

<b>Institution: University of Bolton</b>		
<b>Unit of Assessment: Psychology, Psychiatry and Neuroscience (A4)</b>		
<b>Title of case study: Boosting Student Wellbeing: Positive Psychology Applications for Dyslexia and Mainstream Groups</b>		
<b>Period when the underpinning research was undertaken: 2015 to date</b>		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Chathurika Kannangara	Assistant Teaching Professor	October 2015 to date
Jerome Carson	Professor	September 2012 to date
Gill Waugh	Dean of the Faculty of Professional Studies and Head of the School of Education and Psychology	January 2003 to date
<b>Period when the claimed impact occurred: 2015 to date</b>		
<b>Is this case study continued from a case study submitted in 2014? No</b>		
<b>1. Summary of the impact</b> (indicative maximum 100 words)		
<p>The research surrounding dyslexia has been reported on in the Frontiers, local news media and at a TedX talk. Findings were presented at the British Dyslexia Association conference (2015), Positive Psychology World Congress (2015). The team delivered workshops in India and a presentation in Sri Lanka. The research garnered interest from the Manchester based charity Mediquip4kids who collaborated with the research team on the Hummingbird Project which delivers a positive psychology intervention course to promote well-being and mental health in students and to encourage the participation of parents for sustainability of self-help techniques.</p>		
<b>2. Underpinning research</b> (indicative maximum 500 words)		
<u>Languishing to Thriving Model</u>		
<p>Through personal narratives of those with dyslexia, the 'Languishing to Thriving' model was developed. This theoretical framework suggests that those with languishing dyslexia face challenges with anxiety, avoidant obstacle-related behaviours, perceive criticisms negatively and engage in self-depreciation when experiencing failure, whilst those thriving; embrace challenges, use signature strengths to overcome, learn from criticisms and persevere when met with failure by finding alternative methods [1]. As a positive psychology intervention (PPI), participants were signposted to the Values in Action (VIA) Strengths Survey, to identify their signature strengths. The host website presents a dyslexia friendly interface; allowing users to alter font type, colour and size [1]. The model uses a PPI to promote 'Desirable Dyslexia' by encouraging people to utilise their signature strengths. The research team used an interdisciplinary approach, which concluded that there is scope for the application of positive psychology to dyslexia [2 &amp; 3].</p> <p>Continuation of this research involved the 'Languishing to Thriving' model being applied to students in general. The framework suggests that the languishing student may experience; fixed mind-set, learned helplessness, focus on weaknesses, low grit and low self-control. Whereas the thriving student may experience; growth mindedness, learned optimism, focuses on strengths, grit and self-control. This research explored the importance of the concept of grit in university students, using a mixed methods approach. Three studies explored traits in undergraduate and postgraduate students which contribute to grit, for example; self-control, mental well-being, life</p>		

satisfaction, feelings of worth, resilience, growth mind-set, perceived stress, and perseverance/time management skills, amongst other. This evidenced the usefulness of measuring constructs such as grit and mental well-being, in reference to student success and academic performance [4].

#### Bolton Uni-Stride scale (BUSS)

The team developed a specific 12 item measure of tenacity (seven items) and self-composure (5 items); two constructs crucial to academic success. The Bolton Uni-Stride scale (BUSS), included items relating to mental health and signature strengths use. The measure evidenced good internal consistency and test-retest reliability. The research team suggests that this measure of academic tenacity will be a more effective measure of academic success than competing measures [5].

Based literature evidencing rising mental health issues in schools, and the efficacy of PPI in secondary schools, the Hummingbird Project as developed; a psychoeducational PPI, delivered to schools in Greater Manchester in collaboration with the charity, Mediquip4kids.

#### Hummingbird Project

Hummingbird Phase One was the pilot study delivered to two schools (n=90). It consisted of 8 weekly, 1 hour sessions and included positive psychology topics. Participants completed the World Health Organisation Five Well-Being Index (WHO-5), Grit Scale (GRIT), Bolton Uni-Stride Scale (BUSS), Children's Hope Scale (CHS) and the purpose made Hummingbird Life Satisfaction Scale (HLSS) questionnaires for pre and post test results, and used work books for class sessions and at home. Hummingbird Phase Two was delivered to 14 schools (n=1054). Sessions were condensed to 6 weekly, 1 hour sessions and GRIT was excluded as an outcome measure. Outcomes evidenced positive changes in mental health, using a pre and posttest design [6].

### **3. References to the research** (indicative maximum of six references)

1. Kannangara, C. S. (2015). From languishing dyslexia to thriving dyslexia: developing a new conceptual approach to working with people with dyslexia. *Frontiers in psychology*, 6, 1976. doi: 10.3389/fpsyg.2015.01976
2. Kannangara, C. S., Griffiths, D., Carson, J., & Munasinghe, S. (2015). The relevance of cybernetics for a positive psychology approach to dyslexia. *Kybernetes*, 44(8/9), 1284-1297. doi: 10.1108/K-11-2014-0270
3. Kannangara, C. S., Carson, J., Puttaraju, S., & Allen, R. E. (2018). Not all those who wander are lost: examining the character strengths of dyslexia. *Global Journal of Intellectual and Developmental Disabilities*, 4(5), 555648. <http://dx.doi.org/10.19080/GJDD.2018.04.555648>
4. Kannangara, C. S., Allen, R. E., Waugh, G., Nahar, N., Khan, S. Z. N., Rogerson, S., & Carson, J. (2018). All that glitters is not grit: three studies of grit in university students. *Frontiers in psychology*, 9, 1539. <https://doi.org/10.3389/fpsyg.2018.01539>
5. Kannangara, C. S., Allen, R. E., Carson, J. F., Khan, S. Z. N., Waugh, G., & Kandadi, K. R. (2020). Onwards and upwards: The development, piloting and validation of a new measure of academic tenacity-The Bolton Uni-Stride Scale (BUSS). *Plos one*, 15(7), e0235157. <https://doi.org/10.1371/journal.pone.0235157>
6. Platt, I. A., Kannangara, C., Tytherleigh, M., & Carson, J. (2020). The Hummingbird Project: A Positive Psychology Intervention for Secondary School Students. *Frontiers in Psychology*, 11, 2012. <https://doi.org/10.3389/fpsyg.2020.02012>

### **4. Details of the impact** (indicative maximum 750 words)

Languishing to Thriving

The 'Languishing to Thriving' model was applied to people with dyslexia and evidenced that the PPI of the VIA strengths survey encouraged users to overcome obstacles using their signature strengths. The model was reported by the local news media, after the manuscript was published (Frontiers in Psychology) and was presented a TedX talk at the University of Bolton.

The VIA strengths survey website was modified to have a dyslexia friendly interface was made available to the general public in 2014, freely accessible for those with dyslexia to utilise (A).

Margaret Rooke published a book named 'Creative Successful Dyslexic (B).' Margaret promoted the book at presentations for dyslexic success in the UK and wrote an article for the BDA, naming Kannangara as a key researcher in the field and citing the initial research. Emails of feedback were received stating how it resonated with and was beneficial for people with dyslexia and how the information had been dispersed by attendees and used by others.

Kannangara was invited to deliver a speech for the British Dyslexia Association (BDA) on "Dyslexia Creates 2019 – a conference in collaboration with the V&A on the creative power of dyslexia and how organisations can capitalise on it," advocating the success of those with dyslexia.

### National and International Engagement

Kannangara and Carson attended a two-day workshop organised by the Department of Psychology, Jain University, Bangalore, India to deliver two sessions on Positive Psychology to staff and students. The first focused on mental well-being and the second on 'Desirable Dyslexia (C).'

Research surrounding positive psychology interventions for grit and well-being, Kannangara gave a presentation on positive psychology interventions in counselling at the International Conference on Applied Psychology (ICAP), Sri Lanka (2017; D).

Three members of the of the Counselling Unit of Brac University (BracU), Bangladesh, (E) attended the workshops and stated that the information included in the workshop would be beneficial for both the client and the organisation when implemented;

*Overall these workshops endorse the skills in counselling practice by applying the approaches of the positive psychology which will be helpful for the person as well as the organization.*

Kannangara and Waugh had an audio interview with faculti.net, an academic and learning platform offering insights from academic and industry experts (F). The focus of the interview was the importance of the concept of grit in university students (2020).

### The Humming Bird Project

After becoming aware of the research team and their topicality, a Manchester based charity named Mediquip4kids, who, "improves the health of babies and children in the UK by providing equipment not available from limited NHS resources," working collaboratively with Child and Adolescent Mental Health Services (CAMHS) made contact. From this, the research team worked in collaboration with organisations to deliver the Hummingbird Project (G). Mediquip4kids received £53,953 in grants to develop, coordinate and deliver the Hummingbird Project collaboratively with the research team.

An evaluation of the Hummingbird project evidenced positive results from the PPI. Hummingbird Phase 1 evidenced a significant increase in wellbeing (WHO-5) but only slight improvement in all other outcomes. In Phase 2, the pre and posttest results evidence a significant, positive change in all outcome measures. Results show that the average child who has taken part in the project has improved wellbeing (WHO-5), improved levels of resilience (BUSS), and increased levels of

hope for the future (CHS). The results from the purpose designed HLSS evidenced an improved understanding of the topics covered [6].

The project was mentioned in the Rudheath Senior Academy head teachers newsletter and commended by Metro Mayor of Greater Manchester Andy Burnham at the opening event as he voiced national concerns stating that (H);

*There's a growing call from young people for more support with their own mental health and wellbeing, their own resilience, to navigate what out there is an increasingly challenging world.*

And in his opinion that is why

*...the Hummingbird Project is so right, so of the moment. It's really answering the call coming from young people.*

Head teachers from the schools involved have given positive feedback and testimonials, explaining how the students have benefited from the project (I).

The next phase of the Hummingbird Project has been funded (J) to deliver the course to primary school students and to develop and disperse resources for parent engagement to encourage the continuity of good mental health, psychoeducation and well-being of all students who participate. Due to the global outbreak the next phase has been delayed and will be continued when it is safe to do so.

#### 5. Sources to corroborate the impact (indicative maximum of 10 references)

- A. <http://www.desirabledyslexia.com/>
- B. <https://www.readersdigest.co.uk/culture/books/meet-the-author/how-one-mother-proved-that-dyslexic-doesnt-mean-dumb>
- C. <http://www.aventure.ac.in/positive-intervention-mental-illnesses/>
- D. <https://www.yamu.lk/event/positive-psychotherapy-in-counselling>
- E. <https://www.bracu.ac.bd/news/workshop-attendance-4th-international-conference-applied-psychology-colombo-sri-lanka-2017>
- F. <https://faculti.net/all-that-glitters-is-not-grit/>
- G. <https://www.medequip4kids.org.uk/projects/hummingbird-project/>
- H. <http://www.mancunianmatters.co.uk/content/211177110-manchester-based-charity-medequip4kids-reveal-10-children-aged-five-16-suffer>
- I. School Testimonials
- J. Mediequip4kids Funding Evidence and Testimonial