	---	---	---	---	---	---
Home ownership								
No	.579***	.120	-.955***	-.313	-.140	-.047	-.505*	-.025
Yes	---	---	---	---	---	---	---	---
Age Group								
25 – 39	-.804***	-.629***	-.699***	-1.090***	3.190***	3.362***	.622**	.529
40 – 59	-.442***	-.211	-.176	-.607***	2.036***	2.044***	.777***	.922***
60 +	---	---	---	---	---	---	---	---
Sex								
Male	-1.259***	-1.215	1.189***	.981***	1.706***	1.762***	.383**	.387*
Female	---	---	---	---	---	---	---	---
Race/ethnicity								
Aboriginal person	.145	.108	-.337	-.283	.280	.141	-.626	-.448
Not an aboriginal person	---	---	---	---	---	---	---	---
Visible minority	.106	.189	-.971***	-.361	.533**	.153	-.093	-.514
Non visible minority	---	---	---	---	---	---	---	---
Population Centre								
Smaller/rural population centers	.032	-.063	.064	-.006	.007	.135	-.273	.101
Prince Edward Island	.353	-.054	-.374	-.134	.094	.303	-1.298	-.536
Large/urban population centers	---	---	---	---	---	---	---	---
Region								
British Columbia	-.568***	-.573**	1.261***	.929**	-.144	.069	.292	.443
Prairie Provinces	-.522***	-.562***	1.399***	1.108***	.612**	.537*	-.479*	-.316
Ontario	-.535***	-.571***	1.167***	.944***	.689***	.664**	-.177	-.179
Atlantic Region	-.107	-.172	.723**	.638*	.419	.548*	-1.252***	-1.232**
Quebec	---	---	---	---	---	---	---	---
Nagelkerke R ²		.159 ¹		.119		.234		.144

*p<.05;**p<.01;***p<.001,¹Nagelkerke score is the result for the full model