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Alumni perspectives on a boarding school outdoor education programme

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Abstract

Experiences of outdoor education are believed to have significant impacts on participants, but research on the lasting influences of extended programmes is limited. Gordonstoun School, an independent residential school founded by Kurt Hahn in 1934, provides a rich legacy of outdoor education against which to explore any enduring outcomes. Drawing on data from an online survey (n=1174) and focus group interviews (n=50) with alumni from Gordonstoun, this research characterises the defining features of their out-of-classroom learning and investigates the long-term influences of this 'broader curriculum'. Out-of-classroom learning is seen to have had an overwhelmingly positive impact on former pupils, with expeditions cited as the most influential experience. The expectation that all students engage in a range of challenging situations and the importance of authentic opportunities for responsibility are identified as two particularly critical elements which have lasting influences on students. These findings have strong articulation with existing research and can be used to inform effective programme design.

Keywords:

Boarding School, Expedition, Service, Outdoor Education, Co-curricular

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Scotland's Gordonstoun School was founded in 1934 by Kurt Hahn, who also went on to co-found Outward Bound in 1941.¹ The non-academic elements of Gordonstoun life have been labelled by the school as 'the broader curriculum', which encompasses expeditions, sailing training voyages, seamanship, services to school and community, and after school sports and activities. Despite the ensuing rich history of outdoor education programmes at Gordonstoun and similar schools across the globe, there is a remarkable dearth of literature that examines alumni reflections on the programme several years post-hoc, and its influences on them.

This study examines data generated by an online survey and subsequent focus groups with Gordonstoun's alumni, called Old Gordonstounians or OGs for short. The aim of the research was to capture OGs' reflections on their out of classroom learning experiences (OOCLEs) at Gordonstoun. This was to include their perceptions of the defining features of the broader curriculum, and how this influenced their lives after they left school. The survey and focus groups formed part of a larger mixed methods research project commissioned by Gordonstoun which also involved current students, parents of current students and staff members.

Review of Literature

The complex ecology of diverse out of classroom learning, taking place in a residential private school, and experienced by a wide range of individuals over the last 70 years, makes

¹ For a biography of Kurt Hahn, see Veevers & Allison (2011)

a concise but useful literature review challenging. While formal restrictions lead us to focus on longitudinal research on outdoor education and boarding schools, we assume that readers will refer to key reviews related to the impacts of outdoor and adventure education (e.g. Hattie, Marsh, Neil & Richards, 1997; McKenzie, 2000; Sibthorp & Richmond, 2016) and extra-curricular activities (Feldman & Matjasko, 2005; Farb & Matjasko, 2012; Holland & Andre, 1987) more generally for wider context.

Long term impacts of outdoor education

The findings of Stott, Allison, Felter and Beames' (2013) systematic literature review of personal development through overseas youth expeditions emphasises the relatively short-term nature of most research relating to the topic area. Stott and colleagues note the shortcomings of this literature and call for more studies to examine long-term benefits in outdoor education research more generally. Indeed, the literature exploring participants' long term retrospective views of more than five years after an outdoor education experience is sparse enough to identify individual attempts to develop understanding in the area. For example, Raleigh International has been the focus of two studies: a commissioned report which drew on the experiences of participants over a 25 year period (IPPR, 2009) and an independent research project where Takano (2010) interviewed 67 participants 20 years after their Raleigh expedition. Telford (2010) tracked down and interviewed participants from a Scottish residential outdoor centre who had been there as much as 30 years earlier. The emphasis on looking back on 'one-off' outdoor education experiences after a period of time can be seen also be seen in Gass, Garvey and Sugerman's (2003) exploration of the lasting influences of a one-week university orientation, Daniel's (2007) analysis of a similar programme as a significant life experience (Chawla, 2006) and some research based on

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Outward Bound programmes which has a longitudinal element (Bobilya, Kalisch, Daniel & Coulson, 2015; Gassner & Russell, 2008).

Due to the nature of these approaches, samples are often relatively small and focus on specific programs or data collection relies solely upon surveys. For example, Sibthorp, Furman, Paisley, Gookin and Schumann (2011) draw on a survey of alumni of National Outdoor Leadership School (NOLS) programmes over a period of ten years to investigate transfer of learning – a key outdoor and adventure education research topic since the 1980s (see for example, Gass, 1999; Hattie, Marsh, Neill & Richards, 1997; Brown, 2010).

Particularly relevant to this project's focus on the processes at play in out of classroom learning, their findings from surveying 508 respondents showed that key transfer mechanisms were 'instructors, group dynamics, hardships inherent in the NOLS experience and the leadership progression (structured transfer of leadership from instructors to students)' (Sibthorp et al., 2011, p. 116). More recent research by Richmond, Sibthorp, Gookin, Annarella and Ferri (2018) found that these elements were also central in repeated NOLS experiences that were a mandatory part of schooling, and that teaching staff involvement and shared experiences with classmates supported the transfer of non-cognitive skills into the academic setting.

The point central to the present study's rationale is that retrospective studies have the capacity to reveal fascinating findings regarding outcomes and the processes through which they are achieved, but there is a limited amount of such studies in the literature. Further, these kinds of studies may be more trustworthy than research based on questionnaires provided during or directly after courses (Scrutton & Beames, 2015).

Long term influences of boarding schools

There is also a surprising lack of large scale empirical research on the long-term influences of boarding schools on students (Martin, Papworth, Ginns & Liem, 2014). Writing about boarding schools in the USA, Steel, Erhardt, Phelps and Upham (2015) attribute this limitation to the relatively small number of schools; the fact that independent schools are not necessarily subject to the equivalent national structures; and the diverse forms and purposes of this type of school. Papworth (2014) also acknowledges the diversity of forms and perceptions of boarding school across borders, but the themes of extant research seem to apply internationally, and focus either on the (negative) psychological impacts of private boarding school experiences (e.g., Schaverien, 2011; Duffel, 2000), the psychological and structural impacts of residential schools for indigenous communities (e.g., Barton, Thommasen, Tallio, Zhang, & Michalos, 2005; Elias et al., 2012), or on comparisons between outcomes of boarding and day attendance (Martin et al., 2014; Papworth, 2014; The Association of Boarding Schools (TABS), 2003, 2013).

More recent studies have sought to fill the gaps relating to non-academic outcomes associated with boarding school education and the lack of longitudinal data. One study commissioned by TABS (2003) compared the experiences of 2700 high-school graduates from boarding, day and public schools at different stages in their life and controlled for other factors, such as socioeconomic status, which may have influenced the results. This study showed that attending a boarding school can result in higher levels of engagement in extracurricular activities, more motivated peer groups, greater opportunities for leadership, and greater chance of professional progression by mid-career. While this yields insight into

the results of a boarding school education over time, data such as this does not permit a deeper understanding of the processes at play in the distinct 'ecological context' of boarding schools, which Martin et al. (2014, p. 1010) sought to explore within shorter time frames of up to one year. Both studies relied on large samples and quantitative data, and although adjustments were made for influencing variables, they could not isolate the influence of the non-academic aspects of schooling, which are the focus of our research on Gordonstoun. Generally, Martin et al. (2014) observed a parity of experience for Australian day and boarding students (which again should be noted as a culturally distinct form of schooling), in terms of motivation and psychological well-being. They did, however, identify a tendency for boarding school pupils to score higher for pro-social meaning and value, and to have increased participation in extracurricular activities. This supports TABS' (2003) findings that boarding school students 'participate more deeply' in extracurricular activities than non-boarding school students and that their alumni are more philanthropic (p. 4).

The complexity of the boarding school context is further evident when considering the fact that extracurricular activities (which form part of the out-of-classroom learning considered in the present study) are integrated into the student experience both within and beyond the school community; at Gordonstoun, much of what could be classed as 'extra-curricular' at most schools is called 'the broader curriculum' and, as such, participation is mandatory for all students. Early research using data collected from day-students in the USA showed that over 15 years, extracurricular activities could have positive effects on aspiration and attainment (Otto, 1975; Otto & Alwin, 1977). This literature has progressed through using a range of methods to show that different forms of activity influence identity formation and lead to both positive and negative academic and social outcomes, which depend on student

backgrounds and the context of the activities (Barber, Eccles & Stone, 2001; Eccles & Barber, 1999; Farb & Matjasko, 2012; Hwang, Feltz, Kietzmann & Diemer, 2016; Marsh & Kleitman, 2002). That sport and extracurricular activities in mainstream schooling enter our review of literature is an indicator that there is a shortage of published research on outdoor education programmes at boarding schools -- whether longitudinal or not, and irrespective of methodologies employed.

Our review of retrospective studies examining the long-term influences of non-academic outdoor education programmes and residential school programmes has revealed a rather 'thin' literature, but one that points towards the formative impact of a variety of outdoor challenges, as well as the influence of residential school living, experienced over time. This in turn provided a strong rationale for undertaking an in-depth study at a residential school renowned for its out-of-classroom, 'broader' curriculum. Thus, the aims of this study were twofold: The first was to understand Old Gordonstounians' perceived outcomes of the non-academic aspects of school activities, such as expeditions, sail training voyages, service, seamanship, and afterschool sports and activities. The second aim was to understand the critical elements of these out-of-classroom experiences and the ways in which they influenced former students' lives.

Methodology

Addressing the above aims involved taking a mixed methods approach to data collection, analysis and interpretation (Creswell & Plano Clark, 2011). Two broad categories of data collection were employed: Online surveys and focus group interviews. The research

followed guidelines outlined by the British Educational Research Association and was granted ethical approval from the School of Education of the University of Edinburgh's Research Ethics Committee (BERA, 2011). Throughout all aspects of the research process, the researchers went to great lengths to ensure that issues of confidentiality, anonymity, and the right to withdraw were paid strict attention (see Cohen, Manion, & Morrison, 2013).

Data source one: Online surveys

Online surveys were deployed first, in an attempt to yield quantifiable data from a relatively large sample representative of the school's alumni, and to provide statistical evidence characterising the general view of that population on selected questions. The questionnaire for the online surveys was designed in an iterative way between Gordonstoun staff and University of Edinburgh (UoE) researchers. It therefore addressed the areas of interest of the school and the needs of the researchers to generate data amenable to analysis and interpretation. In addition to demographic questions, the survey included Likert-style and open-response questions.

The survey was emailed to every Gordonstoun alumnus on the School's database and elicited 1174 respondents, which is about 30 per cent of those contacted. This is typical of such on-line surveys and is considered to be a strong basis for the conclusions presented here (Cohen, Manion & Morrison, 2013). There is an unavoidable bias in the survey sample that is due to female students only starting to attend Gordonstoun in 1972. As can be seen in Table 1 (below), there was a relatively even gender split for those under age 50, with the vast majority of respondents over the age of 60 being men. The results do not show any

strong trends when broken down for age or gender. We do not have information on respondent ethnicity or income-levels.

INSERT TABLE 1 HERE

The survey data were analysed in two ways. First, using Excel and SPSS software, the questions yielding numerical data were analysed for descriptive statistics on trends and inferential statistics for relationships between various parts of the data set (Cohen, Manion & Morrison, 2013). Second, using Nvivo software, the survey returns yielding textual data were analysed for the frequency of key words or themes (Bazeley, 2013).

Numerical data from the survey questionnaires yielded descriptive statistics on the distribution of scores on the 1 to 10 or 1 to 5 scales and mean scores on questions, both for all respondents and for males and females separately, and by age group. Where scales are 1-10, only scores of 8, 9 or 10 were considered positive or very positive influence. Where scales are 1-5, points 4 and 5 were considered positive and point 5 alone was considered very positive. The data were further analysed for possible correlations between respondents' scores on different questions. Non-parametric tests to compare means were also carried out to discover whether there were statistically significant differences between the scores from particular cohorts of respondents, such as between genders or between age groups. In terms of the trustworthiness of the questionnaire itself, the iterative process of its development ensured its face and content validity (Cohen, Manion & Morrison 2013, p. 189).

Data source two: Focus group interviews

Following Wisdom & Creswell (2013), an 'explanatory sequential design' was adopted. This approach typically involves: '(1) an initial quantitative instrument phase, followed by (2) a qualitative data collection phase, in which the qualitative phase builds directly on the results from the quantitative phase' (p. 2). Stake's (1995) concepts of the etic and emic themes permitted us to pursue the study's principal aims (driven by the literature) and issues that emerged from initial statistical analysis and thematic coding of the quantitative and qualitative survey data. The two sets of themes formed the basis of the topics that were discussed in the focus group interviews.

The initial sample came from respondents who had indicated at the end of the survey that they were happy to be contacted by email to take part in follow-up interviews. Through cross-referencing email addresses with the school database, a geographic convenience sample was applied to identify clusters of respondents where it would be possible to arrange face-to-face interviews. Fifty OGs were interviewed, with forty-five contributing through focus group meetings that took place across the UK and five through individual Skype or telephone interviews. Fifteen were female and thirty-five male, with the gender split being fairly equal until the over-60 age categories, which can be explained by the introduction of co-educational provision in 1972. While OGs from all age categories were interviewed, there was a markedly higher response rate from older (and therefore male) respondents, with 73 per cent of respondents aged over 50. Another methodological limitation was that the focus groups with OGs only took place in the UK, thus we were not able to verbally capture the thoughts of alumni based overseas. The findings reported here form part of a larger project that was very much 'real world research' (Robson & McCartan,

2016), and which had to respond pragmatically to the inherent restrictions that reality places on research.

Data analysis of the focus group interviews featured open coding that was both deductive and inductive in nature (see Miles & Huberman, 1994). It was deductive in that certain pre-determined themes (e.g., the influence of the international student community) were intentionally sought. However, inductive themes, not previously highlighted in the original research aims or by the surveys, were developed during the focus group data collection and analysis. Audio recordings of each interview were listened to by the analyst multiple times after the original meeting. Notes were made while listening to these recordings and key quotes were extracted. During this process of what Saldaña (2016) calls 'focused coding', items of interest were aggregated into clusters of themes, which gradually cemented.

Data verification used investigator triangulation, which featured another member of the research team listening to a sample of the interviews, going through their own process of open coding, and comparing findings with the first analyst's findings (which they had not seen prior to listening to the audio themselves) (Bazeley, 2013).

Findings

Major findings are presented by data source. The first section, which deals with the online surveys, outlines the five findings from quantitative data and four findings from qualitative data. The second section features the four key themes from the focus group interviews.

The study's overall key findings from both data sources will be interpreted with appropriate literature in the subsequent section of the paper.

Online survey quantitative findings

The first and most obvious finding is that Gordonstoun's out-of-classroom learning experiences have had an overwhelmingly positive influence on students' personal growth and development. 94% of OGs report that out-of-classroom experiences had a positive influence on their personal growth, with 83% of the total reporting this as a *very* positive influence (see Table 1).

Living in the School's international community was also seen to have had a positive influence on personal growth and development. 83% of OGs felt that this had a positive influence on their personal growth and development, and 63.7% saw this as a very positive influence.

In terms of influence on career, 73.8% of OGs felt that the out of-classroom experiences were a positive influence, with 52% reporting this as *very* positive.

57% of OG respondents felt that out of classroom activities somewhat or definitely enhanced their academic studies, whereas 43% felt that they did not, or that they detracted from their academic studies. This was the most contested issue to emerge from the survey findings and reveals very contrasting viewpoints.

INSERT TABLE 2 HERE

The Table above summarises the percentage of positive responses to questions in the OG's survey. Two prominent results are the very high percentage of positive responses on the influence of OCCs on personal growth and development, and then the decrease in percentage positive responses to about 50% for their influence on academic studies. The low percentage regarding academic studies, which is consistent across age groups and genders, was the most contested issue to emerge from the survey findings and reveals very contrasting viewpoints amongst respondents.

The principle statistical tests were for correlations between respondents' scores on different survey questions. For example, we investigated the degree to which respondents returning a high score on the influence of out-of-classroom experiences on personal growth and development also returned a high score on their enhancement of academic studies. An interesting result from correlations amongst OGs was the strong correlation ($r=0.6$) between the positive influence of the OOCLEs on personal growth and development and on subsequent career path. By contrast, the correlation between the positive influence of these experiences over academic studies and career path is weak ($r=0.2$). These findings imply that the OOCLES have a greater influence over career path through their impact on personal growth and development than through their impact on academic studies.

Other tests we conducted with OGs showed that there was no statistically significant difference between scores from male and female respondents, but within genders there were differences between age groups. The question asking to what degree living in an

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international community influenced personal growth and development revealed the greatest differences between age groups, with more recent alumni feeling that the international community had greater positive influence over personal growth and development. All ages and both genders felt most positive about the influence of the out-of-classroom activities on their personal growth and development, and less positive in response to other questions.

Online survey qualitative findings

Expeditions were cited as being the most powerful and enduring out-of-classroom learning experiences, with just over 200 people mentioning them. Sail Training Voyages (STV), Mountain Rescue service, Fire service and Community service each had more than 50 mentions.

Of the out-of-classroom activities on offer, sports and music were both mentioned more than 100 times as having the least powerful and enduring effect on OGs. The Services (e.g., community service, lifeguarding, conservation, lifeboats), Seamanship, and Drama are each mentioned about 70 times as having the least powerful and enduring effect.

The key features of the out-of-classroom experiences that OGs highlighted as having elicited positive outcomes include having responsibility (n=180), challenge (130), leadership (92), opportunities for independence (94), and Service (77).

A large number of ways that out-of-classroom experiences (and features of them) influenced career pathways were reported. Not all comments were positive, but in general,

most OGs saw a strong relationship between Gordonstoun life and their career path. Some of these comments related to transferable skills or attributes (such as confidence, self-belief, leadership skills, the ability to remain calm, determination through adversity), while others identified direct links to careers in naval and fire and rescue settings. Some respondents also identified that a desire to be involved in community service/volunteering began with out-of-classroom experiences at Gordonstoun.

Focus group interview findings

Analysis of the focus group interview data yielded four principal findings. First, the vast majority of participants valued being impelled into a wide breadth of out-of-classroom opportunities. Most respondents felt that while at school, they were able to find a particular activity or role that they could succeed in or contribute to, which led to a culture accepting of achievement. The breadth and scope of opportunities available was central to facilitating this, as was the encouragement and guidance of staff who knew the pupils across a number of different contexts. Staff members' belief in pupils' capability and their openness to new approaches appeared to provide pupils with a sense of personal agency, which seemed to endure into adulthood.

Various forms of this attitude were mentioned in the focus groups, which, when considered with some of the other themes below, seem to have developed confidence in uncertain situations. One OG commented how one must *'never start a conversation with "no, but..." -- say, "yes, yes I can do that", and just muddle through'*.

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There was near unanimous endorsement in the focus groups of the importance of compulsory out-of-classroom experiences – in particular STV and Expeditions – as a key component of the Gordonstoun experience. Compulsory elements of the broader curriculum also created unexpected opportunities for growth. One student's comment that *'the expeditions, I didn't love, but I love that I've done them'*, shows how many seemed to value being impelled into experiences.

The multi-day Sail Training Voyages stand out as a prime example of an out-of-classroom experience in which not all respondents would have chosen to participate, but which created extraordinary experiences and have left lasting impacts for many. One OG commented that it was *'just one week out of two years, but I think it had a big impact on all of us'*. The intense experience of sharing such a small space and working as a team towards a common goal in challenging situations seems to be significantly enhanced by the mixed selection of crews from across the houses and years.

The second focus group theme revolved around having opportunities to take responsibility and the expectation of developing baseline competences with relatively little instruction. OGs highlighted how the above breadth of activities also creates multiple opportunities for pupils to assume roles with responsibility for others. Expectations of the competence and capability of young people, fostered primarily by staff, had positive impacts on OGs' perceived personal growth and development. Frequent mentions of being *'thrown in at the deep end'* and expected to *'get on with things'* at a reasonable level (sometimes without much prior input) pointed towards the sort of Hahnian pedagogy that was crucial to eliciting many of the reported outcomes.

The 12 different Services and open ketch-based Seamanship sessions provided the most regular examples of this type of learning, while learning arising out of Expeditions seemed to be mainly focused on decision-making skills. To many OGs, Service experiences provided an opportunity to be *'part of the adult world'*, and those who held leadership roles felt lifted by being responsible for the day-to-day operation of certain Services and coordinating large teams of students (e.g., through being Captain of Community Service). Older respondents gave particularly vivid accounts of *'real life'* experiences mediated through Services, such as being involved in Mountain Rescue searches, which had left lasting impacts because they were *'the real deal, because we did get called out'*. The Services were generally viewed in a very positive light, with one OG commenting that he still went looking for opportunities *'to contribute usefully and unpatronisingly to the great problems of the modern world that these experiences inspired me to seek'*.

Former pupils also regularly identified Seamanship and STVs as settings where they were trusted with responsibility beyond what they felt would have been expected of their peers in other educational settings. Multiple participants mentioned the same experience of being at the helm of a yacht alone on night watch, and suddenly realising that *'nobody else was there... you had to do it'*. Effective facilitation of this by staff is clearly essential, as one respondent noted that *'we felt as if we were doing everything, but I'm sure we were closely supervised'*.

Alongside opportunities to make decisions without fear of failure, faith placed in pupils' competence by staff seems to be a significant factor in building self-confidence and self-

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efficacy, which was an outcome widely cited in the focus groups: *'I was suddenly in charge of this whole system, and it was great confidence-building... because I was given the responsibility that I didn't expect'*.

Less dynamic, but equally meaningful experiences resulted from in-school responsibilities, and nearly all participants discussed roles they, as individuals, had within the school community. These have evolved over time, and several people made comments like, *'there was a captain for everything'*, and *'everyone was probably a captain of something at some time'*, but this does not seem to have impacted on the value of clearly defined roles where communication, people management and collaboration skills are learned. Insightful appointment to posts of responsibility was also described as being effective in bringing out untapped potential. One OG remembered a staff member giving a student a new role which *'changed that boy overnight'*.

There was widespread agreement that pupils were regularly exposed to decision-making situations, and many of the examples came from Expedition experiences. Older respondents in particular characterised these skills as being learned *'very much on the spot'*, and the statement, *'What little I learned of leadership skills was really by default, like getting it wrong three times before I got it right kind of thing'*, seems to sum up aspects of learning through direct experience. Old Gordonstounians recounted experiences which suggest that these environments were orchestrated to allow poor decisions to be made without generating feelings of failure.

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The third major theme in the OGs focus groups concentrated on interplay between academic and out of classroom learning. Views on the balance of out-of-classroom experiences and academic work and achievement varied, with many older respondents feeling that the school lacked academic rigour. This led to the perception that they were not actively pushed to achieve in the classroom in the same way as in out-of-classroom experiences. More recently graduated alumni were aware of the fact that they could perhaps have achieved more academically elsewhere, but valued the broader skills fostered by out-of-classroom experiences over exam results. One OG commented that,

what I may have lost in an academic grade or two is more than compensated for in the experiences and life lessons I learned at such an impressionable time in my life.

Some participants (especially more recent graduates) felt that they were always very busy, as they juggled the wide breadth of activity; this was said to have helped developed time management skills.

The fact that the same staff were involved in both academic teaching and out-of-classroom experiences was regularly mentioned as valuable. Old Gordonstounians felt that staff-student relationships were deepened because they were built up over time and through different contexts. Nearly all focus groups spoke of the high amount of time and energy that teachers put into out-of-classroom experiences and how high quality, 'rounded' staff from a broad variety of backgrounds were drawn to the School by opportunities to be involved in extra-curricular opportunities.

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The fourth and final theme from the OG focus groups relates to the way in which the school community and out-of-classroom experiences seem to have a social levelling effect; most former students reported that everyone felt equally accepted and valued, regardless of background or nationality.

The breadth of experiences mentioned in earlier in this section was also observed by OGs as manifest in the student community, which was strongly characterised as socially and internationally diverse (although perhaps to a lesser degree in the 1960s), and egalitarian. In addition to international pupils, scholarship students were identified as an important part of this mix. The nature of this diversity and accepting different 'others' appears to be largely normalised within the school culture, and is an attitude that has been sustained into later life for many OG participants. The majority of focus group members mentioned the ability to '*get on with people from anywhere in the world*' as a Gordonstoun trait, and linked this to interacting through school life with a wide variety of both young people and adults.

Equilibrium seems to be maintained by social structures, such as those provided through student leadership positions, such as in-house 'Captains' and the 'Colour-bearer' system. Indeed, the school's activities, the way they were facilitated, and the ensuing student culture point towards an environment that promotes 'social levelling'. Old Gordonstounians who had held positions of responsibility felt that they were accountable for maintaining Hahn's philosophy of there being '*no gods, no kingpins – the captain of rugby was just someone else*'. According to the female OGs interviewed, equality seems to also have extended to gender from the outset of co-educational schooling, as they all felt that they were treated in the same way as male peers, far more so than after leaving the school.

Discussion

Arriving at a set of overall findings involved pooling themes from the two data sources and then considering which features stood-out as particularly dominant and noteworthy. The central themes presented below are not necessarily derived from the most frequently cited units of data, but have been cemented through an extensive, iterative process of intense and rigorous debate within the research team. These will be interpreted with literature germane to each theme.

Following the study's aims, the key findings can be separated into two categories: student outcomes and the critical elements that elicit these outcomes.

Student Outcomes

There are three major student outcomes that can be directly linked to Gordonstoun's broader curriculum. First, it is undisputable that out-of-classroom learning experiences at Gordonstoun have a powerful and enduring influence on students' personal growth. Second, by facing a wide range of challenges, students learn to 'just get on with it' and become accustomed to 'giving it a go'. And third, students appear to develop a generalised personal confidence and resilience through participation in out-of-classroom experiences, from which they are then able to draw on when facing new challenges – both at Gordonstoun and beyond.

These three principal outcomes are generally consistent with findings from major reviews in outdoor education over the years (e.g., Cason & Gillis, 1994; Hattie et al. 1997; Hans, 2000,

Stott et al., 2013). However, this comparison is not entirely supportable, as the majority of the studies cited have looked at extended, one-off courses. The broader curriculum being presently examined involves a series of shorter expeditions and a wider variety of activities done over several years, at a boarding school. While being mindful of apples and oranges comparisons, one can speculate that the repeated nature of these experiences over a long period of time plays a factor in developing certain moral virtues (see Stonehouse, 2010).

On a slightly less dominant level and in ways that cannot be entirely attributable to out-of-classroom learning experiences, two further interpersonal outcomes emerged. First, most students seem to develop a certain 'interpersonal ease' while at Gordonstoun, in that they feel more comfortable speaking to people they have never met and who might come from a different background. And the second outcome, was that a certain kind of 'social levelling' was apparent, where those possessing varying degrees of economic or symbolic capital were valued by peers on remarkably equal terms at Gordonstoun. Links between both of these points and related literature are not immediately obvious, although Forbes and Lingard's (2015) notion of the 'habitus of assuredness' in Scottish independent schools may be associated with our finding of developing an interpersonal ease and Richmond et al. (2018) found that the 'being away' on expedition together facilitated more level interactions between students.

Critical Elements

There are six specific features of out-of-classroom learning experiences at Gordonstoun that elicit the above student outcomes. First, multi-day journeys such as Expeditions and STVs are regarded as the most powerful elements of Gordonstoun's broader curriculum. The

power of groups being isolated in remote areas is directly supported by one of Beames' (2004) critical elements of expeditions. The inescapability of the journey and inability to rely on anyone but those in the group to make progress on it, are key aspects of this theme. The impacts of this type of experience are also observed in Hattie et al.'s (1997), Raleigh International's (IPPR, 2009), and Takano's (2010) findings, which suggest that significant expedition experiences can have long-lasting effects on participants.

Second, the international mix of students is generally very highly valued. The importance of a diverse expedition group when attempting to elicit more bridging forms of social capital (see Putnam, 2001) is of central importance and also mirrors another of Beames' (2004) empirically-driven themes. While we have identified that the diversity of students is noted by OGs as an important factor, particularly in compulsory out-of-classroom experiences, it should be made clear that this cannot (and should not) necessarily be isolated from the holistic school experience. Drawing on Bourdieu (1984) and Putnam (2001), Forbes and Lingard (2015) and Lingard, Forbes, Weiner, and Horner (2012) argue that independent schools in Scotland represent unique fields where multiple capitals are drawn down and developed to support a habitus (and privilege) representative of a 'global middle class' (Ball, 2010). The value and 'normalcy' of the international mix at Gordonstoun may support this, with the added factor of relatively high numbers of bursary and scholarship-supported students.

Third, the breadth of compulsory out-of-classroom experiences is of critical importance; students must try everything that is part of the Gordonstoun programme, even though they may not want to not like it. In an oft-quoted speech, Hahn (1965) said of the need to

encourage young people towards a wide variety of experience that, 'It is the sin of soul to force young people into opinions – indoctrination is of the devil – but it is culpable neglect not to impel young people into experiences' (p. 3). Importantly, this exposure to a wide range of leisure pursuits (from drama to river kayaking) appears to have led to participants finding specific 'interest-driven' (Wilson-Ahlstrom, Yohalem & Pittman, 2003, p. 4) activities that they wanted to pursue in-depth, in their free time, which the school supported.

The fourth critical element identified is that since many aspects of the broader curriculum are run by academic staff, students and staff interact in multiple contexts. This in turn seems to build strong relationships between them. Again, while Richmond et al. (2018) showed that teacher involvement in outdoor adventure experiences developed more meaningful relationships with students, there is surprisingly little in-depth research specific to boarding school contexts to draw on for understanding of this process. Pfeiffer, Pinguart and Krick (2016) demonstrated that teachers play a more significant role in providing social support for boarding school students than day students, but emphasise the fact that according to their research, 'students from boarding schools (still) perceived their parents and peers as more important sources of support than their teachers' (p. 287, brackets in original). Martin et al. (2014) also note that positive results observed for boarders in relation to adaptive motivation, academic goals and academic buoyancy (Martin & Marsh, 2008), may be attributable to the greater involvement of trained educators in everyday life. Recent research into school residential experiences in the UK show how, just as at Gordonstoun, secondary students and staff felt that being together in a residential setting facilitated building new relationships and developing existing ones (Kendall & Rodger, 2015, p. 11).

The specific and unique role of boarding school staff in students' development is under-researched (Hodges, Sheffield & Ralph, 2016) and, while there have been attempts to develop models to support staff acting *in loco parentis* (e.g., Anderson, 2005), these are necessarily general, as they cover a wide range of residential care and learning settings. It is clear, however, that the human element of the boarding experience, which Anderson classifies as part of the 'environmental component' of his model (p.19), has obvious influence on student experiences, and our findings warrant a more detailed exploration of the specific roles which both students and staff inhabit at various points throughout the learning process.

Fifth, many activities feature students being presented with challenging and unfamiliar situations, and being expected to progress without high levels of direction (but not necessarily without support). This element is highly consistent with foundational educational and psychological literature, such as Dewey's (1916) *indeterminate situation*, Festinger's (1957) *cognitive dissonance*, and with more recent outdoor education adaptations (see for example, Beames & Brown, 2016; Houge Mackenzie, Son & Hollenhorst, 2014; Luckner & Nadler, 1997; Walsh & Golins, 1976).

The sixth element is the importance of providing students with opportunities to take responsibility for themselves and others through official roles, such as captaincies of lost property and parking, and organising and using audiovisual equipment for school events, as well as through leadership opportunities on expeditions and sail training voyages. These occasions where participants take on positions of responsibility and leadership for a limited time are noted in the outdoor education literature (e.g., Gookin & Leach, 2008; Isaak, 2011;

Sibthorp, Paisley, Gookin & Furman, 2008; Richmond et al., 2018) and are an example of a Hahnian pillar that can be incorporated to educational settings of all kinds. Both autonomy and authenticity are central to effective learning in this sort of situation (Beames & Brown, 2016; Bonnett & Cuypers, 2003); indeed, opportunities to take roles of responsibility and leadership, and to immerse oneself in Deweyan-like occupations (Dewey, 1915/1990; DeFalco, 2010), were all cited as key features of out-of-classroom experiences which elicited positive outcomes. American data indicates that students at private day and boarding schools reported having more opportunities for leadership than their peers in state education (TABS, 2003, p. 5).

Conclusions and implications

When single elements of Gordonstoun's broader curriculum are considered together, it is unquestionable that they provide a powerful mix of novel and challenging experiences that demand high levels of resolve in order to overcome. The enculturated expectation that students will 'give it a go' in the face of adversity, and despite initially lacking expertise, appears to be a critical element common to experiences reported as being especially powerful. Activities and positions of responsibility that are perceived to have obvious educational, developmental, and societal aims are valued highest by students. Based on these two dominant themes, it is undeniable that the multi-day journeys -- as experienced through STVs and Expeditions -- play a considerable role in achieving Gordonstoun's aims, as they enable students to develop in a balanced way so that they can be positive citizens in their communities.

As we have shown, there is a very limited body of research related to the experiences and long term influences of out-of-classroom learning, particularly in residential school settings. This research has engaged directly with the experiences of a relatively large sample of former students from a school where the 'broad curriculum' features opportunities for outdoor recreation, expeditions, sail training, service, performing arts and music, amongst other areas. The inquiry provides an insight into some of these under-researched areas, and supports existing literature from the field of outdoor education which emphasises the lasting influence of out-of-classroom experiences, and the importance of appropriate challenge, learner autonomy, authenticity, and supportive communities of staff and peers.

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References

- Anderson, E. (2005). *Residential and boarding education and care for young people: A model for good practice*. London: Routledge.
- The Association of Boarding Schools. (2003). *Boarding experience outcomes: High school, post-college, mid-career, and late-career groups*. Asheville, NC: Author.
- The Association of Boarding Schools. (2013). Study of college progress and outcomes. *TABS Report #5*. Asheville: NC: Author.
- Ball, S. (2010). Is there a global middle class? The beginnings of a cosmopolitan sociology of education: A review. *Journal of Comparative Education*, 69, 135-159.
- Barber, B., Eccles, J., & Stone, M. (2001). Whatever happened to the jock, the brain, and the princess?: Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research*, 16(5), 429-455.

Alumni perspectives on a boarding school outdoor education programme

- Barton, S., Thommasen, H., Tallio, B., Zhang, W. & Michalos, A. (2005). Health and quality of life of aboriginal residential school survivors, Bella Coola Valley, 2001. *Social Indicators Research*, 73(2), 295-312.
- Bazeley, P. (2013). *Qualitative data analysis with NVivo*. Los Angeles; London: SAGE.
- Beames, S. (2004). Critical elements of an expedition experience. *Journal of Adventure Education & Outdoor Learning*, 4(2), 145-157.
- Beames, S. & Brown, M. (2016). *Adventurous learning: A pedagogy for a changing world*. New York: Routledge.
- Bobilya, A., Kalisch, K., Daniel, B. & Coulson, E. (2015). An investigation of participant's intended and actual transfer of learning following an Outward Bound wilderness experience. *Journal of Outdoor Recreation, Education and Leadership*, 7(2), 93-111.
- Bonnet, M. & Cuypers, S. (2003) Autonomy and authenticity in education. In N. Blake, P. Smeyers, R. Smith, R. & P. Standish, P. (Eds), *The Blackwell guide to the philosophy of education* (pp. 326-341). Oxford: Blackwell.
- Bourdieu, P. (1984/2010). *Distinction*. Abingdon, UK: Routledge.
- Bressoux, P. & Bianco, M. (2004). Longterm teacher effects on pupils' learning gains. *Oxford Review of Education*, 30(3), 327-345.
- British Educational Research Association. (2011). *Ethical guidelines for educational research*. London: BERA. Retrieved from: <https://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-Ethical-Guidelines-2011.pdf>
- Brown, M. (2010). Transfer: Outdoor adventure education's Achilles heel? Changing participation as a viable option. *Australian Journal of Outdoor Education*, 14(1), 13-22
- Cason, D. & Gillis, H. (1994). A meta-analysis of outdoor adventure programming with adolescents. *Journal of Experiential Education*, 17(1), 40-47.
- Chawla, L. (2006). Research methods to investigate significant life experiences: Review and recommendations. *Environmental Education Research*, 12(3-4), 359-374.
- Cohen, L., Manion, L. & Morrison, K. (2013). *Research methods in education* (7th ed.). Hoboken, CT: Taylor & Francis.

Creswell, J. & Plano Clark, V. (2011). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.

Daniel, B. (2007). The life significance of a spiritually oriented, Outward Bound-type wilderness expedition. *Journal of Experiential Education*, 29(3), 386-389.

DeFalco, A. (2010). An analysis of John Dewey's notion of occupations: Still pedagogically valuable? *Education & Culture*, 26(1), 82-99.

Dewey, J. (1915/1990). *The school and society*. Chicago: University of Chicago Press.

Dewey, J. (1916/1966). *Democracy and education. An introduction to the philosophy of education*. New York: Free Press.

Duffell, N. (2000). *The making of them: The British attitude to children and the boarding school system*. London: Lone Arrow Press.

Eccles, J., & Barber, B. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research*, 14(1), 10-43.

Elias, B., Mignone, J., Hall, M., Hong, S., Hart, L. & Sareen, J. (2012). Trauma and suicide behaviour histories among a Canadian Indigenous population: An empirical exploration of the potential role of Canada's residential school system. *Social Science & Medicine*, 74(10), 1560-1569.

Emerson, R. (1884). *Lectures and biographical sketches*. Boston/New York: Houghton, Mifflin, and Co.

Farb, A. F., & Matjasko, J. L. (2012). Recent advances in research on school-based extracurricular activities and adolescent development. *Developmental Review*, 32(1), 1-48. doi:10.1016/j.dr.2011.10.001

Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research*, 75, 159-210.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Alumni perspectives on a boarding school outdoor education programme

- Finn, J. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117-142.
- Forbes, J. & Lingard, B. (2015). Assured optimism in a Scottish girls' school: Habitus and the (re)production of global privilege. *British Journal of Sociology of Education*, 36(1), 116-136.
- Fredricks, J. & Eccles, J. (2005). Developmental benefits of extracurricular involvement: Do peer characteristics mediate the link between activities and youth outcomes? *Journal of Youth and Adolescence*, 34(6), 507-520.
- Gass, M. (1999). Transfer of learning in adventure programming. In J. Miles & S. Priest (Eds.), *Adventure programming* (pp. 227–234). State College, PA: Venture.
- Gass, M., Garvey, D., & Sugerman, D. (2003). The long-term effects of a first-year student wilderness orientation program. *Journal of Experiential Education*, 26(1), 34-40.
- Gassner, M. & Russell, K. (2008). Relative impact of course components at outward bound singapore: A retrospective study of long-term outcomes. *Journal of Adventure Education & Outdoor Learning*, 8(2), 133-156.
- Gookin, J. & Leach, S. (Eds.). (2008). *Leadership Educator Notebook*. Lander, WY: National Outdoor Leadership School.
- Gordonstoun. (n.d.). *Ethos and Aims*. Retrieved from: <https://www.gordonstoun.org.uk/ethos-and-aims>
- Hahn, K. (1965). *Outward Bound*. Address at the annual meeting of the Outward Bound Trust. London: Outward Bound Trust. Retrieved from <http://www.kurthahn.org/wp-content/uploads/2016/04/gate.pdf>
- Hans, T. (2000). A meta-analysis of the effects of adventure programming on locus of control. *Journal of Contemporary Psychotherapy*, 30(1), 33-60.
- Hattie, J., Marsh, H., Neill, J. & Richards, G. (1997). Adventure education and outward bound: Out-of-class experiences that make a lasting difference. *Review of Educational Research*, 67(1), 43-87.
- Hodges, J., Sheffield, J. & Ralph, A. (2016). Staff and boarders perspectives of the boarding environment. *Journal of Child and Family Studies*, 25(4), 1045-1056.

Alumni perspectives on a boarding school outdoor education programme

- Holland, A., & Andre, T. (1987). Participation in extracurricular activities in secondary school: What is known, what needs to be known? *Review of Educational Research*, 57, 437–466
- Houge Mackenzie, S., Son, J. & Hollenhorst, S. (2014). Unifying psychology and experiential education: Toward an integrated understanding of why it works. *Journal of Experiential Education*, 37(1), 75-88.
- Hwang, S., Feltz, D., Kietzmann, L. & Diemer, M. (2016). Sport involvement and educational outcomes of high school students: A longitudinal study. *Youth & Society*, 48(6), 763-785.
- Institute for Public Policy Research. (2009). *Rallying together: A research study of Raleigh's work with disadvantaged young people*. London: Institute for Public Policy Research.
- Isaak, J. (2011). Balancing more than backpacks: Communitarian ideas applied to educational expeditions. *Australian Journal of Outdoor Education*, 15(2), 3-12.
- Itin, C. (1997). The impelling principle in challenge by choice. *Rocky: Newsletter of the Rocky Mountain Region of the Association for Experiential Education*, 7(1).
- Kendall, S. & Rodger, G. (2015). *Evaluation of Learning Away: Final report*. Paul Hamlyn Foundation. Retrieved from <http://learningaway.org.uk/wp-content/uploads/LA-Final-Report-May-2015-1.pdf>
- Lingard, B., Forbes, J., Weiner, G. & Horner, J. (2012). Multiple capitals and Scottish independent schools: (re)production of advantage. In R. Catts & J. Allan (Eds), *Social capital, children and young people: Implications for practice, policy and research* (pp. 181-198). Bristol, UK: Policy Press.
- Luckner, J. & Nadler, R. (1997). *Processing the experience: Strategies to enhance and generalize learning*. Dubuque, IA: Kendall/Hunt.
- Marsh, H. & Kleitman, S. (2002). The good, the bad and the non-linear. *Harvard Educational Review*, 72(4), 464-511.
- Martin, A. & Marsh, H. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology*, 46(1), 53-83.

Alumni perspectives on a boarding school outdoor education programme

- Martin, A., Papworth, B., Ginns, P. & Liem, G. (2014). Boarding school, academic motivation and engagement, and psychological well-being: A large-scale investigation. *American Educational Research Journal*, 51(5), 1007-1049.
- McKenzie, M.D. (2000). How are adventure education program outcomes achieved? A review of the literature, *Australian Journal of Outdoor Education*, 5(1), 19–28.
- Miles, M. & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). London: Sage.
- Otto, L. (1975). Extracurricular activities in the educational attainment process. *Rural Sociology*, 40(2), 162-176.
- Otto, L. & Alwin, D. (1977). Athletics, aspirations, and attainments. *Sociology of Education*, 50(2), 102-113.
- Papworth, B. (2014). *Attending boarding school: A longitudinal study of its role in students' academic and nonacademic outcomes*. Unpublished PhD dissertation, The University of Sydney. Retrieved from <https://www.researchgate.net/publication/272681011>
- Pfeiffer, J., Piquart, M. & Krick, K. (2016). Social relationships, prosocial behaviour, and perceived social support in students from boarding schools. *Canadian Journal of School Psychology*, 31(4), 279-289.
- Putnam, R. (2001). Social capital: Measurement and consequences. *Canadian Journal of Policy Research*, 2(1), 41-51.
- Richmond, D., Sibthorp, J., Gookin, J., Annarella, S., & Ferri, S. (2018). Complementing classroom learning through outdoor adventure education: out-of-school-time experiences that make a difference. *Journal of Adventure Education and Outdoor Learning*, 18(1), 36–52.
- Robson, C. & McCartan, K. (2016). *Real world research (4th ed.)*. Chichester, UK: John Wiley & Sons.
- Saldaña, J. (2016). *The coding manual for qualitative researchers*. London: Sage.
- Schaverien, J. (2011). Boarding school syndrome: Broken attachments a hidden trauma. *British Journal of Psychotherapy*, 27(2), 138-155.

Alumni perspectives on a boarding school outdoor education programme

- Scrutton, R., & Beames, S. (2015). Measuring the unmeasurable: Upholding rigor in quantitative studies of personal and social development in outdoor adventure education. *Journal of Experiential Education*, 38(1), 8-25.
- Sibthorp, J., Furman, N., Paisley, K., Gookin, J. & Schumann, S. (2011). Mechanisms of learning transfer in adventure education: Qualitative results from the NOLS transfer survey. *Journal of Experiential Education*, 34(2), 109-126.
- Sibthorp, J., Paisley, K., Gookin, J. & Furman, N. (2008). The pedagogic value of student autonomy in adventure education. *Journal of Experiential Education*, 31(2), 136-151.
- Sibthorp, J., & Richmond, D. (2016). Adventure education: Crucible, catalyst and inexact. In B. Humberstone, H. Prince, & K. Henderson (Eds.), *Routledge international handbook of outdoor studies* (pp. 207–216). New York, NY: Routledge.
- Stake, R. (1995). *The art of case study research*. London: Sage.
- Steel, A., Erhardt, R., Phelps, R. & Upham, P. (2015). Estimates of enhanced outcomes in employment, income, health, and volunteerism for the association of boarding schools member school graduates. *Journal of Advanced Academics*, 26(3), 227-245.
- Stonehouse, P. (2010). Virtue ethics and expeditions. In Beames, S. (Ed), *Understanding Educational Expeditions* (pp. 17-23). Rotterdam: Sense.
- Stott, T., Allison, P., Felter, J. & Beames, S. (2013), Personal development on youth expeditions: a literature review and thematic analysis. *Leisure Studies*, 34(2),197-33.
- Takano, T. (2010). A 20-year retrospective study of the impact of expeditions on Japanese participants. *Journal of Adventure Education & Outdoor Learning*, 10(2), 77-94
- Telford, J. (2010). *Meanings, values, and life course: A study of participants' experiences at a Scottish outdoor education centre*. Unpublished PhD dissertation, University of Edinburgh. Retrieved from www.docs.hss.ed.ac.uk/education/outdoored/synopsis_telford.pdf
- Veevers, N. & Allison, P. (2011). *Kurt Hahn: Inspirational, visionary, outdoor and experiential educator*. Rotterdam: Sense.
- Walsh, V. & Golins, G. (1976). *The exploration of the Outward Bound process*. Denver, CO: Colorado Outward Bound School.

Alumni perspectives on a boarding school outdoor education programme

Williams, A. & Wainwright, N. (2016). A new pedagogical model for adventure in the curriculum: Part two - outlining the model. *Physical Education and Sport Pedagogy*, 21(6), 589-602.

Wilson-Ahlstrom, A., Yohalem, N., & Pittman, K. (2003). *Policy commentary #5: Inside the black box: What is the "content" of after-school?* Washington, DC: Author. Available: www.forumforyouthinvestment.org/comment/ostpc5.pdf.

Wisdom, J. & Creswell, J. (2013). *Mixed methods: Integrating quantitative and qualitative data collection and analysis while studying patient-centered medical home models*. AHRQ Publication No. 13-0028-EF. Rockville, MD: Agency for Healthcare Research and Quality.