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Predicting the factors that impact access to, completion of, and progression through Community Sport Leaders qualifications in the UK

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Sports Leaders UK (SLUK) commissioned this study to explore the socio-economic and demographic factors that influence candidates' access, completion and progression through formal sport leader qualifications. A sample ($n = 76,179$) of registered sport leaders, who are defined as those qualified to lead safe, purposeful and enjoyable sport/physical activity at an entry level in local communities, was selected from SLUK's database covering a five year period. Following frequency analysis and binary logistic regression, findings highlighted certain variables (e.g., gender, experience, locality) as strong predictors of qualification completion and candidate progression through the award system. However, socio-economic status was not found to predict award completion or continued engagement. Frequency analysis indicated an inequality of sport leaders identifying as female, Black or minority ethnic, and/or disabled. This research offers some insight into the landscape of the current and potential future workforce, and has determined factors associated with more sustained involvement in UK sport leader roles. Consequently, such findings are thought to offer a valuable insight into the factors impacting the growth and development of the field.

Keywords: sport leadership; volunteering; sport development; personal development; binary logistic regression

Introduction: locating the need for sport leaders as volunteers for sport development

Over the past two decades, sport and physical activity policy has demonstrated a shift between sporting objectives and wider social benefits (Houlihan & Lindsay, 2013). For example, the UK Government's *Sporting Future* strategy detailed how sport can help to: improve educational performance; build confidence, leadership and teamwork in young people; combat social exclusion; reduce crime; and enhance communities (HM Government, 2015). Sport and physical activity is also seen as a tool for tackling obesity and other health issues (HM Government, 2015; Turner, Perrin, Coyne-Beasley, Peterson, & Skinner, 2015). Thus, the importance placed on sport and physical activity to improve the physical and mental health of global society has continued to grow. Irrespective of the focus of governmental policy, however, the need for a motivated and committed workforce remains central to the future success of sporting and physical activity pursuits, increasing participation levels and the subsequent community benefits that may follow (Schulenkorf, 2017). Indeed, the role of coaches and volunteers is widely recognized as being central to the development and sustainability of global sport and physical activity (Gaskin, 2008; Nichols, 2017).

In an attempt to ensure the adequate provision of qualified volunteers to sustain and enhance community sport engagement, the Central Council for Physical Recreation (CCPR) in the UK established Sports Leaders UK (SLUK). The primary mission of SLUK is to provide nationally recognized awards (e.g., qualifications to certify an individual's ability to perform a job at the level required) that result in a more qualified Sport Leader workforce. Those undertaking SLUK awards are expected to learn and demonstrate a range of life skills (e.g., effective communication; organization) and personal attributes (e.g., self-esteem; motivation), whilst also learning to lead basic sporting and physical activities to younger people, their peers, older generations and within the community (SLUK, 2018). This mission was developed on the premise that volunteers are the "lifeblood"

of community sports clubs, and that by providing volunteers with qualifications to develop their knowledge of, and skills in, leading inclusive sporting and physical activities that they would be in a better position to play an active role in their local communities (SLUK, 2018). Since 2004, SLUK awards have been recognized by the UK Regulated Qualifications Framework (RQF, see <https://www.gov.uk/find-a-regulated-qualification>). This development has allowed a range of *centers* (i.e., SLUK award providers), such as schools (e.g., secondary schools providing education to young people aged between 11 and 16 years), colleges (e.g., non-compulsory Further Education [FE] providers for people aged 16 onwards) and community groups (e.g., Local Government Councils), to offer SLUK awards to their students and members. This has resulted in significant numbers of people registering for the awards (SLUK currently has three levels of Sports Leadership Award and currently [at the time of writing] trains approximately 90,000 people each year; SLUK, 2018).

As a concept, sport leadership is widely contested as there does not appear to be a clear distinction between a *sport leader* and a *sport coach*, with the terms often being used interchangeably (Lyle & Cushion, 2016). SLUK define their Sport Leaders as those who are qualified to lead safe, purposeful and enjoyable sport/physical activity at an entry level in local communities. Subsequently, Sport Leaders are often required to be activators in their local community, engaging with a range of individuals in attempts to promote lifelong sport and physical activity participation (e.g., as a player, volunteer or employee; Lyle & Cushion, 2016; SLUK, 2018). Such designation is supported by Lyle and Cushion who suggested that *participation coaching* (e.g., coaching aimed at increasing participation rates in sport) is akin to sport leadership and is at the entry level to the coaching continuum. Given this potential status, this particular strand of the field has tended to rely heavily on the work of volunteers to fulfill sport leader roles (Wicker, 2017). Indeed, leadership volunteering is a vital part of the work of SLUK as volunteers are widely recognized as being important to the continued delivery of UK community sport, with around 5.6 million people volunteering in sporting roles every month in England (Nichols, 2017; Sport England, 2016).

Evidence suggests that SLUK is making a difference to the lives of the sport leaders that it trains, through building self-esteem and developing altruistic behaviors in young people (see Stuart, 2016). Further, research has suggested that the skills learnt through leadership development programs can be transferrable to other areas of life (e.g., business, education) and can engender positive attitudes and behaviors (e.g., commitment, dedication, confidence), which are likely to help motivate individuals to achieve career and personal goals (Holt, 2016; Obare & Nichols, 2001). Evidence has also indicated that sport leadership programs are having a positive impact in communities across a number of different countries. For example, research has demonstrated that being a voluntary sport leader has a positive impact on the leader's personal development as well as potential wider benefits to the community, such as helping to tackle social problems, anti-social behavior, youth delinquency and crime (e.g., Stuart, 2016; Stuart & Grotz, 2015). Such findings should, however, be considered with caution. Meir and Fletcher (2019) have recently reported difficulties in improving community social cohesion through community sport initiatives due to the ethnic divisions that may exist in certain geographical areas. Thus, whilst the complexity of achieving community-based outcomes through sport initiatives engulfs the mere implementation of a sport leader workforce, ensuring that such a workforce is able to effectively engage with individuals and groups through better education and qualification (e.g., SLUK awards) appears to hold value (Stuart & Grotz, 2015).

Despite the positive findings emerging from research that has considered the benefits of SLUK and their associated Sports Leader education programs, less is known about those who access SLUK awards, as well as the factors that impact progression through the awards matrix (e.g., SLUK Level 1 to Level 2, Level 2 to Level 3). Authors have recently argued that sport can be particularly divisive (Long, Fletcher, & Watson, 2017). As a result, participation in sport and physical activity, as well as access to opportunities to progress into coaching and volunteer leader roles, are often bound by exclusivity, bias and discrimination (e.g., against race, sex, social

class; Long et al., 2017; Wetherly, Watson, & Long, 2017). Indeed, with regards to the demographics of those who volunteer in sport roles more widely, research has consistently shown that volunteering rates correlate with socio-economic status, with those from more affluent and educated backgrounds being more likely to volunteer (e.g., D'Souza, Low, Lee, Morrell, & Hall, 2011; Stuart, 2016). Geographical location also appears to have an impact (e.g., those who live in rural locations may find it more difficult to access leisure activities or sport leadership award courses; Gaskin, 2008), as does gender, with research estimating that males are twice as likely to volunteer in sport as females (Burton, 2015). Further, research has consistently indicated that those from a White ethnic background are more likely to volunteer than other ethnicities (e.g., D'Souza et al., 2011; Mawson & Parker, 2013). Such findings appear particularly pertinent given the potential impact that shared identity and empathy between the coach (leader) and participant can have on continued engagement in sporting and physical activities (cf. Burton, 2015; Voelker & Harvey, 2018). In accord with calls to enhance social justice (e.g., improving opportunities for all in sport, Long et al., 2017), it is admissible to argue, therefore, that the development of a sport leader volunteer workforce that is multi-cultural, multi-ethnic, and gender balanced is of utmost importance. Thus, exploring the factors that may impact on individuals' engagement and continuation of sport leader education and subsequent ongoing volunteering may offer important insights that help to promote targeted intervention programs designed to have more success in attracting a diverse sport leader (volunteer) workforce. Indeed, both Kay and Bradbury (2009) and Eley and Kirk (2002), who investigated the motivation of individuals who volunteer as sport leaders, highlighted the potential value in profiling sport leaders for those sporting organizations, educators and community administrators who wish to increase interest and opportunities in sport leader volunteering.

Despite the extant literature (e.g., Kay & Bradbury, 2009), current understanding of the characteristics of those candidates who undertake and progress through SLUK awards remains equivocal. Thus, there is little clarity concerning those factors that potentially impact the engagement of people in volunteer sport leaders roles. Given that volunteer sport leaders are deemed as fundamentally vital in maintaining sport and physical activity provision in the UK (Newman, Ortega, Lower, & Paluta, 2016), SLUK commissioned this current study to: (a) examine the demographics of current/prospective sport leaders; and (b) investigate which factors impact the likelihood of sport leaders continuing to lead and volunteer in sport over extended periods of time. Consequently, this research aimed to investigate the association between the socio-economic status and individual demographics of current sport leaders (e.g., candidates already holding a SLUK Level 1 award) and whether they register for, engage in and/or attain certification in the more advanced SLUK awards (Levels 2 and 3), which qualify them to work with increasing levels of independence (e.g., Level 2 allows sport leaders to lead activities under indirect supervision; Level 3 allows sport leaders to do this independently). In attending to this aim, this study attempted to explore certain predictor variables that could help to explain which personal and social characteristics of candidates are associated with more sustained involvement in the SLUK education process and mission. These predictor variables were specified through discussion with SLUK and were based on the information held by SLUK as well as the extant literature (e.g., Mawson & Parker, 2013; Voelker & Harvey, 2018). The variables included: (a) age; (b) gender; (c) ethnicity; (d) disability; (e) current occupation; (f) volunteering experience; (g) center type (e.g., the location where the qualification was undertaken); (h) socio-economic status; and (i) urban or rural dwelling.

Methods

Participants

Following receipt of institutional ethical approval, SLUK allowed us access to their database, which details all candidates who register for their leadership awards. To ensure data protection and anonymity, any identifying personal information (e.g., name, full address) was removed and unique candidate identification numbers were generated to allow for differentiation between each candidate. In accordance with the wishes of SLUK, who

were interested in examining a cross-section of their database focusing on current sport leaders (e.g., those who already held a SLUK Level 1 and/or 2 award) and prospective sport leaders (e.g., those who entered the SLUK Level 3 qualification directly), all candidates registered to undertake a SLUK Level 2 or 3 award during the previous 5-year period (the last available full census date for SLUK to the point of manuscript preparation) were analyzed. Subsequently, the SLUK candidate database ($n = 152,772$) was thoroughly checked and cleaned to remove incomplete datasets (e.g., where one or more variables were missing from candidate information, such as: age, ethnicity, postcode). To ensure that removing certain candidates due to missing fields of data did not produce a bias (e.g., leaders from certain geographical areas not being represented), frequency analyses were undertaken on both the cleaned and raw data, which indicated no significant skew in the results following the removal of incomplete cases. The cleaned data resulted in a final study sample of 76,179 cases ($n = 74,914$ Level 2 award registrants; $n = 1,265$ L3 award registrants).

Socio-economic measurement: Townsend Deprivation Index

A socio-economic score was assigned to each participant in order to explore associations between the likelihood of SLUK award completion and participant socio-economic status. To do this, the present study adopted the Townsend Deprivation Index (TDI; Townsend, Phillimore, & Beattie, 1988). The TDI distinguishes between measures of social and material deprivation in society, placing emphasis on the latter, with material deprivation being referred to as the lack of resources, services or goods, which are customary in today's society. To calculate an individual's socio-economic status, the TDI adopts four equally weighted variables: (1) *unemployment* (percentage of economically active residents who are unemployed); (2) *car ownership* (percentage of private households who do not possess a car); (3) *home ownership* (percentage of private households not owner occupied); and (4) *overcrowding* (percentage of private households with more than one person per room). These variables are also considered in line with both geographical and census data. The TDI was deemed most appropriate for the current study since: (a) it has been widely used in academic and health research (e.g., Allik, Brown, Dundas, & Leyland, 2016; Norman, 2009); (b) the four variables are thought to provide a good indication of material deprivation as the score is constructed from census data (Galobardes, Lynch, & Smith, 2007; Townsend et al., 1988); and (c) other measures of deprivation (e.g., the Index of Multiple Deprivation [IMD]) are not directly comparable to the indices in Wales, Scotland and Northern Ireland so constructing a UK-wide IMD is not possible (Allik et al., 2016; Norman, 2009). Further, it has been suggested that census data provides the most reliable socio-economic data in the UK (Allik et al., 2016). In relation to *geographical area*, the TDI has previously been criticized for treating areas as socio-economically homogenous, which is unlikely to be the case when considering mobile and center-city populations in particular (cf. Adams, Ryan, & White, 2004). However, to manage this, the TDI can be calculated using *Output Areas* (OAs), which have been suggested to have the benefit of representing the smallest geographical unit for census data across the UK allowing for the most appropriate geographical comparisons due to the socially homogenous construction of each OA (Allik et al., 2016; Gidlow, Johnston, Crone *et al.*, 2007; ONS, 2010).

Calculation of the TDI score for each participant involved two main stages. First, OAs were assigned to each participant for geographical comparison using their home postcode data. In order to ensure accuracy in OA assignment the National Statistics Postcode Directory (NSPD) was utilized along with look-up tables from the UK Borders section of the Edina UK national academic data center web-resource (see <http://edina.ac.uk/ukborders/>). Second, the TDI score for each OA was assigned using the most recent UK Census data (ONS, 2011). To do this, each of the four TDI variables were first matched with census data categories (e.g., TDI unemployment matched with Census economic activity; cf., Norman, 2009). Percentages for each of the four TDI variables were then calculated for each OA (e.g., unemployment % = unemployed/economically active x 100). Next, the proportions of the two variables *unemployment* and *overcrowding* were log transformed to normalize their distributions in an attempt to ensure a less skewed distribution (cf. Norman, 2009). Finally, a *z* score was calculated for each variable to ensure that they were standardized to national levels (cf. Norman,

2009). For example: $\text{Car Ownership} = \text{Log}(\% \text{ Car Ownership} + 1) = \text{Car Ownership} - \text{Mean} / \text{SD}$. The sum of the z scores was then calculated to provide an overall TDI score for each OA in the UK (higher TDI scores represent more deprived areas), therefore linking the TDI score to the corresponding sport leader's dataset according to their home postcode location.

Urban and rural classifications

In addition to the TDI score, another useful variable to explore is the *urban* or *rural locality* of the sport leaders given that this may be a predictor of engagement with SLUK awards. *Locality* can be determined using postcode data for each of the candidates. Data on urban and rural classification was obtained from the Office for National Statistics (ONS, 2011) and the National Statistics Postcode Directory (NSPD; see <http://edina.ac.uk/ukborders/>). The NSPD states that for each country in the UK, postcodes that contain more than 10,000 residents is considered urban, whilst postcodes with less than a 10,000 population is classified as rural. Using this definition, rural/urban classification was assigned to each candidate.

Data Analysis

To analyze the confounding factors associated with candidate progression through the SLUK awards pathway, binary logistic regression (BLR) was adopted. BLR measures the influence of a number of independent (predictor) variables on the dependent (outcome) variable and allows researchers to test *models*, which consist of a number of predictor variables at the same time (Tabachnick & Fidell, 2007). Due to the various stages in the SLUK leadership pathway, three different models were designed, which allowed for examination of the association of predictor variables (e.g., TDI score; age; gender; ethnicity; locality) and different outcome variables (e.g., stage of completion). Models 1 and 2 (SLUK Level 2 and SLUK Level 3 completion respectively) aimed to examine the socio-economic and demographic factors associated with those candidates who had registered for and completed the Level 2 (model 1) or Level 3 (model 2) award compared to those who registered but did not complete. Model 2 also accounted for the inclusion of *direct entry* candidates into the Level 3 pathway (e.g., those who had not completed the Level 2 award prior to enrolling on the Level 3 award). Finally, Model 3 (progression from Level 2 to Level 3) aimed to examine the socio-economic and demographic factors associated with those candidates who registered for the Level 3 award having completed the Level 2 compared to those who did not progress beyond the Level 2 award.

Before BLR was conducted, all models underwent a test for multicollinearity to ensure that the independent variables were not related to each other. For each of the three models, all independent variables had a Pearson's correlation value of less than 0.7 indicating that there was no correlation between the predictor variables, as required for BLR (cf. Tabachnick & Fidell, 2007). In addition, basic descriptive analyses of each of the three models were also undertaken to gain an explicit understanding of frequencies and any patterns present in the data. All statistical analyses were conducted using IBM SPSS Software version 23.

Results

Descriptive statistics

For a full insight into the make-up and distribution of the overall sample ($n = 76179$) please see the descriptive frequency analysis in Table 1.

Table 1. Descriptive statistics of total sample distribution

Category	Frequency	Percentage	Category	Frequency	Percentage
Gender			Location: Country		
Female	31112	40.8	England	69827	91.7
Male	45067	59.2	Scotland	4267	5.6
Age			Wales	1982	2.6
16-20	39765	52.2 (*54.5)	Northern Ireland	103	0.13
21-25	31081	40.8 (*39.6)	Location: Locality		
26-30	1980	2.6 (*1.8)	Rural	18916	24.8
31-35	1067	1.4 (*1.1)	Urban	57263	75.2
36-40	838	1.1 (*0.9)	Center Type (location qualification undertaken)		
41-45	686	0.9 (*1.0)	School	33899	44.5
46-50	457	0.6 (*0.7)	College	30014	39.4
51+	305	0.4 (*0.5)	University	229	0.3
Ethnicity			Local Authority	2438	3.2
White	68256	89.6	LEA	2285	3.0
Black - Caribbean	1523	2.0	Prison Service	2437	3.2
Indian	1143	1.5	Voluntary Org.	1067	1.4
Black – African	1067	1.4	Youth Service	229	0.3
Pakistani	838	1.1	Outdoor Ed Centre	305	0.4
Black - Other	609	0.8	Other	3276	4.3
Bangladeshi	381	0.5			
Chinese	229	0.3			
Other	2133	2.8			
Disability					
Yes	304	0.4			
No	75875	99.6			
Occupation					
FT Education	67889	89.1			
PT Education	828	1.1			
FT Employed	2567	3.4			
PT Employed	1515	2.0			
Unemployed	1875	2.4			
Other	1505	2.0			
Volunteering Experience					
Previously					
Volunteered**	42715	56.1			
Currently					
Volunteering**	24912	32.7			
Experience of					
Volunteering***	44714	58.7			

*Percentage of females per age group

**Frequency and percentage of total participants ($n = 76179$) responding “yes”

***Refers to any volunteering experience that the candidate has had, determined by collapsing all three original variables provided in the SLUK database

BLR models

Model 1: SLUK Level 2 completion

This model explored associations between the predictor variables and whether candidates who registered for a SLUK award completed the Level 2 award or not. The sample included in this model were those candidates who had/were registered for a Level 2 award ($n = 74,914$). The sample, average age 21.3 years ($SD = 4.84$), contained a higher number of males (59.1%), was mainly of White ethnicity (89.5%), and largely reported no disabilities (99.6%). Finally, the sample for this model were generally recognized as in full-time education (89%) from an urban area (75.1%), had undertaken the SLUK qualification at either a school (secondary school, compulsory education for 11-16 year olds) or an FE college (non-compulsory education for those aged 16 onwards; 44.7% and 39.0% respectively), with a greater number of candidates having volunteered previously (56.4%) compared to those currently volunteering (68.0%). Of the total registrants, 59.37% went on to complete the award.

The overall model fit was found to be statistically significant, $\chi^2 (29, n = 74,914) = 1818.02, p < .005$, which indicates that the model was able to determine the difference between those candidates who completed the Level 2 award compared to those who did not. With regards to variance, only 2% (Cox and Snell R Square) to 3% (Nagelkerke R Square) of the variation in the outcome variable can be explained by the model and this set of variables. Additionally, there was only a 0.6% improvement in the prediction power of the model with the variables included, compared to the percentage accuracy in classification test with no variables entered for Block 0 in SPSS (59.4%). The variable identified as the strongest predictor of a candidate completing a Level 2 award was *prison service center type* ($OR = 2.35, 95\% CI = 2.09-2.65, p < .001$) (see Table 2). This finding suggests that those candidates who undertook a Level 2 award organized through the Prison Service, were 2.35 times more likely to complete it compared to those who accessed a course through educational establishments. Similarly, attending a course through the Youth Service (e.g., youth clubs, outdoor education centers, see <https://www.education-ni.gov.uk/articles/youth-service>) indicated that a candidate is 2.12 times more likely to complete a Level 2 award than through educational establishments ($OR = 2.12, 95\% CI = 1.60-2.80, p < .001$). The findings also suggest that those candidates with a disability are less likely to complete the Level 2 award compared to those candidates without a disability ($OR = .76, 95\% CI = .60-.96, p = .021$). Other significant predictor variables included: volunteering currently, gender and ethnicity (all $p < .001$). Finally, where a candidate lives (urban or rural classification) and their level of socio-economic status (Townsend score) did not appear to be associated with whether they completed the SLUK Level 2 award or not.

Table 2. BLR analysis for outcome variable completing a Level 2 award (Model 1)

Predictor (Independent) Variable	β	S.E.	Wald	P	Odds Ratio	95% C.I. for Odds Ratio	
						Lower	Upper
Correct Age	.03	.00	212.33	< .001*	1.03	1.03	1.04
Gender (Male)	-.11	.02	49.82	< .001*	.90	.87	.92
Ethnicity (White)			67.31	< .001*			
1 = <i>Bangladeshi</i>	-.14	.10	1.86	.173	.87	.71	1.06
2 = <i>Black – African</i>	-.25	.06	15.58	< .001*	.78	.69	.88
3 = <i>Black – Caribbean</i>	-.08	.06	2.09	.148	.92	.83	1.03
4 = <i>Chinese</i>	.02	.13	.02	.898	1.02	.78	1.32
5 = <i>Black other</i>	-.18	.09	4.51	.034*	.83	.71	.99
6 = <i>Indian</i>	-.20	.06	11.20	.001*	.82	.72	.92
7 = <i>Pakistani</i>	.00	.07	.00	.946	1.00	.86	1.15
8 = <i>Other</i>	-.29	.05	39.99	< .001*	.75	.69	.82
Disability (Y)	-.28	.12	5.35	.021*	.76	.60	.96
Occupation (full-time education)			45.38	< .001*			
1 = <i>In part-time education</i>	-.08	.07	1.31	.253	.92	.79	1.06
2 = <i>Employed FT (or self employed)</i>	-.17	.05	11.05	.001*	.85	.77	.93
3 = <i>Employed PT (or self employed)</i>	-.33	.06	32.22	< .001*	.72	.64	.81
4 = <i>Unemployed</i>	-.20	.05	13.25	< .001*	.82	.74	.91
5 = <i>Other</i>	-.04	.07	.27	.604	.97	.85	1.10
Volunteering Currently (Y)	.21	.02	114.91	< .001*	1.23	1.18	1.28
Volunteered Previously (Y)	.06	.02	10.68	.001*	1.06	1.02	1.10
Center Type (School)			1061.16	< .001*			
1 = <i>FE College</i>	.50	.02	864.01	< .001*	1.65	1.60	1.71
2 = <i>University /HE</i>	-.10	.13	.69	.406	.90	.70	1.15
3 = <i>Local Education Authority</i>	.46	.05	94.47	< .001*	1.58	1.44	1.73
4 = <i>Prison Service</i>	.86	.06	204.04	< .001*	2.35	2.09	2.65
5 = <i>Youth Service</i>	.75	.14	27.74	< .001*	2.12	1.60	2.80
6 = <i>Voluntary Youth Org</i>	-.06	.06	.77	.380	.94	.83	1.07
7 = <i>Outdoor Education Centre</i>	-.39	.13	9.32	.002*	.68	.53	.87
8 = <i>Local Authority</i>	.15	.04	11.74	.001*	1.17	1.07	1.27
9 = <i>Other</i>	.32	.04	62.13	< .001*	1.37	1.27	1.49
Townsend	.00	.00	.56	.455	1.00	1.00	1.01
Urban Rural Total (Urban)	.01	.02	.57	.450	1.01	.98	1.05

Reference category in brackets

*Significant predictor variables at $p < 0.05$

Model 2: SLUK Level 3 completion

This model explored associations between the predictor variables and whether candidates completed the Level 3 award or not. The sample consisted of those candidates who registered for a Level 3 award ($n = 1,530$), containing candidates who had previously completed a Level 2 award ($n = 265$) and candidates who achieved direct entry onto the Level 3 award ($n = 1,265$). The sample, average age 18.8 years ($SD = 1.61$), consisted of a higher proportion of males (65.4%), was mainly of White ethnicity (94.8%), largely reported no disability (99.5%), and mainly indicated being in *full-time education* (96.1%). The highest proportion of candidates in this sample were either undertaking their award in an FE college (61.7%) or school (31.8%). Finally, a higher proportion of this sample were from an urban area (78.1%), and 68.9% were currently volunteering, with 88.9% having volunteered previously. Of the total who registered for the Level 3 award, 62.1% went on to complete the award ($n = 950$).

The overall model fit was found to be statistically significant, $\chi^2(27, n = 1530) = 120.69, p < .005$. With regards to variance, between 7.6% (Cox and Snell *R* Square) and 10.3% (Nagelkerke *R* Square) of the variation in the outcome variable can be explained by the model. Additionally, there was only a 3.2% improvement in the prediction power of the model with the variables included (65.3%), compared to the percentage accuracy in classification test with no variables entered for Block 0 in SPSS (62.1%). The strongest predictor of a candidate completing a Level 3 award was *local education authority center type* (OR = 20.67, 95% CI = 6.25-68.39, $p < .001$) (see Table 3). This finding suggests that those candidates who undertook a Level 3 award organized through the Local Education Authority (LEA; e.g., local councils responsible for education in their areas) were 20.67 times more likely to complete compared to those who accessed a course through a school (reference category). However, due to the huge confidence interval, it is difficult to determine the true value of the odds ratio. Attending a course through a Voluntary Youth Organization indicated that a candidate was less likely to complete a Level 3 award compared to a course undertaken through a school as indicated by an Odds Ratio of less than 1 (OR = .12, 95% CI = .03-.54, $p = .006$). This model also suggests that those who are currently volunteering are more likely to complete the Level 3 award (OR = 1.59, 95% CI = 1.20-2.10, $p = .001$), however, a candidate who had not volunteered previously was reported to be less likely to complete a Level 3 award compared to those who had (OR = .59, 95% CI = .38-.90, $p = .014$). Other significant predictor variables included: urban or rural classification ($p = .002$) and the centre types of prison service ($p = .016$) and FE College ($p < .001$). Finally, the level of socio-economic status (Townsend score), gender and ethnicity were found to not significantly predict completion of the Level 3 award.

Table 3. BLR analysis for outcome variable of completing a Level 3 award (Model 2)

Predictor (Independent) Variable	β	S.E.	Wald	P	Odds Ratio	95% C.I. for Odds Ratio	
						Lower	Upper
CorrectAge	.08	.05	2.90	.089	1.08	.99	1.19
Gender (Male)	-.12	.12	1.13	.288	.88	.70	1.11
Ethnicity (White)			9.62	.293			
<i>1 = Bangladeshi</i>	-.74	1.43	.27	.604	.48	.03	7.85
<i>2 = Black – African</i>	-.82	.62	1.77	.183	.44	.13	1.47
<i>3 = Black – Caribbean</i>	-.77	.54	2.08	.149	.46	.16	1.32
<i>4 = Chinese</i>	-1.36	1.25	1.17	.279	.26	.02	3.00
<i>5 = Black other</i>	.60	1.28	.22	.641	1.81	.15	22.27
<i>6 = Indian</i>	.74	.68	1.20	.273	2.11	.56	7.98
<i>7 = Pakistani</i>	-1.84	1.17	2.48	.115	.16	.02	1.57
<i>8 = Other</i>	-.31	.42	.54	.462	.74	.33	1.66
Disability (Y)	.50	.82	.36	.547	1.64	.33	8.27
Occupation (full-time education)			10.01	.075			
<i>1 = In part-time education</i>	-2.00	1.17	2.89	.089	.14	.01	1.36
<i>2 = Employed FT (or self employed)</i>	1.43	.60	5.67	.017	4.17	1.29	13.50
<i>3 = Employed PT (or self employed)</i>	.47	.46	1.04	.307	1.61	.65	3.98
<i>4 = Unemployed</i>	-1.14	1.50	.58	.445	.32	.02	6.01
<i>5 = Other</i>	-21.21	28114.23	.00	.999	.00	.00	.00
Volunteering Currently (Y)	.46	.14	10.39	.001*	1.59	1.20	2.10
Volunteered Previously (Y)	-.53	.22	6.01	.014*	.59	.38	.90
Center Type (School)			56.79	< .001*			
<i>1 = FE College</i>	.47	.12	15.84	< .001*	1.61	1.27	2.03
<i>3 = Local Education Authority</i>	3.03	.61	24.62	< .001*	20.67	6.25	68.39
<i>4 = Prison Service</i>	-3.63	1.51	5.77	.016*	.03	.00	.51
<i>6 = Voluntary Youth Org</i>	-2.14	.78	7.52	.006*	.12	.03	.54
<i>8 = Local Authority</i>	-.27	1.60	.03	.866	.76	.03	17.61
<i>9 = Other</i>	-1.31	.54	5.84	.016*	.27	.09	.78
Completed Level 2 (Y)	.06	.16	.15	.699	1.06	.78	1.45
Townsend	-.02	.02	.57	.449	.98	.94	1.03
Urban Rural Total (Urban)	.42	.13	10.00	.002*	1.52	1.17	1.97

Reference category in brackets

*Significant predictor variables at $p < 0.05$

Model 3: Progression from SLUK Level 2 to Level 3

This model explored associations between the predictor variables and whether those who had completed the Level 2 award progressed to register for the Level 3 award or not. The sample for this model consisted of those candidates who completed the SLUK Level 2 award ($n = 44,476$). The sample, average age 21.6 years ($SD = 5.09$), consisted of a higher proportion of males (58.7%), was mainly of White ethnicity (90%), with 99.6% reporting no disability, and 88.2% reporting being in full-time education. Candidates mainly undertook the Level 3 course at an FE college (42.4%) or a school (40.2%), and were largely from urban areas (75.4%), with 33.4% of the sample currently volunteering and 57.3% having previously volunteered. Of the total who completed the Level 2 award, only 0.6% ($n = 265$) went on to register for the Level 3 award.

The overall model fit was found to be statistically significant, $\chi^2 (29, n = 44,476) = 261.50, p < .005$. With regards to variance, between 0.6% (Cox and Snell R Square) and 8.3% (Nagelkerke R Square) of the variation in the outcome variable can be explained by the model. Additionally, there was no difference in the prediction power of the model with the variables included compared to the percentage accuracy in classification test with no variables entered for Block 0 in SPSS (99.4%). The strongest predictor of a candidate registering for a Level 3 award was full-time employed (as the candidate's occupation), which suggested that those candidates who were employed full-time were 6.75 times more likely to register for a Level 3 award having completed the Level 2, compared to those candidates who were in full-time education ($OR = 6.75, 95\% CI = 3.71-12.28, p < .001$). However, there is a large confidence interval range with this finding, which indicates that it is difficult to determine the true value of OR for this variable. *Volunteering currently* was also identified as a significant predictor variable (e.g., current volunteers were 2.70 times more likely to register for a Level 3 award compared to those who were not; $OR = 2.70, 95\% CI = 1.98-3.68, p < .001$). Candidates from an urban area were slightly more likely to register for a Level 3 award compared to those from a rural area ($OR = 1.43, 95\% CI = 1.05-1.95, p = .025$). Other significant predictor variables included: age, gender (both $p < .001$), and the center types of voluntary youth service ($p = .001$) and Local Authority ($p = .041$). Independent variables that were found not to be significant predictors of the outcome variable included: level of socio-economic status (Townsend score) and ethnicity.

Table 4. BLR analysis for outcome variable of registering for a Level 3 award (Model 3)

Predictor (Independent) Variable	β	S.E.	Wald	Sig.	Odds Ratio	95.0% C.I. for Odds Ratio	
						Lower	Upper
CorrectAge	-.31	.04	71.08	< .001*	.73	.68	.79
Gender (Male)	.51	.14	14.40	< .001*	1.67	1.28	2.18
Ethnicity (White)			2.79	.947			
1 = <i>Bangladeshi</i>	-.48	1.03	.21	.643	.62	.08	4.67
2 = <i>Black – African</i>	-.17	.59	.09	.770	.84	.26	2.69
3 = <i>Black – Caribbean</i>	-.39	.59	.43	.511	.68	.21	2.16
4 = <i>Chinese</i>	-15.95	3257.15	.00	.996	.00	.00	
5 = <i>Black other</i>	-.73	1.01	.51	.473	.48	.07	3.51
6 = <i>Indian</i>	-.13	.59	.05	.829	.88	.28	2.78
7 = <i>Pakistani</i>	-1.08	1.01	1.15	.284	.34	.05	2.45
8 = <i>Other</i>	-.39	.51	.58	.446	.68	.25	1.84
Disability (Y)	-15.83	2856.09	.00	.996	.00	.00	
Occupation (full-time education)			40.76	< .001*			
1 = <i>In part-time education</i>	-15.32	1527.15	.00	.992	.00	.00	
2 = <i>Employed FT (or self employed)</i>	1.91	.31	39.22	.001*	6.75	3.71	12.28
3 = <i>Employed PT (or self employed)</i>	.70	.52	1.86	.172	2.02	.74	5.54
4 = <i>Unemployed</i>	-0.19	.74	.07	.798	.83	.19	3.54
5 = <i>Other</i>	.31	1.02	.09	.761	1.36	.19	10.03
Volunteering Currently (Y)	.99	.16	39.29	< .001*	2.70	1.98	3.68
Volunteered Previously (Y)	.01	.17	.00	.969	1.01	.72	1.41
Center Type (School)			27.72	.001*			
1 = <i>FE College</i>	.34	.13	6.47	.011*	1.41	1.08	1.83
2 = <i>University /HE</i>	-14.31	3034.99	.00	.996	.00	.00	
3 = <i>Local Education Authority</i>	-1.36	.72	3.58	.058	.26	.06	1.05
4 = <i>Prison Service</i>	-14.13	774.76	.00	.985	.00	.00	
5 = <i>Youth Service</i>	-15.41	2828.91	.00	.996	.00	.00	
6 = <i>Voluntary Youth Org</i>	1.19	.36	10.89	.001*	3.30	1.62	6.69
7 = <i>Outdoor Education Centre</i>	-15.79	3471.87	.00	.996	.00	.00	
8 = <i>Local Authority</i>	-2.07	1.01	4.19	.041*	.13	.02	.91
9 = <i>Other</i>	-.44	.43	1.04	.307	.64	.27	1.50
Townsend	.01	.02	.36	.551	1.01	.97	1.06
Urban Rural Total (Urban)	.36	.16	5.02	.025*	1.43	1.05	1.95

Reference category in brackets

*Significant predictor variables at $p < 0.05$

Discussion

Given the potential benefits that sport and physical activity can have for both individuals and communities, greater emphasis is being placed on increasing the population's engagement in such activities (cf. HM Government, 2015). It has been suggested, with growing agreement, that central to achieving increased and continued participation in sport and physical activity is the role fulfilled by the sport leader (Newman et al., 2016; Schulenkorf, 2017). However, some concern has been expressed regarding the development of an appropriately qualified and sustainable sport leader workforce as little is known of the factors that influence an individual's pursuit of such roles (Newman et al., 2016). The current study, therefore, aimed to explore the sport leader landscape by examining the socio-economic status and individual demographic factors of sport leaders (aligned with SLUK) and whether certain variables predict candidates' registration, progression and attainment of SLUK awards.

Descriptive frequency analysis of the SLUK candidate database indicated that, of those sport leaders sampled ($n = 76179$): (a) 89.6% identified as being White in ethnicity; (b) a higher proportion identified as male; (c) less than 25% were classified as living in a rural area; (d) only 0.4% identified as having a disability; (e) 58.7% reported having experience as a volunteer; and (f) 90.2% accessed the qualifications through educational establishments. Further, BLR analysis demonstrated that socio-economic status (e.g., TDI) was not a predictor of whether candidates completed SLUK qualifications, or whether candidates progressed from the Level 2 to Level 3 qualification. However, those candidates with volunteering experience were more likely to achieve both levels of qualification, and those who were volunteering at the time of the study were more likely to progress from Level 2 to Level 3. Additionally, younger candidates, males and those living in urban areas were more likely to progress from Level 2 to Level 3, but females were more likely to complete the Level 2 qualification and urban inhabitants more likely to achieve Level 3 than their counterparts (age, gender and ethnicity did not significantly predict completion of the Level 3 award). Finally, the place where candidates completed the qualification (i.e., center type) appeared to be a strong predictor of both Level 2 and Level 3 completion (e.g., Level 2 candidates studying in prison or through the youth service were twice as likely to complete the qualification as those studying in school).

Previously, Collins and Kay (2003) argued that low socio-economic status is at the core of social exclusion, suggesting that those from more deprived areas are more likely to be excluded from sport and other activities. Others have also acknowledged that recruitment of *leaders* into sport and physical activity roles has tended to be exclusive, with those from deprived areas being less represented (D'Souza et al., 2011; Taylor, 2016). In contrast to this, the findings of this study identified that socio-economic status was not a significant predictor of SLUK award completion or continued engagement. This suggests that those living in more deprived areas and/or with lower socio-economic status may not be significantly disadvantaged in accessing such leadership development opportunities. One potential explanation is that the majority of the sample in the current study accessed SLUK awards through educational establishments. As a result, factors such as: distance to facilities; lack of transport; cost of travel; and access to qualifications, which have traditionally deterred individuals from low socio-economic backgrounds from pursuing vocational activities (cf., Collins and Kay, 2003), may not be as significant. Indeed, Newman et al. (2016) reported that only 16 of their 119 participating youth sport leaders reported socio-economic status as one of the five most pressing issues facing them. Such findings indicate the diversification of the sport leader workforce (and potential volunteers) being trained by SLUK who come from a range of socio-economic backgrounds. This is important as, in accord with recent literature, greater egalitarianism and inclusivity in sport leadership has the potential to have a beneficial impact on those accessing sport and physical activity due to the identity, social capital and empathy shared between leader and participant (Kay & Bradbury, 2009; Meir & Fletcher, 2019; Taylor, 2016).

The locality of sport leaders sampled in the current study demonstrated varied predictive ability. For example, urban and rural classification was not found to significantly predict the completion of the SLUK Level 2 award. This is perhaps reassuring for awarding organizations as it suggests that the awards at Level 2 are provided in locations that are easily accessible, and that people in more remote or deprived areas may not be significantly disadvantaged or less likely to complete an award compared to those who live in urban or more affluent areas. Conversely, locality was found to be a significant predictor of both registration for, and completion of, the Level 3 award (e.g., urban-based candidates were 1.52 times more likely to register for, and 1.43 times more likely to complete, the Level 3 award than those living in rural areas). Previous research has, however, reported that sport leaders living in urban areas are less likely to volunteer compared to those living in rural areas (Mawson & Parker, 2013). This is potentially concerning as less than 25% of the sample in the current study were classified as rural inhabitants. Thus, the prospect of developing a volunteer workforce substantial enough to meet sport and physical activity participation objectives is inhibited. Given this finding, it appears permissible to suggest that organizations must consider widening access to qualifications in attempts to encourage the ongoing development of the sport leader workforce and potentially more sustained volunteering engagement (Busser & Carruthers, 2010).

Contrary to previous research that has highlighted a tendency for sport volunteers and sport leaders to be aged (on average) between 35-50 years old (e.g., Newman et al., 2016; Strigas & Jackson, 2003), 93% of the sample in the current study were aged between 16-25 years old. This trend indicates that SLUK awards are predominantly accessed by young people, particularly those who are in education (90.2% of the current sample accessed qualifications through educational establishments). Indeed, learners at schools, colleges and universities represent a captive audience. Consequently, those in education can be easily engaged in vocational awards, especially as the need to develop wider knowledge, skills and qualifications to improve the likelihood of successful career progression following education continues to grow (Di Stasio, 2017). In support of this, the BLR conducted in this study (Model 3) indicated: (a) increases in sport leader age are negatively associated with them choosing to register for the SLUK Level 3 award; and (b) significant association between candidates in full-time education and completion of the Level 2 award compared to those who were employed or unemployed. It would appear, therefore, that whilst educational establishments provide an excellent environment for young people to access and complete sport leaders awards, third sector organizations (e.g., charities and social enterprises), such as SLUK, should improve efforts to engage those leaving education and inspire them to complete and progress through sport leader awards as a pathway into volunteering. By doing so, it is likely that a more educated workforce can be developed that has the value of lasting commitment to sport leadership and is thus capable of changing the culture of sport and physical activity engagement (Stuart & Grotz, 2015). Indeed, Gould and Voelker (2012) stated that, "If young people are to help create a more just society, then the chance to influence this as leaders needs to happen now, not at some undefined time in the future" (p. 39). The development of good leadership behaviors is, however, recognized to require longer term development through ongoing experience. Being able to influence an individual's vocational experiences at an early age can, therefore, help to expedite the growth and maturation of sport leaders (Holt, 2016). In accord with this, the findings of the current study indicated that those candidates in full-time employment were 6.75 times more likely to register for a Level 3 award compared to those in full-time education. This may be due to a number of factors, such as: (a) the growing emphasis being placed on vocational qualifications (cf., Di Stasio, 2017); (b) the SLUK Level 3 award is generally delivered by organizations outside of education (e.g., Armed Forces); and (c) the SLUK Level 3 award is required by those wishing to lead independently, giving candidates access to roles that are traditionally fulfilled by those not in full-time education (e.g., senior roles; group leaders). Nonetheless, this finding may be indicative of the ongoing nature of sport leader development, and as a result organizations such as SLUK must consider how they positively influence the motivation of individuals to continue their vocational training once they leave formal education (Strigas & Jackson, 2003; Taylor, 2016).

One variable that predicted registration, completion and progression across awards was volunteering experience (e.g., candidates in the sample with volunteer experience were more likely to complete both the SLUK Level 2 and Level 3 awards than those with no experience). This is understandable, given that these individuals already had an interest in volunteering making it more likely that they felt equipped and motivated to achieve the required 30 hours of voluntary experience needed to complete the Level 3 award (see SLUK, 2018). Indeed, research has shown that sport volunteers are motivated to continue volunteering since they feel altruistic desires to help sport participants in their activity recreations (Taylor et al., 2003). It is also suggested that sport leaders develop characteristics associated with civic engagement (e.g., volunteering; assisting others; Taylor, 2016). It could be argued, therefore, that sport leadership and volunteering are symbiotic in that volunteering experiences help individuals to develop the skills and characteristics that lie at the heart of the SLUK mission (e.g., to deliver inclusive activities designed to engage the community in sport and physical activity).

In consideration of the demographic diversity of those registering for, completing and progressing through SLUK awards, the sample examined in this study had a higher proportion of males (59.2%). Further, males were more likely to register for and complete the SLUK Level 3 award compared to females. Research has previously highlighted that due to a lack of females in leadership roles in sport, females do not see sport as a legitimate and viable career choice (Long et al., 2017). It is less likely, therefore, that females will undertake such awards unless provision is made to encourage greater participation through interventions that seek to identify and train young female leaders (e.g., *Girls on the Move* program, see Taylor, 2016). In spite of the male dominance in accessing the SLUK awards, however, the findings of the current study indicated that females were more likely to complete the Level 2 award than males. Given that the SLUK Level 2 qualification is largely delivered in formal educational establishments, the current trend of females out-performing their male counterparts in academic achievement (cf., Carvalho, 2016) may also be evident here.

Only 302 (0.4%) candidates in the current sample reported having a disability. Accordingly, national UK statistics (2010-2019) have reported that the percentage of the population of working age (16-64 years) who are registered as having a disability that limits their daily activities averages at 18% (7.6 million people), with approximately 51% of those people in employment (Powell, 2019). In light of these figures, it appears that people with a disability are significantly under-represented in the population of individuals accessing SLUK awards. This finding is consistent with previous research that has highlighted the scant number of individuals with disabilities at all levels of sport including: volunteering, participation, coaching, administration and senior leadership positions (Sport England, 2017; Wickens, Earnshaw, & Fox, 2009). Further, the current study found that those candidates with a disability were less likely to complete the Level 2 award compared to people with no disability. Similarly, with regards to ethnicity, 89.6% of the total sample in this study identified as White. Whilst this is comparable to recent census data (81.9% of the UK population identified as White; ONS, 2011) and findings in similar research that examined the socio-demographic data for community sport volunteers (e.g., Eley & Kirk, 2002; Kay & Bradbury, 2009), it is clear that Black and minority ethnic communities are not well-represented in this sample of sport leaders. Further, in support of previous findings (e.g., Wickens et al., 2009), those identified as Black, Indian, and other ethnic backgrounds were less likely to complete the SLUK Level 2 award compared to those identified as White. Kay and Bradbury (2009) previously highlighted that sport leadership programs struggle to attract Black and minority ethnic individuals, as well as those with disabilities, in spite of the potential benefit that participation may have for such groups. The consequence of this is that the sport leader workforce becomes overly homogenous, potentially impacting the ability of sport leaders to engage the wider community in physical pursuits (Mawson & Parker, 2013). In attempts to address this issue of representation and equality of access, organizations (e.g., SLUK) must continue to proactively seek to engage hard to reach communities through more substantive integration of awards into educational programs across different providers (e.g., youth organizations; schools; local authorities).

Conclusion

This study aimed to examine the socio-economic status and individual demographic factors of sport leaders and whether certain variables predict candidates' registration, progression and attainment of SLUK sports leader awards. Whilst the use of BLR, as adopted in this study, does not indicate direction of cause (e.g., one cannot be clear that volunteering currently results in award completion, as it may be the case that award completion results in current volunteering behavior), it is able to illustrate the extent to which variables are associated. Consequently, the findings of this study identified that a number of independent variables (e.g., volunteer experience; center type; locality) are significant predictors of SLUK award progression. Socio-economic status was not a significant predictor variable of award completion, however, which was surprising given the previous literature in the area of sport leadership and volunteering (e.g., Newman et al., 2016). As a result, this current research has helped to elucidate those factors that potentially influence the engagement and ongoing education of sport leaders, in this case those specifically aligned with SLUK. In doing so, it offers a range of organizations a better understanding of how, where and who best to target in attempts to augment an educated and situated workforce of sport leaders who are capable of fulfilling the volunteering positions required to enhance the populations' engagement in sport and physical activity (for reasons such as: health improvement; community development; combating social exclusion).

Although the findings of the current study support more recent research, which suggests that programs and interventions are having an increasing impact on engaging a wider range of people (e.g., Taylor, 2016), our findings also identified continued under representation of certain groups (e.g., females, Black and minority ethnics) in sport leadership role engagement. Such findings indicate that continued work is required to address aspects of social justice in sport and physical activity (see Long et al., 2017) and in doing so create an inclusive culture where bias and discrimination do not prevent individuals and groups from accessing opportunities to become educated and engage in sport leaders roles. It is likely that by ensuring that all societal groups are represented in sport leader roles entry level participation in sport and physical activity will be improved. Certainly, a sport leader workforce that represents the community it is serving (e.g., ethnically, culturally, socially) is more likely to achieve the desired benefits of lasting participation in physical and sporting recreation (Burton, 2015). In light of the need to enhance diversity and inclusion, in both sport leader roles and in those participating in sport and physical activity, there also appears to be an opportunity for enhancing the education of the sport leader workforce on such matters. Specifically, educating all potential leaders on issues associated with social justice may help them to effectively engage different groups within their communities and thus better achieve the goal of wider engagement in activity. This presents an important challenge, but one that should be addressed if the future sport leader workforce is to achieve its aim of leading inclusive sporting and physical activities and of playing an active role in ever diversifying local communities.

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