

## Building student resilience through first-year Outdoor Adventure residential experience in higher education

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### Background

A primary objective for the Government is to raise and widen participation in higher education and improve the proportion of students who continue into their second year. One in ten students will not continue into Year 2, particularly those from non-traditional backgrounds, making the pursuit of effective remediation in Year 1 especially important for those institutions emphasising widening participation. There are also longer-term consequences; for every five students entering university, one will not complete their studies, leading, in many cases, to suffering from problems like depression, low self-esteem and unemployment in later life (Public Accounts Committee, 2008).

In 2004, a Government-commissioned Review of Research on Outdoor Learning (Rickinson, 2004) called for rigorous, UK-based research to provide deeper insights into the value of adventure education for university students. Our research project has already involved 3,000 incoming Leeds Met students in 2005-07 and explores the enduring impact of induction-based outdoor adventure (OA) experiences on their psychological resilience (personal growth). Such a theoretically-oriented approach aims to provide evidence that can enhance the scope and application of HE pedagogy in enabling new students to fulfil their potential. This paper highlights the design of the project and reports selected findings.

### 'Building' strong young people

Intervention strategies to promote psychological resilience (capacity for psychological maintenance, recovery or improvement following life challenges) will, potentially, be an important feature in helping students to complete their educational programmes with optimal value. To heighten preparedness for their student experience, Carnegie Great Outdoors facilitates OA-based residential experiences that equip all new students in the Carnegie Faculty with the capacity to withstand stressors and develop through their studies.

Consistent with the tenets of positive psychology, our project encourages new students to identify and

evaluate their personal qualities or protective (resilience) factors, irrespective of their backgrounds. Further, we explore practices that encourage them to use and therefore build their personal strengths.

### Types of resilience

Conceptually, resilience comprises ecological, cultural and psychological dimensions (Neill, 2003). Each of these elements helps to provide the detail of how young people might develop personal strengths. For example, *psychological resilience* can be viewed as either an outcome (based on a set of functional responses and adaptations to circumstances and events) or as an ongoing process which ensures adaptation. Research into student retention in higher education (e.g. Cote, 2002; Hammond, 2004; Walker et al, 2004) suggests that *adaptable and endurance resilience* are required to meet the needs of a prolonged challenging environment.

### The use of adventure

Resilience is considered an active process of adaptation, developed from direct exposure to uncertain situations and risk (Luthar and Cicchetti, 2000). Optimising exposure to OA, where challenge is matched to perceived capability, acts as a motivator for positive behaviours. Through carefully managed experiential learning, OA has been associated with heightened markers of resilience (Neill and Dias, 2001) and provides a medium for the development of a range of protective (resilience) factors (Sheard & Golby, 2006; Russell, 2001; Hattie et al, 1997). Some of these outcomes seem not only to be retained over time but increase still further into adulthood.

Unger et al (2004) state that OA programmes positively affect young people through the immediacy of learning and feedback in a natural setting. The authenticity of experience provides the opportunity to develop and demonstrate new competencies, problem-solving, autonomy, helpfulness and other positive attributes associated with resilience (Bunting and Townley, 1999).

### Project overview

Our project is divided into three progressive studies. The *first study* measures the psychological resilience of the incoming student population through self-report questionnaires. Fine-grained biographies also highlight the evolving orientation of student groups. The *second study* explores the processes of personal growth attributable to the residential adventure programmes. Quantitative and qualitative data capture levels of engagement within the OA programme. Our analysis links OA exposure to changes in resilience. The *third study* explores the sustained effects of the residential programmes to wider aspects of achievement. Data drawn at three months identify the enduring and adaptable components of resilience and link them to accepted benchmarks of achievement (attrition rates, course progression and academic attainment).

### Project findings: narrative styles

Life narratives (Frank, 1995) embody issues that reflect qualities associated with resilience, yet little is known about their empirical relationship with resilience. Within our project, students were asked to indicate their narrative style (meaning and purpose given to literature) by the type of story that would best describe their lives at present. (Chaos: "I can describe details but not how things came about or why"; Quest: "I understand my experiences and talk about them to help others"; Restitution: "I can see the problems and know solutions that will work for me."). Focus groups and field interviews explored the immediate impact of experiences during and after the OA programme.

Unexpectedly, resilience changed as much for Chaos students (who represented 10% of incoming students) as for others. OA appears connected to three underpinning resilience themes in students who described their life narrative as being chaotic: cognitive competence ("...learning how to find solutions in different ways"), emotional intelligence ("...learning to accept failure", "I can overcome fears - I feel stronger than I thought I was") and social connectedness ("Struggling helped break down barriers", "Knowing I can ask for help"). We were surprised at this because everyday life lived in

chaos is supposedly permeated by overt and incipient negativity. Yet OA seems to capitalise on a unique blend of "uncertainty with realistic outcomes" to promote adaptive responses.

“Imagine first a lumpy university bed, slanted light coming through a slit between grey curtains, not quite enough Pot Noodles for one week, and a self-imposed set of blinkers focusing your eyes on a spread of frantically annotated texts. A knock on the door which must be ignored because “friends mean failure”; too much fraternising with friends, that is. And imagine also a sweaty grasp on a well chewed biro as the looming clock ticks to a much more sinister 3 o’clock than you’ve ever seen before, and not enough words winding from a sluggish nib.

Hope: hope now that the light coming through the curtains widens and smoothens the crumpled sheets as an unaffected morning begins, a packed bag with a proud essay’s A4 corner gleaming at the edge and a quick coffee with roommates before lectures, discussing the revision you’ll all be doing together later. A cramped study hall with other students you’ve come to know, their ideas holding a familiar quality, each one slightly different; commonplace grown from absurdities. And imagine now, also, the clock ticking onwards to 3 as the last words round off the exam, closing the writing-dented paper and knowing the pleasure of knowing.”

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### Project findings: resilience change

We found by using psychometric measures that there were significant increases across cohorts in psychological resilience immediately following an OA-based residential. Although on some courses females display more consistent comparative increases, this is not significantly different across the Faculty. Follow-up data after three months suggest that resilience scores resume pre-residential levels during the transition to university, although pockets of increased resilience remain. Qualitative data show an overwhelming opinion among students that the induction residential experience is integral to effective transition into university life. Factors identified as facilitating this include the fostering of meaningful peer relationships, interaction with Faculty staff and balancing student expectations with those of the institution. While these data are important, they fall short of providing empirical evidence of *mechanisms of change* following exposure to adventure programmes for students with differing levels of resilience.

Further analysis has succeeded in identifying important elements of the residential experience that can promote personal growth. These include the extent to which students feel in control, act independently and are able to solve problems. These data enable optimum exposure to these factors to be ensured through the design and facilitation of tailor-made programmes by Carnegie Great Outdoors. Logistic regression statistical analysis has been used to identify how specific features of the programme predicted more beneficial levels of resilience for those with low and moderate levels of resilience following the programme. A resulting single factor that led to changes to moderate levels of resilience was being "inspired by the countryside". Every increase in experience of this factor increased the likelihood of being 'moderately' resilient by 55%.

This highlighted the particular value of keeping an open mind about what is going on in OA. With this mindset, regular exposure to natural, inspirational elements of OA residential programmes increases the chances of securing at least moderate levels of resilience.

### Summary

Resilience involves a complex interplay of forces and adaptive qualities necessary for transformation and change. OA residential programmes have helped address many issues highlighted by students as instrumental in their decision to leave first-year courses – lack of social integration and bonding with peers and the institution, low confidence for meeting course demands and lack of preparedness (National Student Survey, 2007). There is still much to be learned from this project. The conceptual fabric of resilience will be tested in respect to its validity as a unitary construct. Retention and achievement profiles are being linked to inductees' resilience data so that they can ultimately be used to predict the performance potential of incoming students, highlighting both needs and qualities that can be built upon. Similar data for students now completing their second and third year programmes are being sought for longitudinal analysis. 'Continuation' OA programmes are being considered for Level 2 and 3 students at key points in their academic cycle. Though the evidence for the effectiveness of these adventure residential programmes is still emerging and students will respond to risk and adversity in different ways, these findings clearly indicate that exposure to adventurous experiences help facilitate personal growth that enables adaptability.

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“As Inog as the frist and lsat letters in a wrod are in the rghit palce, the biarn can uasully raed waht is on the pgae. I sutdy Sorpt Scniene and found Pysochgloy raelly irtetnisng. Lerannig about why we do thngis, waht tehy maen and how inrcidble the biarn is mdae tihs subjct raelly apaelping to me. The aesmessent was jtus an eaxm but beuacse I had so mcuh paisson for the subjct I phsued myslef to do wlel. Haienvg deon a lot of cuoreswrok lsat yae it had been a Inog time snice I had dne an eaxm so I was raelly nrevuos. Pysochgloy is cmopltaiad, wth much to leran, which mdae reivesing hard; hwoveer, uiseng tehcniques sutdeied in my ltceuers and seimanrs form this moedule allwoed me to sdtuty btteer not olny for tihs subjct, but aslo for ohters.

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**Adam Hall**

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