THE UNIVERSITY OF HULL

The transition from College to University: A feasibility and exploratory study of the role of compassion during this transitional period.

being a Thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology

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By

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Overview

This portfolio thesis consists of three parts: (1) a systematic literature, (2) an empirical report and, (3) supporting appendices.

Part one is a systematic literature review evaluating the literature regarding interventions targeting domains of wellbeing and adjustment in first year undergraduate student populations. A systematic search of databases identified thirty studies. A narrative synthesis of the findings was produced alongside the methodological quality of the articles. The implications of the review and directions for future research are discussed.

Part two is an empirical report describing a mixed methods study. The qualitative element explored the experiences of students who had recently transitioned to University in relation to compassion. While a quantitative aspect aimed to explore the feasibility and impact of delivering an online compassion-based intervention to college students transitioning to University. The impact of the intervention on flow of compassion, subjective wellbeing and mood in students was measured, while written responses from participants identified benefits and barriers to accessing and completing the intervention. The findings are discussed and implications for future research proposed.

Part three consists of the appendices which support the systematic literature review and the empirical report. The appendices also include a reflective statement which focuses on the research process and an epistemological statement.

Total Word Count: 24,268 (excluding references, tables, and figures)

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Part 2: Empirical Paper

Part 1: Systematic Literature Review

This paper is written in the format ready for submission to the Journal of Social and Clinical Psychology.

Please see Appendix C for Guidelines for Authors.

Total word count: 7,963 (excluding references, tables, and figures)

Interventions targeting domains of wellbeing and adjustment in first year undergraduate student populations: A Systematic Literature Review.

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Abstract

INTRODUCTION: Mental health problems are on the rise amongst University student populations. Studies indicate that psychological wellbeing declines once students start University compared to levels pre-entry. Therefore, task forces, recommendations from research, and literature exploring wellbeing and adjustment in first year students suggest that a proactive and preventative approach would be beneficial. The aims of this review were to identify the domains of wellbeing and adjustment that have been measured in intervention studies specifically aimed at undergraduate students in their first year of study at University, as well as the impact of these interventions on the domains measured.

METHODS: A systematic search of the literature was conducted using the electronic databases: Academic Search Premier, CINAHL Complete, Education Research Complete, ERIC, MEDLINE, and APA PsycINFO. Twenty-three studies were identified. A hand search of reference lists identified a further seven studies. In total thirty studies were synthesised using a narrative approach.

RESULTS: Domains of wellbeing and adjustment varied widely between the included studies, with the most common domains being stress, coping, resilience, anxiety, and depression. A variety of interventions were delivered which fell into six groups: (1) psychosocial/psychoeducational approaches, (2) mindfulness-based interventions, (3) yoga and relaxation techniques, (4) cognitive-based interventions, (5) creative approaches, and (6) mentoring programmes. Quality of the included studies was also reviewed.

DISCUSSION: The findings provide some evidence to support the use of a range of interventions for symptoms of anxiety, depression, and ways of coping. However, the heterogenous nature of the domains targeted, the measures used, and the interventions delivered make it difficult to make direct comparisons and therefore further research is required before conclusive statements about effectiveness can be made.

Introduction

Student wellbeing in the UK

Mental health problems are on the rise amongst University student populations (Thorley, 2017; Pereira et al., 2020). While it is widely thought that level of mental distress is similar in students to that in the general population (Macaskill, 2013), some studies have found that university students have higher distress (Stallman, 2010), anxiety, depression, and stress (Larcombe et al., 2016) compared to the general population.

The largest study into university student mental health in the UK found that 42.3% of students had experienced an emotional, behavioural, or mental health problem for which they sought professional support; this was an increase of 8% from the year prior (Pereira et al., 2020). Deaths by suicide in student populations have also been on the rise (Office for National Statistics, 2016). In 2015, there was an increase of 79% in number of student suicides compared to 2007 (Pereira et al., 2020). While the number of mental health problems disclosed to academic institutions have increased by five times over the last decade (Thorley, 2017) and students have increasingly been seeking support with a 68% rise in counselling service users at Russell Group Universities since 2011 (Sandeman, 2016), it would appear there are still barriers to students accessing the support they need. A survey from Unite (2019) found that only 53% of students disclosed mental health difficulties to their University, with more than three-quarters reporting that they had concealed their difficulties from those around them for fear of stigmatisation.

Student wellbeing internationally

Although student wellbeing is clearly an area of concern in the UK, it is also an international issue. In a national survey of US undergraduates, 10% reported they had seriously considered suicidal action (American College Health Association, 2006) and in a survey of US

counselling centres, 86% reported increases in students with psychological problems (Gallagher, 2005). However, in a more recent study, less than 25% of students that met criteria for a mental health difficulty had sought treatment (Blanco et al., 2008). Whilst there is relatively little research into student stress until the 1990's (Humphrey et al., 1998), after this time, there was a wave of research into undergraduate stress levels across the world. Research conducted in Canada (Adlaf et al., 2001), Turkey (Guney et al., 2010) and Australia (Stallman, 2010) found that student mental distress is higher than that in the general population.

Wellbeing and adjustment in University students

Research into changes in student wellbeing throughout the course of an undergraduate degree has found that psychological wellbeing declines once students start University compared to levels pre-entry (Cooke et al., 2006; Bewick et al., 2010; Conley et al., 2014).

One reason this population may be at an increased risk of experiencing difficulties with their mental health is, in part, due to the typical age range of this group. Over 80% of full-time undergraduates are between the ages of 18-25 (Higher Education Statistics Agency, 2016); around 75% of adults experience the first symptoms of mental health problems before the age of 25 (Thorley, 2017). Students also have a multitude of stressors to contend with such as academic pressures (Ryan et al., 2010) and financial concerns (Jessop et al., 2005), as well as living away from home, forming new friendships and finding their identity as a student (Scanlon et al., 2007).

While it is clearly important to research wellbeing and adjustment in university students due to the psychological impact of distress discussed earlier in the review, there are also additional consequences of poor wellbeing. A study by Halamandaris and Power (1999) identified a relationship between positive and negative affect and adaptation to University. It

has also been shown that students higher in cheerfulness will have higher self-assessments of their academic abilities and outcomes (Nickerson et al., 2011). Additionally, a relationship between wellbeing and academic aspirations (Nickerson et al., 2011), engagement (Chamorro-Premuzic & Furnham, 2003), attendance (Trice et al., 2000), achievement (Borrello, 2005; Vaez & Laflamme, 2008) and dropout rates (Svanum & Zody, 2001; Frisch et al., 2005) has been found in University students.

The first year of University

While the wellbeing of University students in all years of undergraduate study is important, the current literature review specifically looks at wellbeing and adjustment in first year students. This is because research has shown that following the initial transition to University, first year students show increased levels of anxiety (Cooke et al., 2006), as well as increased mental health distress and absent-mindedness (Fisher & Hood, 1987).

A concerning percentage of students struggle to adjust to University (Lowe & Cooke, 2003) with wellbeing being lower in first year students than in the general population (Roberts & Zelenyanski, 2002). It is thought that these students may be at greater risk of mental distress as they have recently been exposed to the stress of transitioning to University and are simultaneously undergoing the transition from adolescence to adulthood (MacKean, 2011). It is also argued that first year students may have higher stress levels as they have not yet developed effective coping strategies and an adequate level of autonomy compared to students in higher years (Verger et al., 2009).

Further studies have identified that early experiences at University influence the attitudes, behaviour, skills, and knowledge students develop which then impact their adjustment into University education (Woosley, 2003; Krause & Coates, 2008). A study from Tinto (1993) also found that the success of the initial transition affects academic achievement, with 75% of

students who left University attributing this to problems in their first year of study. Additionally, intensive study in the first year of an undergraduate degree is a key predictor for course completion (Tumen et al., 2008). Students who successfully adjust to University in the first six months of study report greater wellbeing, experience less psychological distress and achieve higher grades (Bailey & Phillips, 2016). Therefore, it would follow that interventions aimed at supporting wellbeing and adjustment in first year students would have benefits for both psychological wellbeing and academic achievement.

Response and Recommendations

As concern around the mental health of students has grown, task forces have been formed and research studies have started publishing recommendations and suggestions for how to tackle this problem.

One such initiative came from the American Psychiatric Association (APA) in 2005 when they set up a Task Force on College Mental Health. The task force aimed to provide advice, encourage research and treatment programs. While in New Zealand, The Tertiary Wellbeing Aotearoa New Zealand (TWANZ) Network supports initiatives promoting student and staff health and wellbeing (TWANZ n.d.).

In the UK, the UK Healthy Universities Network (Healthy Universities, 2017) published the Okanagan Charter for Health Promoting Universities and Colleges which asked Universities to "incorporate health promotion values and principles into their mission, vision and strategic plans" (Okanagan Charter, 2015). The Universities UK Framework was developed to encourage Higher Education facilities to put in place a whole university approach to mental health. It set out eight key areas to focus on: leadership, data, staff, prevention, early intervention, support, transitions, and partnership (Universities UK, 2020).

Recommendations in the literature suggest that Universities should improve links between the university and external mental health providers and increase students' awareness of existing support services (Storrie et al., 2010). Hartley (2010) suggests that Higher Education facilities should provide counselling support, academic support, and academic accommodations. While many Universities do provide support services for students, this resource is often underutilised by students in need (Rosenthal & Wilson, 2008; Morris, 2010). Despite this, demand for such services is rising leading to longer waiting times (Browne et al., 2017). Due to this, a systematic literature review into stress reduction interventions aimed at University students recommends that Universities focus on preventative interventions to ensure that they reach a higher percentage of students and are not simply relying on students to access support when they require it (Regehr et al., 2013).

The current review

Previous reviews exploring the effectiveness of interventions aimed at University students have focused on students across all years of undergraduate study. Findings suggest that cognitive, behavioural, and mindfulness-based interventions, are all effective at reducing symptoms of anxiety in this population (Regehr et al., 2013).

Mindfulness-based interventions have been shown to be effective at preventing depressive symptoms in University students (Ma et al., 2019) and at reducing distress, anxiety, depression, rumination and increasing well-being and mindfulness compared to inactive controls (Dawson et al., 2019).

Additionally, computer-delivered, and web-based interventions can reduce depression, anxiety and stress in students compared to inactive controls (Davies et al., 2014).

Finally, interventions aimed at increasing mental health literacy in students and staff found that such interventions do improve attitudes towards providing help but are not effective at reducing stigma or increasing help seeking behaviour (Lo et al., 2018).

The literature therefore indicates that a range of interventions can be effective in supporting wellbeing and adjustment in University students. However, as has previously been discussed, task forces, recommendations from research and literature exploring wellbeing and adjustment in first year students suggests that a proactive and preventative approach would be beneficial. To the best of the researchers' knowledge, the current literature review is the first to explore the effectiveness of interventions specifically aimed at undergraduate students in their first year of study at University on wellbeing and adjustment.

For the purpose of this systematic literature review, the definition of subjective wellbeing (SWB) will be adopted whereby 'wellbeing' refers to level of satisfaction with life and life domains and associated wellbeing states (i.e., positive, and negative affect; Diener and Ryan 2009). 'Adjustment' is harder to define but will generally be thought of as the ability an individual possesses to make changes to help them do better in a new situation (Merriam-Webster, n.d.).

The review aimed to answer the following questions:

1. What domains of wellbeing and adjustment have been targeted and measured in intervention studies for first year undergraduate students to date?
2. What impact did the interventions have on wellbeing and adjustment?

Method

Search Strategy and Sources

Scoping searches were carried out to ascertain that there was no existing review of the literature in this area using the search terms ("mental health" or stress* or anxiet* or depress*

or "well-being" or "well being" or "emotional health" or "psychological health" or "mood") AND (universit* or "higher education" or college* or fresher* or freshman or student* or undergrad*) AND (intervention* or therap* or treatment* or strateg* or train* or cope or coping). Search terms and strategies were adapted based on these initial searches.

A systematic review of the literature was carried out between May and June 2020 across a range of electronic databases to include papers from psychological, educational, medical, and social research areas. Search terms were systematically entered into the EBSCO interface to search Academic Search Premier, CINAHL Complete, Education Research Complete, ERIC, MEDLINE and, PsycINFO.

Selection Criteria

Search Terms

Search terms were selected based upon the questions being asked and relevant key words found in databases, abstracts, and article titles during the initial scoping searches. Search terms used for a title search were:

- T1("mental health" or stress* or anxiet* or depress* or "well-being" or "well being" or "emotional health" or "psychological health" or "mood")

AND

- (("first year" or "fresher*" or "freshman" or "undergrad*" or "year one") N4 (universit* or "higher education" or college* or student*))

AND

- (intervention* or therap* or treatment* or strateg* or train* or cop*)

AND

- ("transition*" or "chang*" or "adjust*" or "progress*").

Search Limits

The following search limiters were applied in the EBSCO interface to increase the frequency of papers returned that met inclusion criteria:

- Papers published in peer reviewed publications.
- Papers published after the year 2000, as this was when the Guidelines on Student Mental Health Policies and Procedures for Higher Education (Committee of Vice Chancellors & Principals (CVCP), 2000) was published.
- Papers written in the English Language.

Inclusion Criteria

- The study reports an intervention.
- Participants are first year undergraduate students.
- A domain of wellbeing or adjustment is measured/explored.
- Articles are from peer reviewed journals.

Exclusion Criteria

- Not reported in the English language.
- Review or discussion papers.
- Participants are not in their first year of undergraduate study or outcomes obtained are not clearly reported in relation to undergraduate year.
- No intervention reported or the intervention focuses exclusively on physical health.

For the purposes of this review, domains of wellbeing and adjustment encompass both positive and negative states.

Article Selection Summary

Duplicates (n=498) were removed, and titles and abstracts (n=718) were assessed using the inclusion and exclusion criteria with non-compliant papers being rejected (n=690). The full text of the remaining articles (n=28) was assessed and papers satisfying the criteria were included in the review (n=23). Reference lists of the accepted papers were searched for additional relevant literature yielding seven further studies. A summary of the article selection process can be found in Figure 1 which resulted in thirty articles being selected for inclusion in the review.

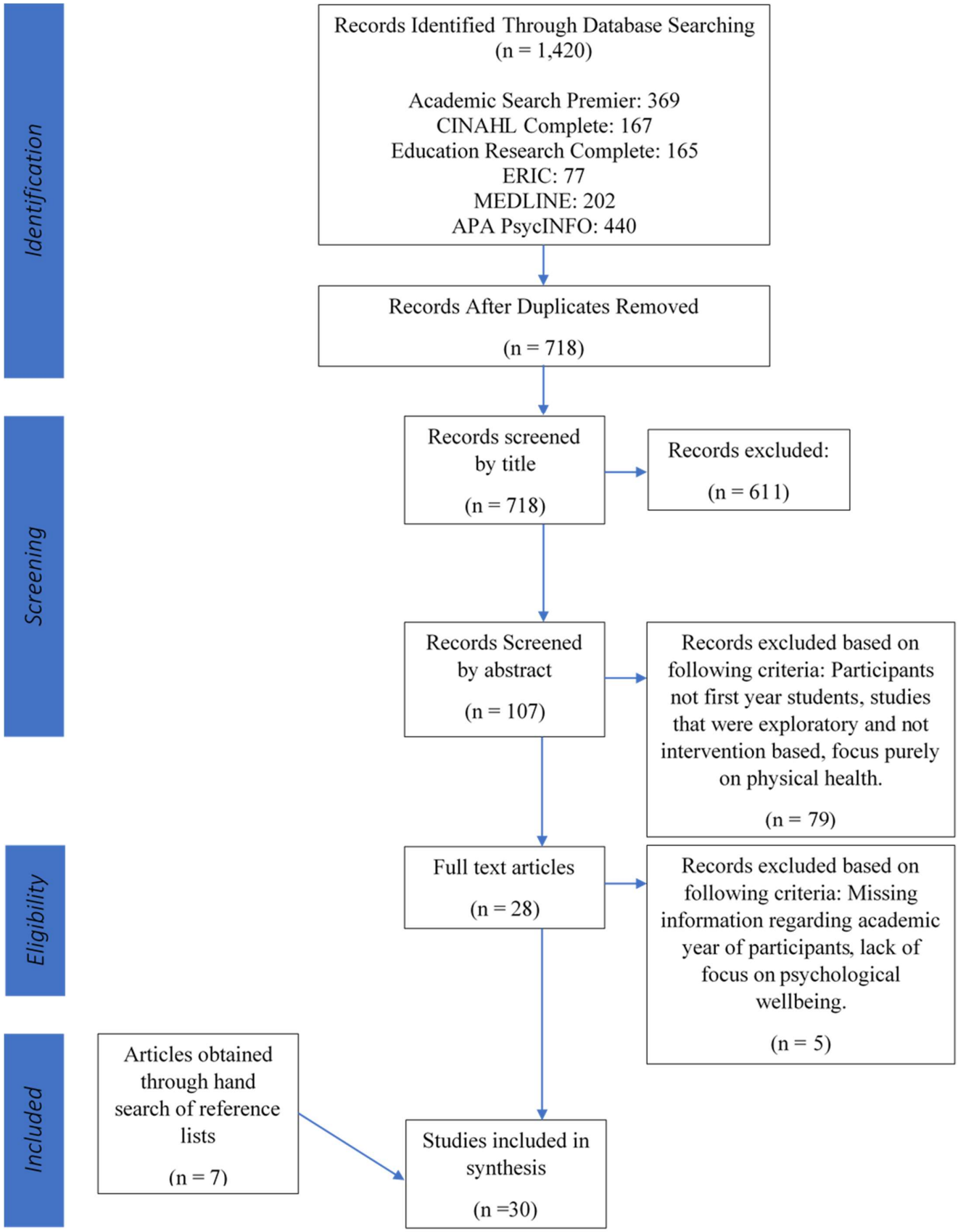

Figure 1: PRISMA flow diagram of the article selection process (Moher et al., 2009).

Data Extraction

To ensure consistency of data extraction a pro-forma was designed (Appendix D). Information regarding the aims, sample, time points, intervention, design, methodology, measures, and outcomes were extracted from each study.

Quality Assessment

To assess the quality of the articles included in the review, a methodological quality assessment was completed for each article. Due to the variation in study designs of papers included in the review (qualitative, quantitative, and mixed methods), the Mixed Methods Appraisal Tool (MMAT; Hong et al., 2018) was used. The tool is presented in Appendix E. The assessment questions utilised in the MMAT have three possible responses: yes (Y), no (N), or can't tell (CT); as Hong et al. warn against the use of overall scores, number of responses (Y, N, CT) for each article were calculated. Studies were not excluded from this review based on checklist scores; reflections on quality will form part of the synthesis.

Due to the judgement making involved in the critical appraisal of the included studies, it is recommended that independent reviewers are involved in the process. Inter-rater reliability was assessed by two independent reviewers. The second reviewer reviewed five (16.67%) of the included studies. One paper reached 100% inter-rater agreement (Deveci & Ayish, 2017). The overall inter-rater reliability score was 85.71%. Where differences in opinion occurred, this was discussed, and an agreement was reached in all cases. Results are presented in Table 1.

Table 1. *Quality Assessment Summary Table.*

Category of study designs	Methodological quality criteria	Allison et al. (2019)	Bai et al. (2020)	Booker et al. (2017)	Brady et al. (2018)	Conley et al. (2013)	Demir et al. (2014)	Deveci et al. (2017)	Dvořáková et al. (2017)	Dyrbye et al. (2017)	Erogul et al. (2014)	Everett (2017)	Gill et al. (2004)	Hsieh (2011)	Hunt et al. (2019)	Jadhav et al. (2009)
Screening questions (for all types)	S1. Are there clear research questions?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	S2. Do the collected data allow to address the research questions?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Further appraisal may not be feasible or appropriate when the answer is 'No' or 'Can't tell' to one or both screening questions.															
1. Qualitative	1.1. Is the qualitative approach appropriate to answer the research question?							Y				Y				
	1.2. Are the qualitative data collection methods adequate to address the research question?							Y				Y				
	1.3. Are the findings adequately derived from the data?							Y				Y				
	1.4. Is the interpretation of results sufficiently substantiated by data?							Y				Y				
	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?							Y				Y				
2. Quantitative randomized controlled trials	2.1. Is randomization appropriately performed?		Y	Y	Y				Y		Y					
	2.2. Are the groups comparable at baseline?		Y	Y	Y				Y		Y					
	2.3. Are there complete outcome data?		Y	C	Y				Y		CT					
	2.4. Are outcome assessors blinded to the intervention provided?		CT	N	N				N		N					
	2.5 Did the participants adhere to the assigned intervention?		Y	N	CT				N		N					
3. Quantitative nonrandomized	3.1. Are the participants representative of the target population?	N				CT	N			Y			CT		CT	CT

	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?	Y				Y	Y			Y			Y		Y	Y
	3.3. Are there complete outcome data?	Y				CT	Y			N			N		Y	CT
	3.4. Are the confounders accounted for in the design and analysis?	CT				Y	N			N			Y		N	N
	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?	Y				Y	Y			Y			Y		Y	CT
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the research question?															
	4.2. Is the sample representative of the target population?															
	4.3. Are the measurements appropriate?															
	4.4. Is the risk of nonresponse bias low?															
	4.5. Is the statistical analysis appropriate to answer the research question?															
5. Mixed methods	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?													Y		
	5.2. Are the different components of the study effectively integrated to answer the research question?													Y		
	5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?													Y		
	5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?													Y		
	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?													Y		

Category of study designs	Methodological quality criteria	Laureano et al. (2014)	Mahfouz et al. (2018)	Mc Sharry et al. (2016)	McCarthy et al. (2018)	Mishra et al. (2015)	Onan et al. (2019)	Park et al. (2017)	Ramasubramanian (2017)	Ramler et al. (2016)	Reynolds et al. (2011)	Robertson et al. (2019)	Roy et al. (2019)	Trockel et al. (2011)	Van der Riet et al. (2015)	Yüksel et al. (2019)
Screening questions (for all types)	S1. Are there clear research questions?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	S2. Do the collected data allow to address the research questions?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Further appraisal may not be feasible or appropriate when the answer is 'No' or 'Can't tell' to one or both screening questions.															
1. Qualitative	1.1. Is the qualitative approach appropriate to answer the research question?		Y										Y		Y	
	1.2. Are the qualitative data collection methods adequate to address the research question?		Y										Y		Y	
	1.3. Are the findings adequately derived from the data?		Y										Y		Y	
	1.4. Is the interpretation of results sufficiently substantiated by data?		Y										Y		Y	
	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?		Y										Y		Y	
2. Quantitative randomized controlled trials	2.1. Is randomization appropriately performed?							Y			Y	Y				
	2.2. Are the groups comparable at baseline?							Y			Y	Y				
	2.3. Are there complete outcome data?							N			Y	N				
	2.4. Are outcome assessors blinded to the intervention provided?							N			Y	N				
	2.5 Did the participants adhere to the assigned intervention?							Y			Y	Y				

3. Quantitative nonrandomized	3.1. Are the participants representative of the target population?	CT		CT	CT		CT			Y				CT		CT
	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?	Y		Y	Y		Y			Y				Y		Y
	3.3. Are there complete outcome data?	CT		N	Y		N			Y				Y		CT
	3.4. Are the confounders accounted for in the design and analysis?	Y		N	N		N			N				N		N
	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?	Y		Y	Y		Y			Y				Y		Y
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the research question?															
	4.2. Is the sample representative of the target population?															
	4.3. Are the measurements appropriate?															
	4.4. Is the risk of nonresponse bias low?															
	4.5. Is the statistical analysis appropriate to answer the research question?															
5. Mixed methods	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?					Y			Y							
	5.2. Are the different components of the study effectively integrated to answer the research question?					Y			Y							
	5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?					Y			Y							
	5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?					Y			Y							
	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?					Y			Y							

Data Synthesis

Studies included in the review were heterogenous, varying in design, measurements of wellbeing and adjustment, and methods of analysis, therefore meta-analysis was not appropriate. Narrative synthesis was applied to answer the research questions. Popay et al. (2006) describe narrative synthesis as a "form of storytelling". They identify four key aspects of the narrative synthesis process: (1) developing a theory of how the intervention works, why and for whom; (2) presenting a preliminary synthesis of findings; (3) exploring relationships in the data; and (4) assessing how robust the synthesis is. Data was extracted using the pro-forma (Appendix D), and key information was collated. Interventions were categorised by their type, summarised, and critiqued in a narrative format. The studies fell into six groups based on the type of intervention delivered: (1) psychosocial/psychoeducational approaches, (2) mindfulness-based interventions, (3) yoga and relaxation techniques, (4) cognitive-based interventions, (5) creative approaches, and (6) mentoring programmes.

Results

Overview of Included Studies

Key Findings

Thirty studies from a range of sources met inclusion criteria and were included in the review (for a summary of characteristics of the included studies see Table 2). The origin of the studies included in this review is limited; while the papers reported studies conducted across the world, most of the research was American (n = 16).

Most studies employed a quantitative methodology (n = 23), of these the most common design was experimental pre-post-test (n = 8) or randomised control trial (RCT; n = 8). Seven

studies used a quasi-experimental approach. The remaining studies adopted either a qualitative methodology (n = 5) or a mixed methods approach (n = 3).

Most studies delivered the intervention face-to-face (n = 23). Sample size varied across studies from 14 (Van der Riet et al., 2015) to 676, which was split across two studies in one paper (Brady et al., 2018). 3,110 participants were recruited in total across the studies.

Nearly all studies recruited participants once they had commenced their first year of undergraduate life with only one paper recruiting participants before making the transition to University (Park et al., 2017). Most students were recruited from existing cohorts i.e., classes, seminars, sports teams, or halls of residence, with only six studies recruiting through adverts, posters, information lectures etc.

The students studied a range of subjects; however, the majority were Medical, Nursing or Midwifery students. Other subjects studied included Psychology, Engineering, Naturopathy and Yogic Sciences, Physical therapy, Public liberal arts, and Veterinary science. Some students had enrolled in specific seminars. Eight studies did not report the subject studied by participants.

The age range of participants varied widely between studies. When an explicit age range or mean/average age was reported, this often fell into the typical age range for students (18-25; Higher Education Statistics Agency, 2016). The widest age range reported was 19-53 (Van der Riet et al., 2015).

Table 2. *Summary Table for Key Findings of Reviewed Papers*

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
Allison et al. (2019)	To assess the use of progressive muscle relaxation as a stress reduction technique.	N=101 USA	Subject and year: First year Veterinary students. Age: 20-41. M = 23.62, SD = 3.1172. Gender: 92 Females, 9 Males.	Progressive muscle relaxation (PMR). The PMR exercise lasted approximately 10 minutes.	Design: Non-experimental, pre-post. Method: The course lasted 8 weeks with one eighth of the class attending the course each week; therefore, each student attended the class once.	SR; SRSI3	All had significant improvements in basic relaxation and stress. Females also had significant improvements in mindfulness post PMR.	Y=5 N=1 CT=1
Bai et al. (2020)	To test the effect of a mindfulness intervention on moment levels of family and occupational stress, negative emotion, rumination, and interference.	N=52 (split between experimental and control condition) USA	Subject and year: Subject not reported, first year students. Age: 83% were 18 years old. Gender: 65% were Female.	'Just Breathe'-Mindfulness training programme. Sessions focused on body, thought and emotion awareness, reduction of self-judgments, and integration of mindfulness practice in daily life. Each session	Design: Experimental (RCT) Method: Random allocation to condition. Within each condition, half were randomized to complete EMAs. Experimental condition: eight 80-minutes group sessions delivered over 6 weeks.	SR; EMAs reporting on family, school or work stress, negative emotion, rumination, and interference up to four times a day for ten days.	All reported higher levels of negative emotion, rumination, and interference when experiencing higher than usual levels of family/occupational stress. Experimental group showed stable levels of emotion regulation responses to	Y=6 N=0 CT=1

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
				included opening mindful movement, short thematic presentation, activities, group discussions, and group mindfulness meditation practice. Audio recordings of guided meditations with practice of skills at home.	Logs of mindfulness practice kept each week.		family stress compared to controls. Emotion regulation responses to school or work stress did not differ by condition.	
Booker et al. (2017)	To compare the effects of two expressive writing interventions on students' adjustment during the college transition.	N=161 USA	Subject and year: Mixed subject areas, first year students. Age: 17-41. M=18.71, SD=2.40. Gender: 69.6% were Female, 30.4% were Male.	Expressive writing. Emotion-disclosing writing (EDW) condition asked to: "write about your very deepest thoughts and feelings about an extremely important emotional issue that has affected you and your life". Gratitude-focused	Design: Experimental (RCT) Method: Random assignment to daily writings in EDW, GFW, or no writing (control) condition for four days. Pre-, post, and one month follow up.	OR; LIWC SR; I-PANASSF SR; Writing Study Questionnaire SR; CAT SR; SWLS SR; CES-D SR; GQ-6 SR; SHS SR; RRS SR; RSDS (Amount and Honest-Accuracy subscales)	EDW condition: increased over time in self-disclosure. Increases in positive affect and decreases in depressive symptoms. Wrote longer, used more cognitive insight words, reported more negative affect following writings, and reported writings	Y=4 N=2 CT=1

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
				writing (GFW) condition asked to: "cultivate a sense of gratitude [and] think about the many things in your life, both large and small, that you have to be grateful about."			being more personally revealing. GFW condition: increase in life satisfaction. Used more positive emotion words and had a greater ratio of positive emotion words to total emotion words.	
Brady et al. (2018)	To understand the effect of a reappraisal intervention on test anxiety.	245 Ps in Study 1. 431 Ps in Study 2. USA	Subject and year: Both studies included mixed years Psychology students. Age: Not reported. Gender: Study 1-64% Females, 34% Males, 1% transgender or genderfluid. Study 2-58% Females, 42% Males.	Minimal reappraisal message embedded in an email.	Design: Experimental (RCT) Method: Study 1-Emotionality, worry, and knowledge of how to perform well was examined. Study 2-The night before the first exam in the course, students received an e-mail	SR; Study 1: Emotionality, worry and how strongly students felt they knew how to perform well on the exam assessed. SR; Study 2: Emotionality and worry assessed. OR; Score on Exam 1. OR; Overall performance in the course.	Study 1: First-year students experience greater test anxiety and are less certain about how to perform well. Study 2: Reappraisal message condition showed decreased worry and increased performance on the exam, as well as increased performance in	Y=5 N=1 CT=1

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
					with a standard or reappraisal message embedded. Measures were appended to the last page of the exam.		the course overall. Females showed greater emotionality and worry than males.	
Conley et al. (2013)	To evaluate the effectiveness of a psychosocial wellness promotion program.	29 in experimental condition. 22 in control condition. USA	Subject and year: First year students enrolled in a Promoting Psychosocial Wellness seminar or a Global Citizenship seminar. Age: M = 18.40 Gender: 65% Female	Psychosocial wellness seminar. Delivered through didactic instruction (readings and informational presentations), journal entries in class activities, skills practice, and out-of-class skills practice.	Design: Quasi-experimental. Method: Intervention lasted two semesters, weekly for 50 minutes. Measures administered the week prior to the intervention and at the end of the course (8 months later).	SR; GSE SR; RSES SR; CD-RISC SR; ADHS SR; SWLS SR; MAAS SR; ERQ SR; ATQ-P SR; DASS SR; PSS SR; DAS-A SR; SACQ SR; ICSRLE SR; Relationship satisfaction. SR; Perceived Improvements. SR; Student-rated skills practice OR; Facilitator-rated skills practise OR; Attendance	Experimental: no significant difference in psychosocial adjustment or stress management but significantly greater perceived improvements over the course of the intervention, in psychosocial adjustment and stress management. Greater attendance in the experimental condition predicted greater benefits at the end	Y=5 N=0 CT=2

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
							of the course.	
Demir et al. (2014)	To examine the effect of a mentoring program on mentees' ways of coping with stress and locus of control, as well as their views on the mentoring program.	N=66 Turkey	Subject and year: First year Nursing students. Age: 17-26 Gender: 92.4% were Female.	Mentoring program. Mentors (fourth year students) trained for 1 day on the mentoring program, coping with stress, and communication. Mentors had weekly meetings with mentees.	Design: Non-experimental, pre-post. Method: The mentoring program lasted for 14 weeks.	SR; LCS SR; WCI SR; Mentoring Assessment Form	Internal locus of control and active coping with stress increased pre- to post-intervention. Reported benefits from the mentoring program.	Y=5 N=2 CT=0
Deveci et al. (2017)	To identify the effect of a transition programme on students' wellbeing.	N=80 United Arab Emirates.	Subject and year: First year Engineering students. Age:18-23. M = 19. Gender: All Male.	The Freshman Year Experience program (FYE). Based on three Ss: Success, Skill and Socialize. 'Success' aims at helping students make a smooth transition to university life. 'Skills' provides students with opportunities to develop the skills necessary for	Design: Qualitative. Method: Written examination to reflect on seminar readings and class discussions in relation to FYE experiences. Writing exam papers were analysed, coded and the frequencies and	SR; Reflective writing exam papers.	Experienced many types of wellbeing during the FYE program: meetings with advisors, workshops, and social and volunteer activities. Self-confidence, self-awareness, and ability to communicate effectively were also positively affected.	Y=7 N=0 CT=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
				academic success. 'Socialize' offers social activities designed specifically for students.	proportions of emerging themes determined.			
Dvořáková et al. (2017)	To evaluate the effectiveness and feasibility of mindfulness training on students' health and wellbeing.	55 Ps in experimental condition. 54 Ps in control condition. USA	Subject and year: Subject not reported, first year students. Age: M=18.2, SD=.4 Gender: 72 Females, 37 Males.	Just BREATHE (JB)- A mindfulness-based wellness programme. See Bai et al. (2020) for further information on intervention.	Design: Experimental (RCT) Method: 8 sessions over 6 weeks. Each session lasted 80 minutes. Baseline measures completed before random allocation to experimental or waitlist control condition. Measures were completed following the intervention.	SR; PHQ SR; GAD SR; SWLS SR; MAAS SR; SCS SR; SCC-R SR; CS SR; PSQI SR; Alcohol use. SR; YAAPST SR; LAQ	Experimental: Significantly lower levels of depression and anxiety and significantly higher levels of life satisfaction compared to controls. Reported learning a wide variety of new practices and ideas, would recommend the programme. Mindfulness, self-compassion, social connectedness, and compassion were not significantly different between the groups.	Y=5 N=2 CT=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
Dyrbye et al. (2017)	To determine whether a required longitudinal stress management and resilience course improves wellbeing.	54 in cohort 1 51 in cohort 2 USA	Subject and year: First year medical students. Age: Cohort 1-<25=77.1%, 25–30=16.7%, 31–35=4.2%, ≥36=2.1%. Cohort 2-<25=79.5%, 25–30=18.2%, 31–35=2.3%, ≥36=0.0%. Gender: Cohort 1 58.3% Female; Cohort 2 59.1% Female.	Stress Management and Resilience Training (SMART) Program. Delivered through formal teaching, discussion, and small group sessions. Practice between sessions encouraged.	Design: Non-experimental, pre-post. Method: 12 hours of training for cohort 1 and 10 hours of training for cohort 2. Students were also offered two 30-minute individual meetings.	SR; MBI SR; SF-8 SR; PSS SR; CD-RISC SR; Happiness and Gratitude Scale SR; IRI (cognitive and emotive subscales)	Mental QOL worsened, stress scores increased and, happiness declined in both cohorts. Cognitive and emotive empathy declined in cohort 1. No statistically significant changes were seen in burnout or resilience. Reported that sessions were valuable but should have been optional.	Y=5 N=2 CT=0
Erogul et al. (2014)	To determine whether mindfulness based stress reduction can improve wellness.	28 in experimental condition. 30 in control condition.	Subject and year: First year Medical students Age: Intervention M=23.6, Control M=23.3%. Gender: Intervention 42.9% were Female;	Mindfulness based stress reduction (MBSR). Teaching about the experiential practices of mindfulness-based meditation, body	Design: Experimental (RCT) Method: 75 minutes/week for 8 weeks. Measures were	SR; PSS SR; RS SR; SCS	Experimental: significant increase in self-compassion post-intervention and 6 months later. Reduction in stress at the	Y=4 N=2 CT=1

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
		USA	Control 48.3% were Female.	scan, and breathing-based yoga, as well as understanding stress and how to manage reactivity. Encouraged to practise guided meditation and self-guided meditation for 20 minutes/day at home. Attended a full day mindfulness retreat.	completed pre-, and post-intervention and at 6 months follow-up.		conclusion of the study, but not at 6 months. There were no differences in resilience after the intervention.	
Everett (2017)	To help students make a successful transition to college using visual narratives.	N=53 USA	Subject and year: First year liberal arts students. Age: Not reported. Gender: Not reported.	Visual narratives. Visual narratives telling the story of first year experiences which were presented to the wider class.	Design: Qualitative. Method: The project was introduced, and sample visual narratives were shown. Students presented three weeks later. Reflection papers were written	SR; Visual narratives and reflection papers.	Visual narratives highlighted issues with food/diet/exercise, living arrangements, social engagement, and academic demands. Reflection papers: The project was reported as	Y=7 N=0 CT=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
					expressing thoughts and feelings about the process of creating the visual narrative and what was taken away from the experience.		enjoyable, different from other assignments, and academically and socially engaging. Students gained support and realised that they were not alone in what they were feeling and experiencing.	
Gill et al. (2004)	To test the multi-process theory by exploring the effects of Benson's relaxation method and progressive relaxation on state anxiety.	N=76 Australia	Subject and year: First year Physical Therapy students. Age: 17-29. M =19.2 years, SD=1.9. Gender: 46 Females and 30 Males.	Benson's relaxation method or progressive relaxation. Delivered via pre-recorded audiocassettes. Progressive relaxation: 45 s of contraction and 30 s of relaxation on nine different muscle groups throughout the body.	Design: Non-experimental, pre-post. Method: While one group completed the progressive relaxation intervention, the other group completed Benson's relaxation. 1 week later, relaxation interventions were reversed. Both interventions	SR; CSAI-2 (questions modified to apply to a student population)	Both relaxation techniques were effective in reducing cognitive and somatic anxiety, and elevating self-confidence. There were no significant differences between the effects of either technique.	Y=5 N=1 CT=1

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
				Benson's relaxation method: Focus on breathing, form a mental picture of this, and say in their minds the word ''relax''.	lasted 16 minutes.			
Hsieh (2011)	To investigate the effect of a group physical activity intervention and peer support program for stressed students.	37 in experimental condition. 40 in control condition. Taiwan	Subject and year: First year Nursing students. Age: M=21.32, SD =.50. Gender: All Females.	Physical activity intervention and peer support program. Experimental group divided into groups. Each group encouraged to design their own physical activities. Group discussions: encouraged to express feelings while participating in the program and to develop stress coping strategies and self-awareness of stress.	Design: Mixed Methods. Method: Selected students with moderate or severe levels of stress. Random allocation to condition. 16 weeks with physical group activity for 30 minutes three times/week. After eight weeks a 1-hour group discussion took place.	SR; Stress questionnaire developed for study. SR; Semi-structured questionnaires guided group discussions.	Level of stress was statistically decreased in the experimental group. Self-reported that attitudes had changed because of the intervention, felt more comfortable and had become more assertive to resist and overcome stress.	Y=7 N=0 CT=0
Hunt et al. (2019)	To evaluate a Mental Health	N=71 UK	Subject/year: First year Psychology students.	'Transitions'-A PDF document aiming to increase	Design: Non-experimental, pre-post.	SR; Transitions evaluation measurement tool	Increase in mental health literacy scores from pre-	Y=5 N=1

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
	Literacy (MHL) resource.		Age: 18-20 = 96%. 21-23 = 4%. Gender: 84% female, 15.5% male.	MHL. Addressed budgeting, study skills, sexual health, social media use etc. As well as mental health, common mental illnesses, and substance use.	Method: Measures completed via an online survey. Between measurement points (1week apart) a PDF copy of 'Transitions' to read was emailed.	SR; MHLS	to post-intervention. As well as self-reported improved mental health knowledge, decreased stigma and increased help-seeking intent.	CT=1
Jadhav et al. (2009)	To explore if a Yoga Intervention influenced state and trait anxiety and subjective wellbeing.	N=50 India	Subject and year: First year Naturopathy and Yogic Sciences students. Age: All 19-20. Gender: 25 Females, 25 Males.	Yoga Intervention. No further details provided.	Design: Non-experimental. Method: Measures were administered in the beginning of the academic year and a second time after a gap of one year.	SR; STAI SR; SUBI	A significant decrease in both state and trait anxiety levels and an increase in subjective wellbeing was found.	Y=3 N=1 CT=3
Laureano et al. (2014)	To determine personal, academic, and sporting needs, and, to evaluate the effectiveness of an experiential-	41 in experimental condition. 32 in needs analysis (7 in focus group, 28	Subject and year: First year Rugby players. Age: Intervention-M=18.90, SD=0.30. Needs analysis (focus group)- M=22.14, SD=1.86. Needs analysis (essays)- M=22.96,	Experiential-learning programme. Covered motivation, goal setting, time management, coping with injuries, emotion-	Design: Quasi-experimental. Method: Needs Analysis-Focus groups and essays described challenges faced and suggested content for the	SR; CSE SR; FORQ SR; AFM-2	Experimental group outperformed controls in terms of problem-focussed coping, dealing with negative emotions and thoughts, obtaining support	Y=5 N=0 CT=2

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
	learning programme.	in essays group). South Africa	SD=1.63. Gender: Not reported.	focused coping and getting into the 'zone'. Material was covered via worksheets, discussions, case studies and workbooks.	intervention. Consisted of six 1-hour sessions over two weeks. Measures completed before and 1 month after the intervention.		from family and friends, as well as overall happiness.	
Mahfouz et al. (2018)	To evaluate a mindfulness-based wellness programme.	N=26 USA	Subject and year: Subject not reported, first year students. Age: Not reported. Gender: 24 were Female; 2 were Male.	Just BREATHE (JB)- A mindfulness-based wellness programme. See Bai et al. (2020) for further information on intervention.	Design: Qualitative. Method: 8 sessions. Researchers observed two sessions at different times and recorded observations. Pre-and post-intervention, individual and focus group interviews were conducted. 6 month-1 year follow up individual and	SR; Interviews and focus groups. OR; Observations.	Pre-intervention interviews: difficulties in adapting to college life were identified. JB was found to provide coping strategies to combat common stressors and may help address underlying causes of stress. Changes in several areas: improved organization and time management, commitment to a	Y=7 N=0 CT=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
					focus group interviews also took place.		healthy lifestyle, improved emotional awareness and relationships, and self-compassion.	
Mc Sharry et al. (2016)	To evaluate the impact of a health and wellbeing course on health outcomes.	49 in experimental condition. 49 in a control condition. Ireland	Subject and year: First year Home Economics (control) and Nursing (intervention) students. Age: Intervention- 17-43. M = 22.08. Control- 17-28. M =18.7. Gender: Intervention- Female = 44; Male = 5 Control- Female = 45; Male = 1	'Health and Well-Being'-A new course in the University. Included knowledge on aspects of physical activity, healthy eating, and psychological wellbeing. As well as practical workshops and motivational interviewing workshops.	Design: Quasi-experimental. Method: Intervention was embedded in the undergraduate nursing curriculum, delivered over 32 hours for a three-month period. Measures completed pre (T1)-and post (T2)-intervention and at a follow-up (T3) one year later.	SR; Health behaviours questionnaire. SR; WHO-5 SR; IPAQ-short version OR; BMI	Experimental: Statistically significant difference in IPAQ scores, improvements not maintained long-term. As well as statistically significant improvement in psychological wellbeing scores. Increase in mean BMI scores from T1 to T2 in the comparison group.	Y=4 N=2 CT=1
McCarthy et al. (2018)	To evaluate the impact of a psycho-educational intervention.	N=197 Ireland	Subject and year: First year nursing and midwifery students taking a communication/psychology module.	'Coping with Stressful Events'-A psycho-educational intervention.	Design: Non-experimental, pre-post. Method: Delivered over a	SR; CIQ	Mean scores were lower post-intervention for restraint and mental disengagement,	Y=5 N=1 CT=1

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
			Age: 17–19 years =69.3%, 20–25 years =15.7%, 26–30 years =8.4%, > 30 years =6.6%. Gender: 91.5% Female.	Focused on stress and the stress response (psychoeducation and mindfulness activities) and coping strategies (psychoeducation, identification and implementation and reflective exercises).	four-month period (fourteen hours) via small group tutorials, lectures, and reflective assignments.		and higher for use of emotional and instrumental social support indicating improved coping strategies. Females scored higher on religious coping, socially supported, and venting of emotions, while males scored higher on humour.	
Mishra et al. (2015)	To explore the impact of a Neo-Rogerian Counselling intervention on perceived stress.	N=40 (10 provided with interventio n) India	Subject and year: Subject not reported, first year students. Age: M =16.17, SD = 0.25 years. Gender: Not reported.	Neo-Rogerian Counselling. Both group and individual counselling was provided. The group counselling was provided in two sessions followed by individual counselling for two sessions.	Design: Mixed methods. Method: Pre-screening identified students with high stress and low perceived quality of life. These individuals were invited for Neo-Rogerian Counselling. Post counselling	SR; Stress Scale (developed by authors) SR; QOLPAV	Qualitative and quantitative results suggest counselling had a significant role in changing stress perceptions. Post counselling scores on perceived quality of life showed significant increase.	Y=7 N=0 CT=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
					behaviour was explored and examined 15 days after the end of the counselling.			
Onan et al. (2019)	To evaluate a stress coping course on psychological resilience.	N=78 Turkey	Subject and year: First year Nursing students. Age: M = 18.88. Gender: 94.9% Females.	A stress coping course. Focused on concepts of stress and stressors, physiology of stress, work stress and burnout, coping concepts, and coping methods. Taught using lectures, question-answer, experience sharing, warm-up games, homework, and role play techniques.	Design: Non-experimental, pre-post. Method: Students signed up to a "stress coping" course in their first year. The course was 2 hours/week.	SR; Stress Self-assessment Checklist SR; RSA	No statistically significant difference in incidence of stress symptoms was found. A statistically significant increase was found on the self-perception and social resources subscales on the PRQ. An increase in stress symptoms caused a decrease in psychological resilience.	Y=4 N=2 CT=1
Park et al. (2017)	To explore the effects and feasibility of using stress-management	16 in experimental condition. 18 in	Subject and year: Subject not reported. Students recruited before starting University, intervention provided after	Cognitive-behavioural stress management (CBSM) or Yoga. CBSM: Basic	Design: Experimental (RCT) Method: Random allocation to	SR; PAR-Q SR; DASS-21 SR; DERS SR; BSCS SR; MAIA SR; Sexual risk-	No significant within- or between-group differences in stress, depression, anxiety, sexual	Y=5 N=2 CT=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
	interventions.	control condition. USA	transition. Age: M=18.31. Gender: All Female.	stress-management techniques, coping skills, cognitive techniques for stress management, and relaxation skills. Yoga: Brief overview of yogic theory and techniques, meditation, diaphragmatic breathing, warm-up exercises, gentle to moderate yoga postures, and a relaxation practice.	CBSM or Yoga. Interventions conducted for eight twice-weekly 60-minute sessions. Measures administered pre-, and post-intervention (8 weeks), as well as at a follow-up (4 months later).	taking behaviour. SR; Motivation to avoid exercising. SR; Intake of fruits, vegetables, and dietary fat. SR; PPAQ OR; Resting blood pressure. OR; BMI OR; Muscle strength and endurance. OR; Flexibility. OR; Balance. SR; Perceived helpfulness/relevance of intervention.	risk taking, exercise related avoidance, fruit consumption, or vegetable consumption. Statistically significant within-group differences observed in self-regulation, emotion dysregulation, and interoceptive awareness. Yoga intervention rated as more helpful in general, than the CBSM intervention.	
Ramasubramanian (2017)	To understand the underlying mechanisms by which mindfulness communication leads to adaptive	19 in experimental condition. 43 in control condition. USA	Subject and year: Intervention-First year students in a mindfulness communication course. Control-Mixed years students in a standard communication course. Age: Intervention-M =	Mindfulness course. Critical thinking about mindfulness through three main areas: physical, mental, and emotional/social wellbeing.	Design: Quasi-experimental. Mixed methods. Method: 40 minutes/week for 14 weeks.	SR; PSS SR; CISS SR; Journals	Experimental: Post-test stress levels were lower than pre-test stress levels. Controls: Post-test stress levels were higher than pre-test stress levels.	Y=7 N=0 CT=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
	stress coping in a seminar setting.		18.12; SD = 0.332. Control-M = 20.54; SD = .682. Gender: 10 Females, 41 Males.	Delivered through self-reflexivity, small group discussion, journaling, and experiential activities. Detailed journals of mindfulness practices were kept every day for a one-week.			In both conditions, levels of avoidance coping were significantly higher than pre-test. Mindfulness practice helped students relax, sleep better and be calmer about handling stressful situations.	
Ramler et al. (2016)	To examine the efficacy of an adapted mindfulness-based stress reduction intervention in fostering adjustment.	30 in experimental condition. 32 in control condition. USA	Subject and year: Intervention: enrolled in a First Year Seminar (FYS). Control: drawn from Intro Psychology courses. All first-year students. Age: Mean =18. Gender: 40 Females, 22 Males.	Mindfulness-based stress reduction (MBSR). Intervention involved discussion, reading assignments and training and practice in a variety of mindfulness-based meditation and yoga techniques. A day-long weekend retreat was also offered.	Design: Quasi-experimental. Method: Intervention lasted 8 weeks. Each session lasted 2 hours. Measures were completed before and after the course. After completing the measures, students were provided with	OR; Diurnal salivary cortisol samples. SR; SACQ SR; FFMQ (Experimental Ps only)	Experimental: Higher scores on the Personal-Emotional Adjustment subscale, on the SACQ. Significantly lower cortisol levels upon awakening, as well as 30 min after awakening, compared to controls. Significant improvements on the observing	Y=6 N=1 CT=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
					tubes to collect salvia samples the following morning.		facet, describing facet, and the nonreactivity facet on the FFMQ.	
Reynolds et al. (2011)	To explore the impact of Brief Behavioral Activation Treatment for Depression within a standard college orientation program on depression and alcohol use.	37 in experimental condition. 34 in control condition. USA	Subject and year: Subject not reported, first year students. Age: M=17.91 years, SD = 0.53. Gender: 54.3% Female.	Brief Behavioral Activation Treatment for Depression (BATD). Activity monitoring was assigned and reviewed. Involved identifying values and life goals and planning activities in line with these. A behavioural checkout form monitoring, and planning activities was completed.	Design: Experimental (RCT) Method: Random allocation to one of four groups (two experimental, two control). Experimental: received the same programme as controls BATD activities added. Both programmes were 2 hours/week for 15 weeks. Measures completed at the beginning, middle, and end of the course.	SR; Depression Subscale of the DASS-21 SR: AUDIT	Problem drinking was significantly reduced in the experimental condition and largely unchanged in the control condition. No difference was observed in depression scores.	Y=7 N=0 CT=0
Robertson et al.	To examine	N=90	Subject and year: First	Expressive Writing	Design: RCT.	SR; BDI-II	Those with	Y=5

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
(2019)	the role of expressive writing in the reduction of depression symptoms and on the number of physician visits related to illness.	USA	year Psychology students. Age: M=18.26 years, SD = .73. Gender: 86.67% were Female.	(EW). Instructed to write about deepest thoughts/feelings about coming to college e.g., leaving friends, family, high school, or about adjusting to a new social and academic world. 20 minutes provided to complete this task.	Method: Randomly assigned to EW condition or control condition (writing about any object or event of their choosing). Responses were divided into two groups based on initial depression scores (one group with minimal symptoms, and a second group with mild/moderate/severe symptoms). Experimental: completed 3 consecutive days of writing, and two follow-up visits (one month and six months post-intervention).	SR; Physical Illness visits per month. OR; LIWC	mild/moderate/severe BDI-II scores in the EW condition demonstrated significant decreases in depression symptoms and fewer physician visits over the study period, while controls did not. No changes in depression and physical illness visits were found for those with minimal symptoms of depression.	N=2 CT=0
Roy et al. (2019)	To evaluate a wellbeing workshop.	N=251 UK	Subject and year: First year Medical and Nursing students.	Wellbeing workshop. Included three	Design: Qualitative. Methods: Over six	SR; Written evaluation form.	The interprofessional aspect of the workshop and the	Y=7 N=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
			Age: Not reported. Gender: Not reported.	sessions (self-care, empathy, and communication).	afternoons, students rotated through the three sessions. On completion of the workshop, written evaluation and take- home messages were collected and thematically analysed.		practical tools imparted were positively evaluated. Take-home messages highlighted the need to integrate well- being into the curricula. Students concluded that 'simple acts of care' to self and to others were essential for the maintenance and improvement of wellbeing.	CT=0
Trockel et al. (2011)	To examine the effects of a self-help program (Refresh) to improve sleep, on sleep quality and symptoms of	58 in experimental condition. 67 in an active control condition. USA	Subject and year: Subject not reported, first year students. Age: 18=99. 19-22=26. Gender: 61 females, 64 males.	'Refresh'-A cognitive behavioural self-help program. Focused on (1) the physiology of sleep; (2) relaxation training; (3) mindfulness training; (4)	Design: Quasi-experimental. Method: Interventions delivered in 8 weekly sessions, sent via e-mail messages with attached PDF files.	SR; PSQI SR; CES-D	Among students with poor sleep at baseline, participation in Refresh was associated with greater improvements in sleep quality and greater reduction in depressive	Y=5 N=1 CT=1

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
	depression.			stimulus control strategies; and (5) cognitive strategies to reduce the impact of maladaptive thoughts about sleep. The equal length comparison program, (Breathe) focused on reducing depressive symptoms and improving coping skills for stress.	Measures completed pre-and post-intervention.		symptoms than participation in Breathe. Among students with high sleep quality at baseline there was no difference in baseline to post-intervention changes in sleep or depressive symptom severity.	
Van der Riet et al. (2015)	To explore the impact of a stress management and mindfulness program on stress reduction.	N=14 Australia	Subject and year: First year Nursing and Midwifery students. Age: 19-53. Gender: All Female.	Stress management and mindfulness programme. Each session involved a didactic and an experiential component. Encouraged to practice the exercises regularly at home in between formal sessions.	Design: Qualitative. Method: Intervention was comprised of a 1-hour session/week for seven weeks. Following the intervention an hour long semi-structured focus group interview	SR; Semi-structured focus group interview.	Three main themes were generated: attending to self, attending to others, and attending to program related challenges. Data indicated a positive impact on sleep, concentration,	Y=7 N=0 CT=0

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)
					was conducted.		clarity of thought and a reduction in negative cognitions. Challenges related to timetabling, program structure and venue.	
Yüksel et al. (2019)	To determine the effect of a mentoring program on adjustment to university and ways of coping with stress.	44 in experimental condition. 47 in control condition. Turkey	Subject and year: First year Nursing students. Age: Intervention M=18.72; Control M=18.40. Gender: Intervention 63.6% Female; Control 61.7% Female.	Mentoring programme. Covered acquaintance and group awareness, life in University city, University and its features, communication skills, stress and its effects, stress and coping, and evaluation/termination of the programme.	Design: Quasi-experimental. Method: 10 fourth year mentors were identified. They were provided with 10 hours of training. Mentors then provided eight sessions of the peer mentoring program to the mentees. Measures completed pre- and post-intervention.	SR; AUS SR; WCI	Experimental: Post-test mean scores of AUS statistically higher than the control group. Also scored higher at post-test on optimistic and seeking social support approaches. Overall, the mentoring program influenced self-confidence, optimism, seeking social support, submissive, and helpless approaches.	Y=4 N=1 CT=2

First author (year)	Aims	Sample size and location	Sample characteristics	Intervention	Methodology	Measure(s)	Main Findings	Quality rating (number of Y/N/CT responses)

SR: Self-Report; OR: Other Report

For further details on measures and associated references, see Table 3**.**

Quality rating: Number of Yes (Y), No (N) and Can't Tell (CT) responses are presented.

Domains and measures of wellbeing and adjustment

Most studies administered self-report measures to capture outcomes (n = 22), while others used a mixture of self-report and other recordings (n = 8). Most studies included validated measures, however a large proportion (n = 18) reported outcomes from a measure created by the authors for the purpose of the research. Additionally, the domains and measures selected to report outcomes were largely inconsistent across the included studies. See Table 3 for further details.

Table 3. *Domains and measures used across the included studies.*

Domain	Measure	Reference for measure	Included studies using the measure
Adjustment	CAT (College Adjustment Test)	Pennebaker et al., 1990	Booker et al., 2017
	SACQ (Student Adjustment to College Questionnaire)	Baker & Siryk, 1984	Conley et al., 2013 Ramler et al., 2016
	AUS (Adjustment to University Scale)	Akbalık, 1997	Yüksel et al., 2019
	*Perceived Improvements: Psychosocial Adjustment	N/A	Conley et al., 2013
Stress	PSS (Perceived Stress Scale)	Cohen & Williamson, 1988	Conley et al., 2013 Dyrbye et al., 2017 Erogul et al., 2014 Ramasubramanian., 2017
	The Stress Self-Assessment Checklist	DasGupta, 1992	Onan et al., 2019
	SRSI3 (The Smith Relaxation States Inventory)	Smith, 2010	Allison et al., 2019
	*EMAs (Ecological Momentary Assessments) using items adapted from validated measures	N/A	Bai et al., 2020
	*Stress Scale	N/A	Mishra et al., 2015
	*Stress Questionnaire	N/A	Hsieh., 2011
	Diurnal salivary cortisol samples	N/A	Ramler et al., 2016
Stress & Adjustment	ICSRLE (Inventory of College Students' Recent Life Experiences)	Kohn et al., 1990	Conley et al., 2013
	*Perceived Improvements: Stress Management	N/A	Conley et al., 2013
Burnout	MBI (Maslach Burnout Inventory)	Maslach et al., 1996)	Dyrbye et al., 2017
Coping	WCI (Ways of Coping Inventory)	Folkman & Lazarus, 1984	Demir et al., 2014 Yüksel et al., 2019
	CSE (The Coping Self-Efficacy Scale)	Chesney et al., 2006	Laureano et al., 2014
	FORQ (The Fortitude Questionnaire)	Pretorius & Heyns, 1998	Laureano et al., 2014
	CIQ (COPE Inventory Questionnaire)	Carver et al., 1989	McCarthy et al., 2018

Resilience	CD-RISC (Connor-Davidson Resilience Scale)	Campbell-Sills & Stein, 2007	Conley et al., 2013 Dyrbye et al., 2017
	RS (Resilience Scale)	Wagnild & Young, 1993	Erogul et al., 2014
	RSA (Resilience Scale for Adults)	Friborg et al., 2003	Onan et al., 2019
Coping & Resilience	CISS (Coping Inventory for Stressful Situations)	Endler & Parker, 1990	Ramasubramanian., 2017
Psychological wellbeing	SUBI (Subjective Well-being Inventory)	Sell, 1994	Jadhav et al., 2009
	AFM-2 (Affectometer-2)	Kammann & Flett, 1983	Laureano et al., 2014
	WHO-5 (Well-being Index)	Bech et al., 2003	Mc Sharry et al., 2016
	*Measure of emotionality, worry and belief in own ability	N/A	Brady et al., 2018
Anxiety	GAD-7 (Generalized Anxiety Disorder Scale)	Spitzer et al., 2006	Dvořáková et al., 2017
	*Adapted CSAI-2 (Competitive State Anxiety Inventory-2)	Martens et al., 1990	Gill et al., 2004
	STAI (State-Trait Anxiety Inventory)	Spielberger et al., 1970	Jadhav et al., 2009
Depression	CES-D (The Center for Epidemiologic Studies Depression Scale)	Radloff, 1977	Booker et al., 2017 Trockel et al., 2011
	PHQ (The Patient Health Questionnaire)	Spitzer et al., 1999	Dvořáková et al., 2017
	BDI-II (Beck Depression Inventory, 2nd Edition)	Beck et al., 1996	Robertson et al., 2019
Anxiety & Depression	DASS-21 (Depression, Anxiety and Stress Scale)	Lovibond & Lovibond, 1993	Conley et al., 2013 Park et al., 2017 Reynolds et al., 2011
Positive & Negative Affect	I-PANAS-SF (International Positive And Negative Affect Schedule-Short Form)	Thompson, 2007	Booker et al., 2017
Happiness	SHS (Subjective Happiness Scale)	Lyubomirsky & Lepper, 1999	Booker et al., 2017 Dyrbye et al., 2017
Emotion Regulation	BSCS (Brief Self-Control Scale)	Tangney et al., 2004	Park et al., 2017
	DERS (Difficulties in Emotion Regulation Scale)	Gratz & Roemer, 2004	Park et al., 2017
Quality of Life	SWLS (Satisfaction With Life Scale)	Diener et al., 1985	Booker et al., 2017 Conley et al., 2013 Dvořáková et al., 2017
	QOLPAV (Quality of Life Profile: Adolescent Version)	Raphael et al., 1996	Mishra et al., 2015
Dysfunctional Thoughts	DAS-A (Dysfunctional Attitude Scale-Form A)	Power et al., 1994	Conley et al., 2013
Positive Thinking	ATQ-P (Automatic Thought Questionnaire-Positive)	Ingram & Wisnicki, 1988	Conley et al., 2013
Cognitive reappraisal & Expressive suppression	ERQ (Emotion Regulation Questionnaire)	Gross & John, 2003	Conley et al., 2013
Rumination	RRS (Ruminative Responses Scale)	Treynor et al., 2003	Booker et al., 2017
Compassion	SCS (Self-Compassion Scale)	Neff, 2003	Dvořáková et al., 2017 Erogul et al., 2014
	CS (Compassion Scale)	Pommier, 2010	Dvořáková et al., 2017

Mindfulness	MAAS (Mindful Attention and Awareness Scale)	Brown & Ryan, 2003	Conley et al., 2013 Dvořáková et al., 2017
	FFMQ (Five Facet Mindfulness Questionnaire)	Baer et al., 2006	Ramler et al., 2016
Social Connectedness	SCC-R (The Social Connectedness Scale)	Lee & Robbins, 1995	Dvořáková et al., 2017
	*Relationship Satisfaction: Friends	N/A	Conley et al., 2013
	*Relationship Satisfaction: Parents	N/A	Conley et al., 2013
Empathy	IRI (Interpersonal Reactivity Index)	Davis, 1980	Dyrbye et al., 2017
Gratitude	GQ-6 (Gratitude Questionniare-6)	McCullough et al., 2002	Booker et al., 2017
Hope	ADHS (Adult Disposition Hope Scale)	Snyder et al., 1991	Conley et al., 2013
Self-disclosure	RSDS (Revised Self-Disclosure Scales)	Wheeless, 1976	Booker et al., 2017
Self-efficacy	GSE (General Self-Efficacy Subscale)	Sherer et al., 1982	Conley et al., 2013
Self-esteem	RSES (Rosenberg Self-esteem Scale)	Rosenberg, 1965	Conley et al., 2013
Interoceptive awareness	MAIA (Multidimensional Assessment of Interoceptive Awareness)	Mehling et al., 2012	Park et al., 2017
Locus of Control	LCS (The Locus of Control Scale)	Dağ, 2002	Demir et al., 2014
Mental Health Literacy	MHLS (Mental Health Literacy Scale)	O'Conner & Casey, 2015	Hunt et al., 2019
Physical Activity/Health	IPAQ (International Physical Activity Questionnaire)	Craig et al., 2003	Mc Sharry et al., 2016
	PPAQ (Paffenbarger Physical Activity Questionnaire)	Paffenbarger et al., 1995	Park et al., 2017
	PAR-Q (Physical Activity Readiness Questionnaire)	Thomas, Reading & Shephard, 1992	Park et al., 2017
	*Health behaviours questionnaire	N/A	Mc Sharry et al., 2016
	BMI (Body Mass Index)	N/A	Mc Sharry et al., 2016 Park et al., 2017
	Sexual risk-taking behaviour	Wetherill, Neal & Fromme, 2010	Park et al., 2017
	Motivation to avoid exercise	Vartanian & Shaprow, 2008	Park et al., 2017
	Intake of fruits, vegetables, and dietary fat	Thompson et al., 2002; 2007	Park et al., 2017
	Resting blood pressure	Pickering et al., 2005	Park et al., 2017
	Muscle strength and endurance	Pescatello et al., 2013	Park et al., 2017
	Flexibility	Pescatello et al., 2013	Park et al., 2017
	Balance	Hunt, Ferrara, Bornstein & Baumgartner, 2009	Park et al., 2017
Medical Outcomes	SF-8 (Short Form-8)	Ware, 2002	Dyrbye et al., 2017
	*Physical Illness Visits Per Month	N/A	Robertson et al., 2019
Alcohol Use	YAAPST (Young Adult Alcohol Problems Screening Test)	Hurlbut & Sher, 1992	Dvořáková et al., 2017
	AUDIT (Alcohol Use Disorders Identification Test)	Saunders et al., 1993	Reynolds et al., 2011

	*Alcohol Use	N/A	Dvořáková et al., 2017
Sleep	PSQI (Pittsburgh Sleep Quality Index)	Buysse et al., 1989	Dvořáková et al., 2017 Trockel et al., 2011
Qualitative	*Adapted Writing Study Questionnaire	Pennebaker, 2013	Booker et al., 2017
	*Reflective writing exam papers	N/A	Deveci et al., 2017
	*Visual narratives and reflection papers	N/A	Everett., 2017
	*Journals	N/A	Ramasubramanian., 2017
	*Written evaluation form of intervention	N/A	Roy et al., 2019
	*Focus group interviews	N/A	Van der Riet et al., 2015
Other	LIWC (Linguistic Inquiry and Word Count)	Pennebaker, Booth, & Francis, 2007	Booker et al., 2017 Robertson et al., 2019
	*Score on exam and overall course performance	N/A	Brady et al., 2018
	*Mentoring Assessment Form	N/A	Demir et al., 2014
	*LAQ (The L2B Acceptability Questionnaire)	N/A	Dvořáková et al., 2017
	*Semi-structured questionnaire to guide group discussion	N/A	Hsieh., 2011
	**Transitions* evaluation measurement tool	Potvin-Boucher et al., 2010	Hunt et al., 2019
	*Interviews and focus groups	N/A	Mahfouz et al., 2018
	*Observations	N/A	Mahfouz et al., 2018
	*Perceived helpfulness and relevance of the intervention	N/A	Park et al., 2017

A '*' next to a measure indicates that the measure was made for the purpose of the study and was not a previously validated measure.

Quality of Included Studies

The quality of the included papers varied. All papers provided clear research aims/questions and were able to answer these to an adequate degree. A common limitation that reduced quality scores was the lack of complete outcome data. Additionally, in RCT studies, the assessors were often not blind to the participant condition and occasionally there was a lack of adherence to the intervention. In quasi-experimental studies, the papers often either provided no comment indicating if their sample were representative of the wider population or confirmed that generalisability of findings would be an issue due to this. Confounding

factors were also sometimes not considered or controlled for, affecting the reliability of the results.

A relative strength of the literature was that over half of the studies included a comparison/control condition (n = 16). Several studies that included a comparison condition had active control participants, however the majority were inactive or on a waitlist to receive the intervention. A limitation of the literature is that only a few monitored the impact of the intervention over time at follow-up (n = 7), the gap between post-intervention and follow-up varied from one month (Booker & Dunsmore, 2017) to one year (Mc Sharry & Timmins, 2016).

Attrition was a difficulty many of the studies faced with all but one study (Roy et al., 2019) reporting participant attrition over time. Completion rates ranged from 24.1% to 100%, with fourteen studies reporting an attrition rate of 15% or more. A further limitation was that female participants made up a larger percentage of the sample in most studies (n = 21), with eleven studies reporting that females made up over 80% of their sample.

Ethnicity was often not reported in the included studies (n = 19). Where ethnicity was reported, all studies stated that over 50% of the sample were White/Caucasian. The majority of the included papers did not report any inclusion/exclusion criteria (n = 22).

Psychosocial/Psychoeducational Approaches

Three studies aimed to reduce levels of stress or enhance coping in medical or nursing students. Dyrbye et al. (2017) delivered a mandatory Stress Management and Resilience Training (SMART) programme to medical students. Student quality of life and happiness declined in both cohorts; with cognitive and emotive empathy also decreasing in one. Furthermore, stress had increased over the course of the year for both cohorts. No significant differences were seen in burnout or resilience scores. The study was hampered by high

attrition rates which may have been linked to its mandatory nature. A second more successful study delivered another mandatory psycho-education intervention "Coping with Stressful Events" (McCarthy et al., 2018). Topics included stress and the stress response and coping strategies which were explored through small group discussions, lectures, and reflective activities. Positive changes in coping were found with less use of restraint and mental disengagement strategies and more emotional and social support strategies. Finally, Onan et al. (2019) delivered an elective stress coping course focusing on the physiology of stress, work burnout and coping strategies but no significant difference in stress symptoms was found pre to post-intervention. However, changes were found in relation to psychological resilience with students more likely to utilise self-perception and social support in response to stress. All three studies adopted a non-experimental pre-post-test methodology so were limited by a lack of control condition or follow-up time point, with none finding reductions in stress where measured.

General wellbeing was measured in four papers. Two studies employed a quasi-experimental approach, assigning condition based on the class the participants were enrolled in. Conley et al. (2013) delivered seminars predominantly focused on stress management and adjustment. Post-intervention, experimental participants reported greater improvements in psychosocial adjustment and stress management compared to controls. Additionally, they found that course attendance significantly predicted greater adjustment and ability to manage stress. A study with a similar design put a greater emphasis on physical as well as mental wellbeing by delivering a health and wellbeing course to nursing students (Mc Sharry et al., 2016). The intervention was effective at increasing levels of physical activity and psychological wellbeing. However, a one-year follow-up found that improvements were not maintained over time. Both studies would have been benefited from employing a randomised allocation to condition. Whilst in one study there were no differences at baseline between experimental

and control participants (Conley et al., 2013), in the other study there were significant differences in relation to age, marital status, number of dependents and working hours (Mc Sharry et al., 2016).

Two studies used thematic analysis to evaluate a series of wellbeing workshops (Roy et al., 2019), and a first-year experience (FYE) programme (Deveci et al., 2017) aiming to improve wellbeing. Both programmes received positive feedback with students saying the wellbeing workshop had taught them practical skills and simple acts of care essential for improving their wellbeing, whilst the FYE programme improved self-confidence, self-awareness, and ability to communicate effectively. The studies were limited in terms of the sample, with Deveci et al. (2017) including only male students and Roy et al. (2019) being predominantly made up of medical students despite the intervention being aimed at both medical and nursing students. Additionally, neither study included a control group or a follow up.

The final paper focused on increasing mental health literacy (MHL; Hunt et al., 2019). The intervention ("Transitions" resource) was emailed to participants. 94.4% of students reported finding the intervention resource helpful, with 88.7% stating that they would recommend the resource to others. Participants reported increases in knowledge about mental health and treatments for mental health difficulties. Attitudes towards those experiencing a mental health difficulty also improved, as well as help seeking intentions. Overall MHL also improved. However, the study did not measure engagement with the resource. The reliability of the findings is questionable as it is possible students did not read the document and felt pressured to positively evaluate the resource.

Mindfulness-Based Interventions

All mindfulness-based interventions were provided face-to-face, with the intervention length varying from six weeks (Dvořáková et al., 2017; Mahfouz et al., 2018; Bai et al., 2020) to

fourteen weeks (Ramasubramanian, 2017), however the content was typically delivered in eight sessions (n = 5).

Three studies utilised the same pool of participants who had completed the "Just Breathe" (JB) programme. The original study randomly allocated participants to an intervention group or a waitlist control condition (Dvořáková et al., 2017). Experimental participants reported significantly lower levels of depression, anxiety, and sleep issues and significantly higher levels of life satisfaction compared to controls. There was no change in intrapersonal or interpersonal awareness. Mahfouz et al. (2018) then qualitatively evaluated the programme. JB was described as providing students with coping strategies to combat stress. Participants reported improved organisation and time management, a greater commitment to a healthy lifestyle, improved emotional awareness, relationships, and self-compassion. Finally, Bai et al. (2020) asked a subset of participants to complete Ecological Momentary Assessments (EMAs). Experimental participants showed relatively stable levels of emotion regulation responses to stress over the semester while control participants demonstrated an exacerbation of negative emotion, rumination, and interference to family stress over time. This innovative approach has found the intervention consistently demonstrates improvements across a variety of domains. It would have been useful to have an active control condition to enhance the attribution of changes to the JB programme. Additionally, the measures utilised in Bai et al.'s (2020) study were not validated.

Two studies delivered Mindfulness-Based Stress Reduction (MBSR). The studies found that participants showed increased self-compassion, decreased perceived stress (Erogul et al., 2014), increased adjustment and reduced physiological stress levels (Ramler et al., 2016). Erogul et al. (2014) completed a follow-up 6 months later with some improvements maintained. Both studies included a comparison group, in one participants were randomly assigned (Erogul et al., 2014), whilst in the other participants were assigned a group based on

the seminar they were enrolled in (Ramler et al., 2016). Neither study ascertained previous exposure or practise of MBSR which may have influenced the findings.

The final two studies evaluated the impact of mindfulness on coping with stress. A mixed methods study found experimental participants had more positive emotions and lower perceived stress than controls (Ramasubramanian, 2017). Focus group interviews indicated that mindfulness programmes can have positive effects on sleep, concentration, clarity of thought and a reduction in negative cognitions (Van der Riet et al., 2015). Both studies had issues with their samples. Attrition was a major limitation for Van der Riet et al. (2015) as only one participant attended all sessions of the intervention. In Ramasubramanian's (2017) study only 19 participants were in the experimental condition compared to 43 in the comparison group.

Yoga and Relaxation Techniques

Two studies delivered progressive muscle relaxation (PMR) using a non-experimental pre-post-test design. Allison et al. (2019) found that male and female students showed significant improvements in basic relaxation and stress levels after the PMR, whilst females showed additional improvements in mindfulness. Students of all ages showed improvements in basic relaxation and stress levels. However, the exercise was only 10 minutes long and the research indicates that PMR exercises should be around 25 minutes (Smith, 2005). Gill et al. (2004) compared the effectiveness of PMR and Benson's relaxation method. Outcomes indicated that both techniques were equally effective in reducing anxiety. Although, the measure utilised in the study was originally created for a sporting context and whilst questions were adapted to be applicable for general student populations, the validity and reliability of this measure is questionable. Additionally, many students did not complete the second intervention. Neither study included a control condition or a follow up time point.

Jadhav et al. (2009) delivered a yoga intervention. Outcomes indicate the intervention significantly reduced students state and trait anxiety levels and increased subjective wellbeing. The paper provided few details about the yoga intervention meaning that the study is not replicable. All participants were between 19-20 years of age reducing generalisability of the findings.

Cognitive-Based Interventions

Two RCT studies delivered interventions online. One sent a cognitive reappraisal email about anxiety to students before an exam (Brady et al., 2018), while the other sent PDF documents attempting to either improve sleep or reduce depressive symptoms (Trockel et al., 2011). Both studies saw improvements in experimental participants compared to controls, however improvements were only found in students who had poor sleep to begin with (Trockel et al., 2011) and domains were assessed with only one Likert scale each and engagement with the intervention was not assessed (Brady et al., 2018).

Two studies utilised a RCT methodology to deliver interventions face-to-face. One delivered Cognitive Behavioural Stress Management (CBSM) or Yoga (Park et al., 2017) whilst the other offered Behavioural Activation Treatment for Depression (BATD; Reynolds et al., 2011). The BATD intervention had no impact on depression scores, low scores at baseline may have limited the opportunity to measure the impact of the intervention. Both Yoga and CBSM interventions led to improvements in psychological and physical health, however only those in the yoga intervention maintained these improvements at follow-up. Neither study was able to comment on if students practised skills they had learnt following the intervention.

The final study delivered Neo-Rogerian counselling to students (Mishra et al., 2015). Quality of life and stress perception improved in both qualitative and quantitative reports. However, participants were chosen due to having high stress and low perceived quality of life at

baseline and therefore it is difficult to know if the same improvements would be found in students with average levels.

Creative Interventions

Two of the papers delivered an expressive writing intervention in an RCT study. Booker et al. (2017) assigned participants to either an emotion-disclosing writing (EDW) condition, a gratitude-focused writing (GFW) condition or a no writing control. Robertson et al. (2019) assigned participants to an expressive writing (EW) condition or a neutral writing comparison group. Both studies found significant decreases in depressive symptoms post intervention, however one found that this only occurred in students who had mild/moderate/severe depression scores at baseline (Robertson et al., 2019). The studies included a follow-up time point one-month post-intervention with Robertson et al. (2019) including an additional follow-up at six months.

Everett (2017) utilised visual narratives to encourage participants to explore their transition to University. Students reported enjoying taking part in the intervention, that they had taken something of value away from the experience i.e., gaining support and understanding that they were not alone, and that their feelings were shared with others. Unlike the other studies that fall into this category, the study did not include a comparison group or a follow up time point. Additionally, themes were not checked for inter-rater reliability.

Mentoring

Two Turkish studies involved fourth year nursing students providing mentoring to first year nursing students. Improvements in ways of coping were found across both studies. Yüksel et al.'s (2019) study included a comparison group and found that experimental participants adjusted better to University and had higher optimism and social support seeking compared to controls. Demir et al. (2014) also found that mentoring programmes increased internal

locus of control, ability to cope with stress and social support seeking. Perhaps due to the subject studied by the participants, the sample in both studies was largely female, limiting generalisability. Additionally, neither study administered measures to the mentors, it is possible that the intervention may have also had an impact on them.

Hsieh (2011) also delivered an intervention to nursing students. Unlike the previous studies, the mentoring was peer support from fellow first year students. Students were randomly assigned to an experimental or control condition. Experimental participants were asked to devise a physical group activity. Levels of stress significantly decreased following the intervention and participants reported that they felt more comfortable to resist and overcome stress. The study would have been strengthened by the inclusion of a validated measure; the only measure used was created for the purpose of the research. Additionally, participants were all females between the ages of 20-23 with moderate to severe levels of stress at baseline, therefore generalisability of the results is vastly limited.

The final study involved older rugby players developing a programme for younger players (Laureano et al., 2014). The students showed increased problem-focused coping, a greater ability to cope with negative emotions and thoughts, increased seeking of social support and better overall happiness compared to controls. The study did have several limitations, namely that detailed demographic information was not collected, participants were not randomly assigned to conditions and an unpublished scale measured outcomes, calling into question the reliability of the results.

Discussion

The purpose of the review was to explore the domains of wellbeing and adjustment that have been targeted and measured in intervention studies for first year undergraduate students and to evaluate the impact of these interventions on wellbeing and adjustment. A wide variety of domains and a range of different intervention approaches were found.

Overview of Findings

What domains of wellbeing and adjustment have been targeted and measured in intervention studies for first year undergraduate students to date?

Several different outcome measures were utilised across the included studies. Whilst most studies administered self-report measures (n = 22), others used a mixture of self-report and other recordings (n = 8). Most studies included validated measures, however a large proportion (n = 18) reported outcomes from a measure created by the authors for the purpose of the research. Additionally, the domains measured were largely inconsistent across the studies, perhaps reflective of the difficulties in defining the concepts of "wellbeing" and "adjustment".

The most frequently measured domains were stress, coping, resilience, anxiety, and depression. To a slightly lesser extent, life satisfaction, compassion, and mindfulness were also explored. An assortment of other domains were monitored for changes in outcomes.

A greater emphasis appeared to be placed on measures of wellbeing, rather than domains of adjustment. This is perhaps due in part to the body of literature on students in their first year of undergraduate study focusing on anxiety (Cooke et al., 2006), and increased mental health distress (Fisher & Hood, 1987). Due to the heterogeneity of domains and measures used, it was not possible for this review to make direct comparisons between effectiveness of interventions on outcomes in the various domains.

What impact did the interventions have on wellbeing and adjustment?

Psychosocial/psychoeducational approaches

Psychosocial/psychoeducational interventions were found to have a mixed impact on stress and coping with one study finding that stress levels had increased, while another saw no

change. However, the studies did not include a comparison condition, so it is possible that the outcomes were better than if the students had received no intervention. When ways of coping with stress were explored, a positive impact was found with two studies reporting that students utilised social support strategies more. This suggests that future studies with interventions of this type may benefit from including an overall stress measure and more specific measures looking at ways of coping.

Generally, psychosocial/psychoeducational interventions were found to be effective at increasing general wellbeing, but the persistence of this benefit was not clear. Two studies utilised a comparison condition and found that compared to controls, participants had improved psychosocial adjustment, stress management, psychological wellbeing, and level of physical activity. Quantitative findings were supported by two qualitative studies where participants reported improvements in wellbeing following this type of intervention. However, only one study included a follow-up time point which found that improvements were not maintained. Further research with psychosocial/psychoeducational interventions should include follow-up time points to establish if these improvements can be maintained over time.

Finally, only one study explored MHL. The findings were that the intervention was effective at increasing knowledge of mental health. Additionally, in contrast with the findings by Lo et al. (2018), attitudes towards mental health and help seeking intent improved.

Mindfulness-based interventions

Seven studies delivered mindfulness-based interventions. The common domain measured was stress. Three of the included studies had utilised the same pool of participants from a mindfulness course that the authors had delivered.

Consistent with the findings of previous reviews into students in all years of study, mindfulness-based interventions were found to reduce symptoms of anxiety (Regehr et al., 2013), as well as being effective at preventing depressive symptoms (Ma et al., 2019) and increasing well-being (Dawson et al., 2019). Additionally, the studies included in the review found improvements in satisfaction with life, ability to cope with stress and positive emotions as well as a reduction in sleep issues.

Encouragingly, five of the seven studies included a comparison condition, adding strength to the validity of effectiveness of mindfulness-based interventions. All of the interventions were delivered face-to-face and it would be interesting to explore if the same effects would be found through online programmes, especially in the current climate of the COVID-19 pandemic where face-to-face interventions would not be practical. Computer-delivered and web-based interventions have been found to reduce depression, anxiety, and stress in students (Davies et al., 2014), however the researcher is not aware of research applying these findings to mindfulness-based interventions delivered to first year students.

Yoga and relaxation techniques

Three studies delivered yoga or relaxation techniques to students. Common domain measures included anxiety and stress. Two studies found that yoga and relaxation techniques decreased levels of anxiety, other findings indicated that such techniques could reduce stress and improve wellbeing and basic relaxation. Whilst the findings are largely consistent, the literature is limited by the small number of studies employing such techniques and the weaknesses in the methodology used in the included studies. No control conditions or follow-up time points were employed, making it difficult to attribute the outcomes purely to the interventions.

Cognitive-based interventions

Five studies delivered cognitive-based interventions. A strength of the literature of this type of intervention were that four out of the five studies utilised a RCT approach, increasing the reliability of the findings that measured changes in outcomes are due to the intervention.

A range of domains were measured including depression, anxiety, sleep quality, quality of life, stress, and psychological and physical health.

The literature was relatively consistent in that improvements were demonstrated across the measured domains with only one study finding no impact of the intervention on the domain measured (depression scores). This may be due to the average depression scores at baseline in the participants, this reflection is strengthened by the findings of another study that improvements in sleep and depression scores only occurred in those who were struggling to begin with.

This highlights that future research needs to consider baseline scores and explore whether such interventions are appropriate to the wider student population or simply students who may already be having difficulties. Additionally, only one study included a follow-up time point and found that improvements were only maintained in students who received the yoga and relaxation technique and not the cognitive strategy. Therefore, future studies may also benefit from monitoring if improvements are maintained over time.

Creative approaches

Two studies using creative approaches delivered expressive writing as the intervention to first year students. A strength of both studies was the inclusion of a comparison condition and a follow-up time point. Both studies found that this approach is effective as reducing symptoms of depression, however one reflected that this was only the case in students who had mild/moderate/severe depression scores at baseline. Additional impacts included an increase in positive affect, self-disclosure, and life satisfaction. Both authors reflected that the

generalisability of the findings are limited due to the samples being predominantly female. This suggests that additional research is needed to ascertain if findings apply to a more diverse sample.

The final study utilised a vastly different intervention by asking students to create visual narratives of their transition to University. Students reported that this task helped them know they were not alone and that they had gained something valuable from taking part. However, these qualitative responses were not supported by a quantitative measure which would have been useful to identify any other outcomes and triangulate the findings.

Mentoring programmes

Four studies drew on other students to act as support for first year students. Generally, there was consistency in that improvements were found in all studies, namely increased social support seeking and improved ways of coping with stress and problems. Other improvements were better adjustment, increased optimism and internal locus of control and decrease in negative emotions. A strength of the literature was that three out of four of the studies included a comparison condition.

However, the studies are limited in terms of generalisability with three of the studies mainly focusing on female nurses. The other study did not report the gender of participants, but it is implied that the sample is all male. Further research is needed to apply the principles of mentoring or learning from other students in different subject areas and with mixed gender participants.

Limitations of the Literature

Domains of wellbeing and adjustment varied widely between the studies and a wide range of measures were used. While standardised measures were often utilised, several authors did

also include measures created for the purpose of the research which had not been validated. Therefore, reliability and validity of these measures was questionable.

Generalisability of the literature is an issue. Most of the studies were based in the USA which has a different higher education system to other countries such as the UK. While a range of subjects were studied across participants, they were usually nursing or medical students. Additionally, participants were often female, with eleven studies including a sample that was comprised of over 80% female students. Ethnicity was overlooked in the literature and rarely reported. These limitations make it difficult to make recommendations on the most effective intervention strategies that could be applied proactively to first year undergraduate student populations as a whole.

There were also limitations in relation to the methodology utilised across the included studies. While it was a relative strength that over half of the studies included a comparison condition, control participants were often inactive, limiting the statements that can be made about the impact of the specific intervention compared to the impact of simply doing something. Additionally, in RCT studies, the assessors were often not blind to the participant condition and occasionally there was a lack of adherence to the intervention.

Throughout the included studies, only seven included a follow-up time point. Where follow-up measures were taken, improvements had often not been maintained over time. This is a significant limitation in the literature as it is vital that the implementation of a proactive strategy to maintaining or improving baseline levels of wellbeing and adjustment are not simply improved for the first year but also are maintained in subsequent years of study. While it is possible that helping students through the initial transition may be effective in reducing the rise in psychological distress we are seeing in this particular population, further research

is needed into the impact of proactive interventions in the first year on subsequent mental health and wellbeing.

Another issue common in the studies was the rate of attrition. Many studies reported incomplete outcome data, with nearly half of the studies missing 15% of the data. Attrition appeared to have been mitigated against slightly in studies where the intervention and completion of measures had been mandatory and embedded into an existing seminar or course. However, authors often reflected that outcomes may have then been influenced by social-desirability bias or the belief that a positive response may increase the students mark in the course.

Critique of this Review

A strength of the review was the inclusion of papers from a variety of methodological approaches, this ensured that valuable literature was included and reviewed. However, this may have also been a limitation in that it was challenging to make direct comparisons between domains, measurements, or interventions. Additionally, while the review is inclusive it is possible that publication bias may have played a role in the limited number of studies who reported no changes or declining outcomes.

While it has been discussed that the limitations of the literature as a whole may be due to the vague definitions of wellbeing and adjustment, this review also adopted loose definitions of these complex concepts and a more concise targeted view of these domains may have led to a more succinct review of interventions.

The MMAT (Hong et al., 2018) was chosen to review the quality of the included papers. Whilst this measure was perhaps the most appropriate due to the range of methodologies that can be assessed, all qualitative papers scored 100% despite significant limitations. This suggests that it would have been beneficial to review the standard questions and include

questions more relevant to the current review. A subset of the included papers was rated by an independent rater and the overall inter-rater reliability score was 85.71% suggesting a good level of accuracy with quality scoring.

Areas for Future Research and Conclusions

The findings provide some evidence to support the use of mindfulness-based and yoga and relaxation techniques for symptoms of anxiety. While mindfulness-based interventions and creative approaches reduce depression, cognitive-based interventions may also reduce depression but only for those already struggling. Psychosocial/psychoeducation approaches were found to be effective at altering ways of coping. While mentoring programmes increased social support strategies and improved coping. However, the heterogenous nature of the domains targeted, the measures used, and the interventions delivered make it difficult to make direct comparisons and therefore it is hard to make conclusive statements about effectiveness.

Future research should aim to increase consistency between definitions of wellbeing and adjustment and the standardised measures used to monitor changes in these domains. This would allow for direct comparisons to be made between interventions, increasing understanding on the most effective interventions for this population group. It will also be important for the literature to expand the generalisability of the findings by including a more diverse sample of participants.

Additionally, whilst interventions were delivered in the first year of study, only one study recruited participants before they had made the transition to University (Park et al., 2017). A more proactive and preventative approach could include further research implementing interventions prior to transition to protect wellbeing and support adjustment.

References

References marked with an asterisk indicate studies included in the review.

Adams, R. (1999). Revised Physical Activity Readiness Questionnaire. *Canadian Family Physician*, *45*, 992.

Adlaf, E. M., Gliksman, L., Demers, A., & Newton-Taylor, B. (2001). The prevalence of elevated psychological distress among Canadian undergraduates: Findings from the 1998 Canadian Campus Survey. *Journal of American College Health*, *50*(2), 67-72.

Akbalık, G. (1977). *The Effect of Information Giving and Group Counselling on University Adjustment of Freshman*. (Doctoral Dissertation, University of Ankara, Turkey).

*Allison, S., Hamilton, K. I., Yuan, Y., & Hague, G. W. (2019). Assessment of Progressive Muscle Relaxation (PMR) as a Stress-Reducing Technique for First-Year Veterinary Students. *Journal of Veterinary Medical Education*, e20180013.

American College Health Association. (2006). American College Health Association National College Health Assessment (ACHA-NCHA) spring 2005 reference group data report. *Journal of American College Health*, *55*, 5–16.

Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., Walsh, E., Duggan, D., & Williams, J. M. G. (2008). Construct validity of the five facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment*, *15*(3), 329-342.

*Bai, S., Elavsky, S., Kishida, M., Dvořáková, K., & Greenberg, M. T. (2020). Effects of Mindfulness Training on Daily Stress Response in College Students: Ecological Momentary Assessment of a Randomized Controlled Trial. *Mindfulness, 11*, 1433–1445.

Bailey, T. H., & Phillips, L. J. (2016). The influence of motivation and adaptation on students' subjective well-being, meaning in life and academic performance. *Higher Education Research & Development*, *35*(2), 201-216.

Baker, R. W., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology*, *31*(2), 179.

Bech, P., Olsen, L. R., Kjoller, M., & Rasmussen, N. K. (2003). Measuring well-being rather than the absence of distress symptoms: a comparison of the SF-36 Mental Health subscale and the WHO-Five well-being scale. *International Journal of Methods in Psychiatric Research*, *12*(2), 85-91.

Beck, A. T., Steer, R. A., & Brown, G. (1996). Beck depression inventory–II. *Psychological Assessment*.

Bewick, B., Koutsopoulou, G., Miles, J., Slaa, E., & Barkham, M. (2010). Changes in undergraduate students' psychological well-being as they progress through university. *Studies in Higher Education*, *35*(6), 633-645.

Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S. M., & Olfson, M. (2008). Mental health of college students and their non–college-attending peers: Results from the national epidemiologic study on alcohol and related conditions. *Archives of General Psychiatry*, *65*(12), 1429-1437.

*Booker, J. A., & Dunsmore, J. C. (2017). Expressive writing and well-being during the transition to college: Comparison of emotion-disclosing and gratitude-focused writing. *Journal of Social and Clinical Psychology*, *36*(7), 580-606.

Borrello, A. (2005). *Subjective well-being and academic success among college students* (Doctoral dissertation, Capella University).

*Brady, S. T., Hard, B. M., & Gross, J. J. (2018). Reappraising test anxiety increases academic performance of first-year college students. *Journal of Educational Psychology*, *110*(3), 395.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822.

Browne, V., Munro, J., & Cass, J. (2017). The Mental Health of Australian University Students. *Journal of the Australian & New Zealand Student Services Association*, *25*(2), 51-62.

Buysse, D. J., Reynolds III, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: a new instrument for psychiatric practice and research. *Psychiatry Research*, *28*(2), 193-213.

Campbell-Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the connor–davidson resilience scale (CD-RISC): Validation of a 10-item measure of resilience. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, *20*(6), 1019-1028.

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of Personality and Social Psychology*, *56*(2), 267.

Chamorro-Premuzic, T., & Furnham, A. (2003). Personality traits and academic examination performance. *European Journal of Personality*, *17*, 237–250.

Chesney, M. A., Neilands, T. B., Chambers, D. B., Taylor, J. M., & Folkman, S. (2006). A validity and reliability study of the coping self-efficacy scale. *British Journal of Health Psychology*, *11*(3), 421-437.

Cohen, S., & Williamson, G. (1988). *Perceived stress in a probability sample of the US* In: Spacapam S, Oskamp S, editors. The social psychology of health: Claremont Symposium on Applied Social Psychology.

Committee of Vice Chancellors & Principals (CVCP). (2000). *Guidelines on student mental health policies and procedures for higher education.*

*Conley, C. S., Travers, L. V., & Bryant, F. B. (2013). Promoting psychosocial adjustment and stress management in first-year college students: The benefits of engagement in a psychosocial wellness seminar. *Journal of American College Health*, *61*(2), 75-86.

Conley, C. S., Kirsch, A. C., Dickson, D. A., & Bryant, F. B. (2014). Negotiating the transition to college: Developmental trajectories and gender differences in psychological functioning, cognitive-affective strategies, and social well-being. *Emerging Adulthood*, *2*(3), 195-210.

Cooke, R., Bewick, B. M., Barkham, M., Bradley, M., & Audin, K. (2006). Measuring, monitoring and managing the psychological well-being of first year university students. *British Journal of Guidance & Counselling*, *34*(4), 505-517.

Craig, C. L., Marshall, A. L., Sjöström, M., Bauman, A. E., Booth, M. L., Ainsworth, B. E., Pratt, M., Ekelund, U.L.F., Yngve, A., Sallis, J.F., & Oja, P. (2003). International physical activity questionnaire: 12-country reliability and validity. *Medicine & Science in Sports & Exercise*, *35*(8), 1381-1395.

Dağ, İ. (2002). Locus of Control Scale: scale development, reliability and validity study. *Turk Psikoloji Dergisi*, *17*, 77-90

DasGupta, B. (1992). Perceived control and examination stress. *Psychology: A Journal of Human Behavior, 29*(1), 31–34.

Davies, E. B., Morriss, R., & Glazebrook, C. (2014). Computer-delivered and web-based interventions to improve depression, anxiety, and psychological well-being of university students: a systematic review and meta-analysis. *Journal of Medical Internet Research*, *16*(5), e130.

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.

Dawson, A. F., Brown, W. W., Anderson, J., Datta, B., Donald, J. N., Hong, K., Allan, S., Mole, T.B., Jones, P.B., & Galante, J. (2019). Mindfulness-Based Interventions for University Students: A Systematic Review and Meta-Analysis of Randomised Controlled Trials. *Applied Psychology: Health and Well-Being*, *12*(2), 384-410.

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*(1), 71-75.

*Demir, S., Demir, S. G., Bulut, H., & Hisar, F. (2014). Effect of mentoring program on ways of coping with stress and locus of control for nursing students. *Asian Nursing Research*, *8*(4), 254-260.

*Deveci, T., & Ayish, N. (2017). Engineering Students' Well-Being Experiences: A Freshman Year Experience Program. *Transformative Dialogues: Teaching & Learning Journal*, *9*(3), 1-20.

Diener, E., & Ryan, K. (2009). Subjective well-being: A general overview. *South African Journal of Psychology*, *39*(4), 391-406.

*Dvořáková, K., Kishida, M., Li, J., Elavsky, S., Broderick, P. C., Agrusti, M. R., & Greenberg, M. T. (2017). Promoting healthy transition to college through mindfulness training with first-year college students: Pilot randomized controlled trial. *Journal of American College Health*, *65*(4), 259-267.

*Dyrbye, L. N., Shanafelt, T. D., Werner, L., Sood, A., Satele, D., & Wolanskyj, A. P. (2017). The impact of a required longitudinal stress management and resilience training course for first-year medical students. *Journal of General Internal Medicine*, *32*(12), 1309-1314.

Endler, N. S., & Parker, J. D. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, *58*(5), 844.

*Erogul, M., Singer, G., McIntyre, T., & Stefanov, D. G. (2014). Abridged mindfulness intervention to support wellness in first-year medical students. *Teaching and Learning in Medicine*, *26*(4), 350-356.

*Everett, M. C. (2017). Fostering first-year students' engagement and well-being through visual narratives. *Studies in Higher Education*, *42*(4), 623-635.

Fisher, S., & Hood, B. (1987). The stress of the transition to university: a longitudinal study of psychological disturbance, absent-mindedness and vulnerability to homesickness. *British Journal of Psychology*, *78*(4), 425-441.

Folkman, S., & Lazarus, R. S. (1984). *Stress, appraisal, and coping* (pp. 150-153). New York: Springer Publishing Company.

Friborg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: what are the central protective resources behind healthy adjustment? *International Journal of Methods in Psychiatric Research*, *12*(2), 65-76.

Frisch, M. B., Clark, M. P., Rouse, S. V., Rudd, M. D., Paweleck, J. K., Greenstone, A., & Kopplin, D. A. (2005). Predictive and treatment validity of life satisfaction and the quality of life inventory. *Assessment*, *12*(1), 66-78.

Gallagher, R. (2005). *National survey of counseling center directors* (Monograph Series No. 8O). Alexandria, VA: International Association of Counseling Services, Inc.

*Gill, S., Kolt, G. S., & Keating, J. (2004). Examining the multi-process theory: an investigation of the effects of two relaxation techniques on state anxiety. *Journal of Bodywork and Movement Therapies*, *8*(4), 288-296.

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, *26*(1), 41-54.

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, *85*(2), 348.

Guney, S., Kalafat, T., & Boysan, M. (2010). Dimensions of mental health: life satisfaction, anxiety and depression: a preventive mental health study in Ankara University students population. *Procedia-Social and Behavioral Sciences, 2*(2), 1210-1213.

Halamandaris, K. F., & Power, K. G. (1999). Individual differences, social support and coping with the examination stress: A study of the psychosocial and academic

adjustment of first year home students. *Personality and Individual Differences*, *26*(4), 665-685.

Hartley, M. T. (2010). Increasing resilience: Strategies for reducing dropout rates for college students with psychiatric disabilities. *American Journal of Psychiatric Rehabilitation*, *13*(4), 295-315.

Healthy Universities (2017). 'What is the UK Healthy Universities Network? Healthy Universities', http://www.healthyuniversities.ac.uk/about-the-network/

Higher Education Statistics Agency (2016). 'Higher Education Statistics for the UK 2016/17', https://www.hesa.ac.uk/data-and-analysis/publications/higher-education-2016-17

Hong, Q. N., Pluye, P., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.P., Griffiths, F., Nicolau, B., & O'Cathain, A. (2018). Mixed methods appraisal tool (MMAT), version 2018. *Registration of copyright*, *1148552*.

*Hsieh, P. L. (2011). A school-based health promotion program for stressed nursing students in Taiwan. *Journal of Nursing Research*, *19*(3), 230-237.

Humphrey, R., McCarthy, P., Popham, F., Charles, Z., Garland, M., Gooch, S., Hornsby, C. H., & Muldoon, C. (1998). Stress and the contemporary student. *Higher Education Quarterly*, *52*(2), 221-242.

Hunt, T. N., Ferrara, M. S., Bornstein, R. A., & Baumgartner, T. A. (2009). The reliability of the modified balance error scoring system. *Clinical Journal of Sport Medicine*, *19*(6), 471-475.

*Hunt, S., Wei, Y., & Kutcher, S. (2019). Addressing Mental Health Literacy in a UK university campus population: Positive replication of a Canadian intervention. *Health Education Journal*, *78*(5), 537-544.

Hurlbut, S. C., & Sher, K. J. (1992). Assessing alcohol problems in college students. *Journal of American College Health*, *41*(2), 49-58.

Ingram, R. E., & Wisnicki, K. S. (1988). Assessment of positive automatic cognition. *Journal of Consulting and Clinical Psychology*, *56*(6), 898.

*Jadhav, S. G., & Havalappanavar, N. B. (2009). Effect of yoga intervention on anxiety and subjective well-being. *Journal of the Indian Academy of Applied Psychology*, *35*(1), 27-31.

Jessop, D. C., Herberts, C., & Solomon, L. (2005). The impact of financial circumstances on student health. *British Journal of Health Psychology*, *10*(3), 421-439.

Kammann, R., & Flett, R. (1983). Affectometer 2: A scale to measure current level of general happiness. *Australian Journal of Psychology*, *35*(2), 259-265.

Kohn, P. M., Lafreniere, K., & Gurevich, M. (1990). The inventory of college students' recent life experiences: A decontaminated hassles scale for a special population. *Journal of Behavioral Medicine*, *13*(6), 619-630.

Krause, K. L., & Coates, H. (2008). Students' engagement in first-year university. *Assessment & Evaluation in Higher Education*, *33*(5), 493-505.

Larcombe, W., Finch, S., Sore, R., Murray, C. M., Kentish, S., Mulder, R. A., Lee-Stecum, P., Baik, C., Tokatlidis, O., & Williams, D. A. (2016). Prevalence and socio-demographic correlates of psychological distress among students at an Australian university. *Studies in Higher Education*, *41*(6), 1074-1091.

*Laureano, C., Grobbelaar, H. W., & Nienaber, A. W. (2014). Facilitating the coping self-efficacy and psychological well-being of student rugby players. *South African Journal of Psychology*, *44*(4), 483-497.

Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology*, *42*(2), 232.

Lo, K., Gupta, T., & Keating, J. L. (2018). Interventions to promote mental health literacy in university students and their clinical educators. A systematic review of randomised control trials. *Health Professions Education*, *4*(3), 161-175.

Lowe, H., & Cook, A. (2003). Mind the gap: are students prepared for higher education? *Journal of Further and Higher Education*, *27*(1), 53-76.

Lovibond, S. H., & Lovibond, P. F. (1993). *Manual for the depression anxiety stress scales (DASS). Psychology Foundation Monograph.* Sydney, Australia: University of New South Wales.

Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, *46*(2), 137-155.

Ma, L., Zhang, Y., & Cui, Z. (2019). Mindfulness-based Interventions for prevention of depressive symptoms in university students: a meta-analytic Review. *Mindfulness, 10*, 2209–2224.

MacKean, G. (2011, June). Mental health and well-being in post-secondary education settings: A literature and environmental scan to support planning and action in Canada. In *CACUSS Pre-Conference Workshop: Student Mental Health: A Call to Action, Toronto*.

*Mahfouz, J., Levitan, J., Schussler, D., Broderick, T., Dvorakova, K., Argusti, M., & Greenberg, M. (2018). Ensuring college student success through mindfulness-based classes: Just breathe. *College Student Affairs Journal*, *36*(1), 1-16.

Martens, R., Vealey, R. S., & Burton, D. (1990). *Competitive anxiety in sport*. Human kinetics.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual 3rd edth ed.* Palo Alto (CA): Consulting Psychologists Press Inc.

*Mc Sharry, P., & Timmins, F. (2016). An evaluation of the effectiveness of a dedicated health and well being course on nursing students' health. *Nurse Education Today*, *44*, 26-32.

*McCarthy, B., Trace, A., O'Donovan, M., O'Regan, P., Brady-Nevin, C., O'Shea, M., Martin, A.M., & Murphy, M. (2018). Coping with stressful events: A pre-post-test of a psycho-educational intervention for undergraduate nursing and midwifery students. *Nurse Education Today*, *61*, 273-280.

McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: a conceptual and empirical topography. *Journal of Personality and Social Psychology*, *82*(1), 112.

Mehling, W. E., Price, C., Daubenmier, J. J., Acree, M., Bartmess, E., & Stewart, A. (2012). The multidimensional assessment of interoceptive awareness (MAIA). *PloS one*, *7*(11), e48230.

Merriam-Webster. (n.d.). Adjustment. In *Merriam-Webster.com dictionary*. Retrieved September 13, 2020, from https://www.merriam-webster.com/dictionary/adjustment

*Mishra, N., & Rath, P. K. (2015). Impact of intervention on perceived stress of college students. *Indian Journal of Health & Wellbeing*, *6*(9), 859-864.

Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *Preferred Reporting Items for Systematic Reviews and Meta-Analyses:* The PRISMA Statement. BMJ 2009;339:b2535, doi: 10.1136/bmj.b2535

Morris, C. (2010). *Open minds final report: student mental health and wellbeing at the University of Brighton.* University of Brighton. https://staff.brighton.ac.uk/clt/published/Open_Minds_Final_Report.pdf.

Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and identity*, *2*(3), 223-250.

Nickerson, C., Diener, E. D., & Schwarz, N. (2011). Positive affect and college success. *Journal of Happiness Studies*, *12*(4), 717-746.

O'Connor, M., & Casey, L. (2015). The Mental Health Literacy Scale (MHLS): A new scale-based measure of mental health literacy. *Psychiatry Research*, *229*(1-2), 511-516.

Office for National Statistics. (2016). *Total number of deaths by suicide or undetermined intent for Students aged 18 and above in England and Wales, 2014,* 23 May 2016. See: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/adhocs/005732totalnumberofdeathsbysuicideorundeterminedintentforstudentsaged18andaboveinenglandandwales2014.

Okanagan Charter. (2015). *Okanagan Charter: an international charter for health promoting universities and colleges.* University of British Columbia, Vancouver. https://open.library.ubc.ca/cIRcle/collections/53926/items/1.0132754.

*Onan, N., Karaca, S., & Unsal Barlas, G. (2019). Evaluation of a stress coping course for psychological resilience among a group of university nursing students. *Perspectives in Psychiatric Care*, *55*(2), 233-238.

Paffenbarger Jr, R. S., Wing, A. L., & Hyde, R. T. (1995). Physical activity as an index of heart attack risk in college alumni. *American Journal of Epidemiology*, *142*(9), 889-903.

*Park, C. L., Riley, K. E., Braun, T. D., Jung, J. Y., Suh, H. G., Pescatello, L. S., & Antoni, M. H. (2017). Yoga and cognitive-behavioral interventions to reduce stress in incoming college students: A pilot study. *Journal of Applied Biobehavioral Research*, 22(4), e12068.

Pennebaker, J. W., Colder, M., & Sharp, L. K. (1990). Accelerating the coping process. *Journal of Personality and Social Psychology*, *58*(3), 528.

Pennebaker, J. W., Booth, R. J., & Francis, M. E. (2007). Linguistic inquiry and word count: LIWC [Computer software]. *Austin, TX: liwc. net, 135*.

Pennebaker, J. W. (2013). Questionnaires from a typical writing study. *Measurement Instrument database for the Social Science. Retrieved from www. midss. ie*.

Pereira, S., Early, N., Outar, L., Dimitrova, M., Walker, L., Dzikiti, C., & Platt, C. (2020). *University Student Mental Health Survey 2020.* March 2020. See: https://www.diginbox.com/go/files/Mental%20Health%20Report%202019%20(2020).pdf.

Pescatello, L. S., Arena, R., Riebe, D., & Thompson, P. D. (2013). SNEAK PEEK: Preview of ACSM's Guidelines for Exercise Testing and Prescription. *ACSM's Health & Fitness Journal*, *17*(2), 16-20.

Pickering, T. G., Hall, J. E., Appel, L. J., Falkner, B. E., Graves, J., Hill, M. N., Jones, D. W., Kurtz, T., Sheps, S. G., & Roccella, E. J. (2005). Recommendations for blood pressure measurement in humans and experimental animals: part 1: blood pressure measurement in humans: a statement for professionals from the Subcommittee of Professional and Public Education of the American Heart Association Council on High Blood Pressure Research. *Hypertension*, *45*(1), 142-161.

Pommier, E. A. (2010). *Development of a scale to measure compassion.* University of Texas, Doctor of Philosophy. Austin.

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N., Roen, K., & Duffy, S. (2006). Guidance on the conduct of narrative synthesis in systematic reviews. *A product from the ESRC methods programme Version*, *1*, b92.

Potvin-Boucher, J., Szumilas, M., Sheikh, T., & Kutcher, S. (2010). Transitions: A mental health literacy program for postsecondary students. *Journal of College Student Development*, *51*(6), 723-727.

Power, M. J., Katz, R., McGuffin, P., Duggan, C. F., Lam, D., & Beck, A. T. (1994). The Dysfunctional Attitude Scale (DAS): A comparison of forms A and B and proposals for a new subscaled version. *Journal of Research in Personality*, *28*(3), 263-276.

Pretorius, T. B., & Heyns, P. M. (1998). *Fortitude as stress-resistance: Development and validation of the Fortitude Questionnaire (FORQ).* University of the Western Cape: Bellville, South Africa.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*(3), 385-401.

*Ramasubramanian, S. (2017). Mindfulness, stress coping and everyday resilience among emerging youth in a university setting: a mixed methods approach. *International Journal of Adolescence and Youth*, *22*(3), 308-321.

*Ramler, T. R., Tennison, L. R., Lynch, J., & Murphy, P. (2016). Mindfulness and the college transition: the efficacy of an adapted mindfulness-based stress reduction intervention in fostering adjustment among first-year students. *Mindfulness*, *7*(1), 179-188.

Raphael, D., Rukholm, E., Brown, I., Hill-Bailey, P., & Donato, E. (1996). The Quality of Life Profile—Adolescent Version: background, description, and initial validation. *Journal of Adolescent Health*, *19*(5), 366-375.

Regehr, C., Glancy, D., & Pitts, A. (2013). Interventions to reduce stress in university students: A review and meta-analysis. *Journal of Affective Disorders*, *148*(1), 1-11.

*Reynolds, E. K., MacPherson, L., Tull, M. T., Baruch, D. E., & Lejuez, C. W. (2011). Integration of the brief behavioral activation treatment for depression (BATD) into a college orientation program: Depression and alcohol outcomes. *Journal of Counseling Psychology*, *58*(4), 555.

Roberts, R., & Zelenyanszki, C. (2002). *Degrees of Debt in Stanley. Students' Mental Health Needs–Problems and Responses,* Jessica Kingsley, London.

*Robertson, S. M., Short, S. D., Asper, A., Venezia, K., Yetman, C., Connelly, M., & Trumbull, J. (2019). The effect of expressive writing on symptoms of depression in college students: randomized controlled trial. *Journal of Social and Clinical Psychology*, *38*(5), 427-450.

Rosenberg, M. (1965). *Society and the Adolescent Self-image*. Princeton, NJ: Princeton University Press.

Rosenthal, B & Wilson, W. (2008). 'Mental health services: use and disparity among diverse college students', *Journal of American College Health*, *57*(1), 61-68.

*Roy, S., Close, L., McCorkell, V., & Skinner, J. (2019). Well-being workshop: simple acts of care. *The Clinical Teacher*, *16*(4), 378-383.

Ryan, M. L., Shochet, I. M., & Stallman, H. M. (2010). Universal online interventions might engage psychologically distressed university students who are unlikely to seek formal help. *Advances in Mental Health*, *9*(1), 73-83.

Sandeman, G. (2016). Surge in students struggling with stress. *The Times, 11 July 2016.*

Scanlon, L., Rowling, L., & Weber, Z. (2007). 'You don't have like an identity… you are just lost in a crowd': Forming a student identity in the first-year transition to university. *Journal of Youth Studies*, *10*(2), 223-241.

Saunders, J. B., Aasland, O. G., Babor, T. F., De la Fuente, J. R., & Grant, M. (1993). Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption-II. *Addiction*, *88*(6), 791-804.

Sell, H. (1994). The subjective well-being inventory (SUBI). *International Journal of Mental Health*, *23*(3), 89-102.

Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports*, *51*(2), 663-671.

Smith, J. C. (2005). *Relaxation, meditation, & mindfulness: A mental health practitioner's guide to new and traditional approaches*. Springer Publishing Company.

Smith, J. C. (2010). *Smith relaxation states inventory 3 (SRSI3).* Raleigh, NC: Lulupress.

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, *60*(4), 570.

Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). *State-trait anxiety inventory manual.* Mind Garden, Inc.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Patient Health Questionnaire Primary Care Study Group. (1999). Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. *Jama*, *282*(18), 1737-1744.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine*, *166*(10), 1092-1097.

Stallman, H. M. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, *45*(4), 249-257.

Storrie, K., Ahern, K., & Tuckett, A. (2010). A systematic review: students with mental health problems—a growing problem. *International Journal of Nursing Practice*, *16*(1), 1-6.

Svanum, S., & Zody, Z. B. (2001). Psychopathology and college grades. *Journal of Counseling Psychology*, *48*(1), 72.

Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, *72*(2), 271-324.

Thomas, S., Reading, J., & Shephard, R. J. (1992). Revision of the physical activity readiness questionnaire (PAR-Q). *Canadian Journal of Sport Sciences, 17*(4), 338–345.

Thompson, F. E., Subar, A. F., Smith, A. F., Midthune, D., Radimer, K. L., Kahle, L. L., & Kipnis, V. (2002). Fruit and vegetable assessment: performance of 2 new short instruments and a food frequency questionnaire. *Journal of the American Dietetic Association*, *102*(12), 1764-1772.

Thompson, E. R. (2007). Development and validation of an internationally reliable short-form of the positive and negative affect schedule (PANAS). *Journal of Cross-cultural Psychology*, *38*(2), 227-242.

Thompson, F. E., Midthune, D., Subar, A. F., Kipnis, V., Kahle, L. L., & Schatzkin, A. (2007). Development and evaluation of a short instrument to estimate usual dietary intake of percentage energy from fat. *Journal of the American Dietetic Association*, *107*(5), 760-767.

Thorley, C. (2017). *Not By Degrees: Improving student mental health in the UK's universities.* IPPR: London, UK.

Tinto, V. (1993). Building community. *Liberal Education*, *79*(4), 16-21.

Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research*, *27*(3), 247-259.

Trice, A. D., Holland, S. A., & Gagne´, P. E. (2000). Voluntary class absences and other behaviors in college students: An exploratory analysis. *Psychological Reports, 87*, 179–182

*Trockel, M., Manber, R., Chang, V., Thurston, A., & Tailor, C. B. (2011). An e-mail delivered CBT for sleep-health program for college students: effects on sleep quality and depression symptoms. *Journal of Clinical Sleep Medicine, 7*(3), 276–281.

Tumen, S., Shulruf, B., & Hattie, J. (2008). Student pathways at the university: Patterns and predictors of completion. *Studies in Higher Education*, *33*(3), 233-252.

TWANZ n.d. Tertiary Wellbeing Aotearoa New Zealand. http://www.twanz.ac.nz.

Unite. (2019). *The new realists: Unite Students Insight Report*, September 2019, p.23.

Universities UK. (18 May 2020) Found online at: https://www.universitiesuk.ac.uk/policy-and-analysis/stepchange/Pages/default.aspx

Vaez, M., & Laflamme, L. (2008). Experienced stress, psychological symptoms, self-rated health and academic achievement: A longitudinal study of Swedish university students. *Social Behavior and Personality: An International Journal*, *36*(2), 183-196.

*Van der Riet, P., Rossiter, R., Kirby, D., Dluzewska, T., & Harmon, C. (2015). Piloting a stress management and mindfulness program for undergraduate nursing students: Student feedback and lessons learned. *Nurse Education Today*, *35*(1), 44-49.

Vartanian, L. R., & Shaprow, J. G. (2008). Effects of weight stigma on exercise motivation and behavior: a preliminary investigation among college-aged females. *Journal of Health Psychology*, *13*(1), 131-138.

Verger, P., Combes, J. B., Kovess-Masfety, V., Choquet, M., Guagliardo, V., Rouillon, F., & Peretti-Wattel, P. (2009). Psychological distress in first year university students:

socioeconomic and academic stressors, mastery and social support in young men and women. *Social Psychiatry and Psychiatric Epidemiology*, *44*(8), 643-650.

Wagnild, G. M., & Young, H. M. (1993). Development and psychometric. *Journal of Nursing Measurement*, *1*(2), 165-17847.

Ware, J. E. (2002). *The SF-12v2TM how to score version 2 of the SF-12® health survey:(with a supplement documenting version 1)*. Quality metric.

Wetherill, R. R., Neal, D. J., & Fromme, K. (2010). Parents, peers, and sexual values influence sexual behavior during the transition to college. *Archives of Sexual Behavior*, *39*(3), 682-694.

Wheeless, L. R. (1976). Self-disclosure and interpersonal solidarity: Measurement, validation, and relationships. *Human Communication Research*, *3*(1), 47-61.

Woosley, S. A. (2003). How important are the first few weeks of college? The long term effects of initial college experiences. *College Student Journal*, *37*(2), 201-208.

*Yüksel, A., & Bahadır-Yılmaz, E. (2019). The effect of mentoring program on adjustment to university and ways of coping with stress in nursing students: A quasi-experimental study. *Nurse Education Today*, *80*, 52-58.

Part 2: Empirical Paper

This paper is written in the format ready for submission to the Journal of Social and Clinical Psychology.

Please see Appendix C for Guidelines for Authors.

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The transition from College to University: A feasibility and exploratory study of the role of compassion during this transitional period.

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Abstract

INTRODUCTION: Research shows that wellbeing in students declines following the transition from college to University and that compassion-based interventions increase compassion and wellbeing in this population. The mixed methods study explores experiences of the transition for first year students in relation to compassion. The feasibility of delivering an online compassion-based intervention to college students prior to the transition and the impact of this on mood, wellbeing, and flow of compassion is also examined.

METHOD: The qualitative element of the study involved nine students in their first year of University describing their experiences of making the transition and adapting to University life in relation to the two psychologies of compassion and the flows of compassion. Responses were thematically analysed. Eighty-six college students intending to progress to University were recruited to the quantitative element of the study to complete a nine-session online compassion-based course. Measures were completed pre- and post-intervention. Participants also completed a questionnaire exploring the feasibility and barriers of the intervention.

RESULTS: Five themes were generated from the qualitative analysis: adjustment, relational impact, common humanity, communication, and support. Data from the intervention yielded no statistically significant changes in mood, wellbeing, or flow of compassion, despite questionnaire responses indicating that the intervention had been useful. The greatest barrier to engaging with the intervention appeared to be due to the timing of the study.

DISCUSSION: Compassion plays a valuable role in the transition to University. Adjustment to University was more challenging for some then others, but all participants reported struggling at some point. Responses indicated that it would be useful for colleges to provide further education around University life, and that students should be aware of possible avenues of support. Future research is required with a larger sample and the inclusion of a

control group to be able to make comments about the effectiveness of an online compassion-based intervention.

Introduction

Student wellbeing

Student wellbeing is increasingly recognised as an area of concern as mental health problems rise among University student populations (Thorley, 2017; Pereira et al., 2020).

Pereira et al. (2020) conducted the largest study into university student mental health in the UK. They found that 42.3% of participants had experienced an emotional, behavioural, or mental health problem for which they sought professional support; this was an increase of 8% from the year prior. The most frequently reported mental health difficulties were depression (12%), anxiety disorders (11.2%) and bipolar disorder (0.5%).

At its worst, mental distress can be associated with loss of life. The number of deaths by suicide in student populations has also been increasing (Office for National Statistics, 2016). In 2015, there was an increase of 79% in number of student suicides compared to 2007 (Pereira et al., 2020). Another potential impact of increasing psychological distress is that the number of students who are dropping out of University due to metal health problems has trebled over recent years (Marsh, 2017).

The increase in mental health difficulties in students is reflected in figures demonstrating that the number of mental health problems disclosed to academic institutions have increased by five times over the last decade (Thorley, 2017). Additionally, students have increasingly been seeking support with a 68% rise in counselling service users at Russel Group Universities since 2011 (Sandeman, 2016). However, worryingly a survey (Unite, 2019) found that only 53% of students suffering with mental health difficulties disclosed this to their University and more than three-quarters of students reported that they had concealed their difficulties from

those around them for fear of stigmatisation (Pereira et al., 2020). This data suggests that the actual number of students who require support with their mental health may be much higher than is currently known.

The Transition to University

'Transition' can be defined as an event which involves changes in relationships, routines, assumptions, or roles (Schlossberg, Goodman & Anderson., 2012). Schlossberg's Transition Theory (Schlossberg et al., 2012) identified that an individual's response to transition is impacted by (1) their perception of the transition, (2) the pretransition and post-transition environments, and (3) how the individual experiences the transition. This theory also went on to identify four factors that influence an individual's ability to cope with transition, these are referred to as the 4 S's (situation, self, support, and strategies). Situation refers to triggers, control, role change, duration, previous experience, concurrent stress, and assessment. Self focuses on personal and demographic characteristics i.e., gender and age etc. and psychological resources such as outlook and values. Social Support refers to intimate relationships, family, friends, institutions, and communities. Finally, Strategies describes three coping responses: (1) those that modify the situation, (2) those that control the meaning of the problem, and (3) those that assist in managing the stress (Evans, Forney & Guido-DiBrito., 1998).

Matriculation to University is a common transition amongst young people; in 2020, 40.5% of home 18-year olds applied to a University in England (O'Kelly., 2020). Links between the impact of this transition on psychological distress can be related back to the 4 S's (Schlossberg et al., 2012). The transition often involves role changes such as an increase in responsibility and changes in identity, and lifestyle (Situation; Terry, Leary & Mehta, 2013). This is often accompanied by alterations to the individual's social environment and living

arrangements with many students living away from home for the first time (Support; Terry et al., 2013). The high figures of reported psychological distress in student populations may also be related to demographic characteristics such as age. It is known that 75% of mental health problems develop by the age of 24 (Kessler et al., 2005); in the UK 90% of University applicants are younger than 24 years of age (Arnett, 2000), this would suggest that psychological distress is likely to occur prior to making the transition or while studying at University (Self). Finally, up to 1 in 4 students are using, or waiting to use, counselling services in some Universities (Thorley, 2017), while in the NHS access to services has reduced and waiting times have grown longer (King's Fund, 2018). This would suggest that students may be having to manage their distress without professional support or guidance for increasing periods of time (Strategies).

The impact of this transition on wellbeing in students has been explored in numerous studies, with findings indicating that students experience poorer mental health and a decline in wellbeing upon starting University. Bewick et al., (2010) conducted a longitudinal study over three years of an undergraduate course and found that psychological wellbeing was lower at all times once at University compared with the period of time immediately preceding entry. Similar findings were found in a study by Conley et al., (2014). First year university students experienced a decline in psychological and social wellbeing and an increase in psychological distress during the transition. While this became stable over time, the levels did not return to baseline. The transition has also been shown to increase levels of depression and anxiety in symptom free students; however, this only occurred in 9% and 20% of the sample studied respectively (Andrews & Wilding, 2004).

Qualitative research into the transition to University has mainly focused on how students adjust (De Clercq et al., 2018) and factors that aid/hinder successful adjustment (Sevinç & Gizir., 2014; Wasylkiw, 2015). De Clercq's (2018) study identified that students adjust to

University over time. The findings highlighted the importance of readiness to make the transition, the difficulties of reaching personal drives in the first few weeks, and the experiences of fighting an overwhelming program and becoming a self-regulated learner throughout the rest of the first year. 'Readiness' was also a key theme in Wasylkiw's (2015) study, alongside 'work ethic' and 'match/mismatch' between the individual and academics/social culture. Factors that hinder adjustment were explored in Sevinç et al's. (2014) study. Academic adjustment was found to be negatively affected by relationships with teachers and the quality of teaching. Social adjustment was impacted by relationships with friends, participation in activities, and leisure-time management. Individual factors such as shyness, fear of failure, loneliness, and homesickness also influenced adjustment.

The presented findings would suggest that this major life transition can place a strain on psychological wellbeing. Additionally, wellbeing appears to be impacted throughout the transitionary period, this indicates that a proactive approach to increase or preserve incoming University students' wellbeing could be a beneficial strategy.

Defining 'Wellbeing'

The research presented identifies a relationship between the decline in wellbeing in student populations and their entrance into University life. However, there are multiple concepts that aim to encapsulate 'wellbeing'.

Subjective wellbeing (SWB) or Hedonic wellbeing (HWB) are terms where the main components of wellbeing are positive mood, life-satisfaction, and low negative affect (Busseri, 2015). Similarly, the Psychological wellbeing (PWB) model argues that wellbeing consists of mastery, positive relationships, personal growth, purpose, self-acceptance, and autonomy (Ryff & Keyes, 1995).

Another concept, Eudaimonic wellbeing (EWB), is proposed to consist of the following twelve elements: self-actualisation, self-determination, personal expressiveness, flow, intrinsic motivation, meaningful life, flourishing, spirituality, wisdom, positivity, personal growth, and individual orientations (Vitterso, 2016).

Keyes et al. (2002) suggested that all three definitions of wellbeing could be considered under the broader category of "flourishing" which refers to individuals being free of diagnosable mental health difficulties and filled with high levels of emotional, psychological, and social wellbeing. They also suggest that the elements mentioned under the PWB and EWB models are all eudaimonic factors that contribute to overall SWB. Therefore, for the purposes of the current study, the SWB definition will be adopted.

Defining 'Compassion'

There are many varying definitions and theories of 'compassion', a few of which will be presented here. "The word compassion comes from the Latin words *com,* which means 'with'/'together', and *pati,* which means 'to bear', or 'to suffer'" (Irons & Beaumont, 2017, p.67), therefore compassion is a sense of suffering with or together.

Compassion can be thought of as an 'emotion', however others argue that compassion is a 'motivation' (Gilbert, 2009). A body of literature suggests that compassion is simply an interchangeable term for the feeling (often called empathetic distress) that is evoked in response to witnessing the distress of another person suffering (Hoffman, 1981; Ekman, 2003). While some suggest that compassion is not a distinct emotion and is a blend of sadness or love (Shaver et al., 1987; Sprecher & Fehr, 2005), others argue that compassion is a distinct affective state (Bowlby, 1973; Keltner, Haidt & Shiota, 2006) with an evolutionary basis (Sober & Wilson, 1998; Goetz, Keltner & Simon-Thomas, 2010).

One theory of compassion comes from Neff (2008) who proposes that self-compassion involves taking a similar stance towards one's own suffering as towards that of others i.e., adopting a kind and understanding approach to oneself when experiencing failure and inadequacy. The six-factor model of self-compassion (Neff, 2003) consists of three key components (self-kindness, common humanity, and mindfulness) and their counterparts (self-judgement, isolation, and over-identification). Self-kindness involves being understanding and warm towards oneself when suffering or experiencing failure or inadequacy rather than being critical or blaming of oneself. Recognising that suffering and failure is a universal aspect of the human experience is an example of common humanity; when an individual perceives themselves as separate and the only one suffering, they can feel isolated. Finally, mindfulness involves noticing one's own thoughts and feelings and not trying to avoid them without getting caught up with ruminating on the negatives.

Another theory comes from Gilbert (2014) who utilises a Buddhist informed definition (Dalai Lama, 1995), he defines compassion as "a sensitivity to the suffering in self and others, with a commitment to try to alleviate and prevent it" (Gilbert, 2014, p.14). The two mind states described in this definition are often referred to as the two psychologies of compassion. The first psychology of compassion is engagement with distress which involves both noticing suffering and then turning towards it (Irons et al., 2017). Six core qualities that assist individuals with this psychology of compassion have been identified: sensitivity, sympathy, distress tolerance, empathy, non-judgement, and care for wellbeing (Gilbert, 2009). The second psychology of compassion focuses on the motivation to alleviate distress which may involve the acquisition of wisdom or developing the courage that may prevent suffering (Irons et al., 2017). There are six key skills that may assist an individual to develop the core qualities mentioned, these are: imagery, reasoning, behaviour, sensory, feeling, and attention (Gilbert, 2009). It has also been proposed that compassion can 'flow' in three different

directions: (1) self-to-self, (2) self to other, and (3) other to self (Gilbert, 2014). Additionally, three major emotion systems have been identified: threat, drive and soothing (Gilbert, 2009). The 'threat' system functions to protect and keep us safe by responding to threats in the world. This system is often associated with feelings such as anger, anxiety, and disgust. The 'drive' system motivates us to strive to pursue resources and goals that may help us. It is often associated with feelings of excitement and vitality. Finally, the 'soothing' system helps us to engage with peacefulness and to give and receive care from others. It is often associated with feelings of contentment, safety, and connectedness (Irons et al., 2017). The current study draws on Gilbert's (2009; 2014) conceptualisation of compassion.

Compassion and wellbeing

Compassion has consistently been found to correlate with wellbeing (Zessin et al., 2015; Ferrari et al., 2019). Levels of self-compassion have been found to have many benefits to the individual including increased life-satisfaction, emotional intelligence and social connectedness, and lower self-criticism, depression, anxiety, rumination, thought suppression, and perfectionism (Neff, 2003).

Compassion and wellbeing in student populations

The positive relationship between compassion and wellbeing is replicated in University student populations. Changes in self-compassion in first year University students are positively correlated with changes in psychological need satisfaction and negatively related to change in negative affect (Gunnell et al., 2017). Similarly, in student populations, higher self-compassion correlates with greater wellbeing and lower distress (Fong & Loi, 2016).

The link between compassion, academic achievement goals and coping with academic failure has also been investigated. Self-compassionate individuals were found to have a lesser fear of failure and a greater perceived competence (Neff, Hsieh & Dejitterat, 2005). An additional

study found that self-compassion is positively associated with emotion-focused coping strategies (i.e., reinterpretation/growth and acceptance) and negatively associated with avoidance-oriented strategies (denial and mental disengagement; Neff et al., 2005).

Students with higher levels of self-compassion also appear to cope with social/academic struggles more effectively, report less homesickness, depression, and dissatisfaction about their choice to attend university (Terry, Leary & Mehta, 2013).

Interventions to develop Compassion and wellbeing in student populations

It has been argued that higher self-compassion is related to greater wellbeing in students, therefore it follows that interventions targeting levels of compassion may be beneficial to student populations.

Previous research has focused on delivering face-to-face courses to students. A Compassion Focused Therapy (CFT) based training course was delivered to higher education students (Laidlaw et al., 2014). The course comprised of four two-hour long psycho-educational workshop-based sessions. Post-intervention, participants showed improvements in self-compassion, self-criticism, and self-efficacy; improvements were maintained at a six-month follow up. However, increased scores were also found on the General Health Questionnaire (GHQ; Goldberg & Hillier, 1979), indicating poorer mental health. The researchers suggested this may be due to the follow up occurring during an exam period.

Similarly, randomised control trials (RCT's) have also found benefits for students. In one study University students were allocated to either a three-week self-compassion course or a control condition (Dundas et al., 2017). Participants in the experimental condition showed increases in healthy self-regulation and decreases in unhealthy self-regulation as well as increases in self-compassion and decreases in depression and anxiety. These effects were also still present at a six-month follow-up. Smeets et al., (2014) allocated participants to a three-

week self-compassion group or a control time management skills course. Experimental participants showed significant increases in self-compassion, mindfulness, optimism, and self-efficacy and significant decreases in rumination in comparison to the control condition. Improvements in life satisfaction and connectedness were found in both conditions, while no differences in worry or mood were reported.

Other research has focused on skills within CFT such as imagery. Self-compassionate imagery exercises were delivered to university staff and students (McEwan & Gilbert, 2016). The exercises were found to increase wellbeing and reduce self-criticism, anxiety, and stress. The same exercises were used in another study which allocated participants who were assessment anxious to either a web-based self-compassion intervention or a control relaxation intervention (McEwan, Elander & Gilbert, 2018). Those in the experimental condition showed greater improvement in levels of self-compassion than those in the control condition. Both interventions improved wellbeing and reduced assessment anxiety but only in participants who had high baseline assessment anxiety.

Research adopting a qualitative approach to analysis has found similar benefits. Binder et al., (2019) provided students with a three-session self-compassion course. Post-intervention participants completed surveys and a sample were interviewed. The main themes generated suggested that participants were more supportive and friendlier towards themselves; more aware of when they were being too hard on themselves; were feeling less alone and more accepting of painful feelings; and overall were feeling more stable and peaceful.

The studies presented indicate that compassion-based interventions can have long-lasting benefits on domains of wellbeing in students in a higher education context.

Rationale for the Current Study

The evidence presented highlights the rising levels of psychological distress in student populations, with this being equal to that in similar aged non-student populations (Hunt & Eisenberg, 2010). It is also clear that the life transition of going to University, while enjoyable for many, also comes with major changes and adjustments which may impact on student wellbeing (Terry et al., 2013). Encouragingly, the positive relationship between compassion and levels of wellbeing found in the general non-clinical population can also be seen in University students (Neff et al., 2005; Terry et al., 2013; Fong et al., 2016; Gunnell et al., 2017) and studies implementing compassion-based interventions with University students have been found to be effective at increasing levels of compassion and domains of wellbeing (Laidlaw et al., 2014; Smeets et al., 2014; McEwan et al., 2016; Dundas et al., 2017; McEwan et al., 2018; Binder et al., 2019). However, despite the body of literature exploring the impact of the transition on student wellbeing and the effect of compassion-based interventions in student populations, research exploring the relationship between compassion and wellbeing in students during the transitional period to University is sparse. The researcher is not aware of any research looking at experiences of compassion in this time of change or any studies that explore the impact of a compassion-based intervention implemented during this transitional period. It is important to know more about this experience and to explore ways of helping students to manage this major change in their lives. The study that follows will adopt a mixed methods approach. The qualitative aspect will explore the experiences of first year University students transition in relation to the flow of compassion and the two psychologies of compassion. Whilst the quantitative aspect will assess the feasibility and impact of an online intervention aiming to promote compassion in college students transitioning to University. The findings may help inform compassionate approaches to reducing distress and enhancing wellbeing for undergraduate students during transition to University.

Aims of the study

The study aimed to explore the experiences of transition from college to University in first year University students and to understand how these experiences may relate to the flow of compassion and the two psychologies of compassion.

The study also hoped to explore the feasibility, benefits, and barriers of delivering an online compassion-based intervention to college students making the transition to University. Additionally, the pilot study aimed to assess the impact of the intervention by comparing subjective wellbeing, mood, and flow of compassion pre- and post-intervention.

Method

Design

To address the aims of the study, a mixed methods approach was utilised. A semi-structured interview was used to explore the experiences of first year undergraduate students in relation to the two psychologies of compassion and the flows of compassion throughout the transition to University. Interview data was then analysed using qualitative analysis. Thematic analysis was chosen as the most appropriate method due to the focus on identifying patterns of meaning to answer a range of research questions, including questions which relate to people's experiences. Additionally, the approach can be applied in an inductive way, being directed by the content of the data while also acknowledging that existing ideas may exist (Braun & Clarke, 2006).

The quantitative element of the study used a pre-post design with no control group. The outcome measures were the three flows of compassion (self to self, self to others and from others to self), wellbeing, depression, and anxiety. A questionnaire was also provided to participants aiming to explore feasibility, benefits, and barriers to the intervention. Responses were collated and summarised.

Sample

The local University Research Ethics Committee granted ethical approval for the study in July 2019 (Appendix F). To be eligible for the study, participants were required to confirm that they were above the age of 16, and that they had not started formal psychotherapy within the three months prior to the research, nor did they intend to initiate such psychotherapy during the course of their involvement with the research.

The qualitative and quantitative aspects of the study utilised separate participant pools due to the variations in inclusion criteria and the timings of the research.

Qualitative sample

To be eligible for the study, participants had to confirm that they were in their first year of study at a University in the UK.

Recruitment extended from February to April 2020. The researcher recruited participants by speaking in lecturers at a local University (Appendix G), and via online posters placed in Facebook groups (Appendix H). Participants who took part in an interview were entered into a prize draw with the chance of winning 1x £40 voucher for an online retailer.

A total of sixteen participants expressed interest in the study by completing the consent form and providing contact information, however, due to loss of contact, only nine of these participants attended for interviews. The interviewed participants attended three different Universities and studied a range of subjects (Psychology, History, Linguistics, Engineering, Criminology etc.). The mean age of participants was 19.33 (SD = 0.94); 22.22% (2) of the sample were male and 77.78% (7) were female. Eight of the participants had moved away from home to study at University, while one had remained living at home. Seven participants had made the direct transition from college/sixth form to University, with two of these

individuals resitting a year of college first. One participant had worked for a year and another had been on an internship abroad for a year before starting University.

Quantitative sample

To be eligible for the study, participants were required to confirm that they were attending a college or sixth form and intended to start University in 2019.

Recruitment extended from July to September 2019. Participants were recruited via emails to sixth form colleges in the United Kingdom (Appendix I), via online posters placed on Twitter and in Facebook groups (Appendix J) and through a Facebook advertisement (Appendix K). Between August and September 2019, 30,616 impressions of the advertisement were presented on Facebook (Facebook, 2019) and it was clicked on 268 times (0.88% of the total impressions).

A total of eighty-six participants (mean age = 18.22, SD = 1.35) completed the initial measures. 18.6% (16) of the sample were male, 80.2% (69) were female, and 1.2% (1) identified as other. One participant was excluded from the study as they had provided incorrect contact information. Eighty-five participants were provided with a username and password that would enable them to access the online intervention. Of the eighty-five participants who had profiles set up, seventeen accessed the intervention. All eighty-five participants were contacted and asked to complete the follow-up measures and feasibility questionnaire, although only nine participants did this.

Measures

The qualitative aspect of the study did not require the use of measures. The quantitative element involved a survey consisting of 74 questions, including demographics (Appendix L), and measures of mood, wellbeing, and flow of compassion (Appendices M, N & O).

Mood

Mood was measured by the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983). The HADS is a screening device that was originally developed to identify anxiety disorders and depression among patients in nonpsychiatric hospitals. It is made up of two subscales: (1) anxiety subscale and, (2) depression subscale, comprising 7 items each. Each scale is scored separately with each item having a possible score of between 0 and 3. A score of 0-7 would be a 'normal' score, 8-10 would indicate a 'borderline abnormal' score and 11-21 would be scored as 'abnormal'. The scale has been used in general population samples (Spinhoven et al., 1997; Lisspers et al., 1997; Jimenez et al., 1989) as well as student populations (Webb et al., 1996; Andrews et al, 2004; Andrews, Hejdenberg & Wilding, 2006) and found to be an effective measure. A review of the literature of validity (Bjelland et al., 2002) found that most factor analyses identified a two-factor solution in agreement with the subscales of the HADS. Furthermore, Cronbach's alpha varied from .68 to .93 for the anxiety subscale and between .67 to .90 for the depression subscale. The HADS was also found to have a good balance between sensitivity and specificity when caseness was defined by a score of 8 or above on both scales. Additionally, it has similar sensitivity and specificity to the General Health Questionnaire (GHQ; Goldberg & Hillier, 1979).

Wellbeing

Wellbeing was measured using the 14-item Warwick Edinburgh Mental Wellbeing Scale (WEMWBS; Tennant et al., 2007). All items are worded positively and cover positive affect, successful interpersonal relationships, and positive functioning. Participants are asked to respond to the statements based on their experience over the past two weeks on a 5-point Likert scale (none of the time, rarely, some of the time, often, all of the time). A minimum score of 14 and a maximum score of 70 can be obtained with a higher total score indicating a

higher level of wellbeing. The scale has been validated with those aged 16 and above and was initially validated in University student populations where it was found to have good internal consistency with a Cronbach's alpha coefficient of 0.89 (Tennant et al., 2007).

Compassion

The Compassionate Engagement and Action Scales (CEAS, Gilbert et al., 2017) is comprised of three scales which measure the three flows of compassion: self-compassion, compassion to others and compassion from others. Participants are asked to rate how frequently each statement occurs on a scale of 1 (never) to 10 (always). Each scale is scored separately, with two subscales being calculated for each scale (Engagement and Action), a total score can also be calculated. Reversed filler items are not included in scoring and were included to minimise response bias. A minimum score of 10 and a maximum score of 100 can be obtained on each subscale with higher scores indicating greater levels of compassion. The scale was originally developed using student populations and all subscales have been found to have high Cronbach's alpha's ranging from .74 to .94; the Cronbach's alpha for the overall scale was .91 (total score of all three subscales); and good test-retest reliability (Lindsey., 2017).

To measure participant usability of the intervention, participants completed an online questionnaire post-intervention (Appendix P). The questionnaire was constructed for the purpose of the research and consisted of free text responses and one multiple choice question which determined the set of additional questions the participant would answer. All participants were asked how they had heard about the research, what their expectations were of the study (and if they were met), how they found completing the measures and if they had accessed the intervention. Those that had engaged with the intervention were asked about the accessibility of the website and any issues with this, how many modules they completed (and what the reasons were for not completing all the modules), as well as which modules were

most enjoyable and how they could be improved. These participants were also asked to identify any skills they had put into practise, how they found the transition to University and if the intervention had helped with this in any way. Participants who did not access the intervention were asked to identify any factors that impacted them accessing the website and if there was anything that would have made them more likely to engage with it. These participants were also asked how they found the transition to University and if taking part in the research had helped with this in any way, as well as how the study could have been improved. A free text response box was provided to all participants to allow them to add any additional comments or feedback.

Materials

The qualitative aspect of the study did not require the use of materials. The quantitative element of the study utilised an online compassion focused intervention called Young Mind Be Kind from the Compassionate Mind Foundation. A pilot study testing the acceptability and efficacy of the intervention found positive results (Ierfino, 2017). Participants aged between 16-25 years old were randomly assigned to complete the intervention or to a wait-list control condition. Participants in the experimental condition demonstrated a decrease in symptoms of depression, anxiety and stress and an increase in self-esteem, wellbeing, and self-compassion.

The intervention consists of 9 x 20-30-minute modules delivered online. The modules cover a range of topics within compassion. Each session involves interactive elements such as videos, activities, and games (see Table 1). In summary, the first three sessions involved psychoeducation, sessions 4-6 explored compassionate mind training and sessions 7-9 aimed to activate compassion.

Table 1. *Components of the YMBK online intervention.*

Session number and title	Goals to learn:	Activities included:
1-Our complex brains	• Life is often stressful and hard. • The way our brain deals with difficult situations, and how this can add to our stress and struggling.	Psychoeducation of old brain, new brain, and unhelpful loops in our thinking. Participants identified a time they got caught up in 'loops in the mind' and identified what happened in their new brain and old brain. Mindful breathing activity.
2-Soothing System	• We have three different emotional regulation systems. • The way these systems are balanced can have a big impact on how we feel about ourselves. • How to bring greater balance to our emotion systems.	Psychoeducation explaining the threat, drive, and soothing systems. Participants rated on a scale of 0-10 how activated each system had been in their life in the past week. Example video of the impact of activation of each of the systems when out of balance. Soothing Rhythm Breathing practice.
3-Imagery	• How to continue to develop the soothing system using imagery.	Psychoeducation around imagery. Soothing colour activity. Development of safe place imagery.
4-Compassion flowing in	• How to experience compassion flowing into you from the outside.	Psychoeducation of the flows of compassion. Development of a compassionate ideal.
5-Compassion self to other	• How to direct compassion from yourself to someone else.	Compassion flowing to others using memory, bringing compassion to life, and bringing it into real life behaviours.
6-Self-compassion	• How to focus the compassionate self on yourself.	Creating an inner experience of being the compassionate self.
7-Putting your compassion to work	• How to balance thoughts in a compassionate way.	Compassionate thought balancing. Participants asked to keep a compassionate thought diary.
8-Compassionate letter writing	• How to write a compassionate letter.	Psychoeducation and instruction of compassionate letter writing.
9-Continuing with your compassion work	• How to maintain the skills that have been acquired.	Review of psychoeducation and skills.

Procedure

Qualitative Procedure

An online survey presenting the participant information sheet (Appendix Q), confirmation of consent (Appendix R), demographic information and contact details (Appendix S) was created using onlinesurveys.ac.uk. Participants were then contacted via email and an interview was arranged at a time convenient for the participant. The first three interviews were conducted face-to-face; however due to the COVID-19 pandemic, subsequent interviews were conducted over video conferencing software.

All interviews were audio recorded and lasted between 41 minutes and 1 hour 45 minutes (mean=67.1 minutes). A semi-structured interview schedule (Appendix T) was developed by the researcher and used to guide the interviews. The interview began with a summary of what the interview would entail and an opportunity to ask any questions was provided. Participants were asked to provide their own definition of 'compassion' (Appendix U) and were then presented with the definition being used in the research. The questions asked in the interview were based on Gilbert's theories of compassion (2009; 2014) and explored the three flows or directions of compassion (to self, from others and to others) and the two psychologies of compassion (engagement and action). The researcher asked additional open questions about topics that appeared important to the participant and pre-planned prompts were used to further discussion. At the end of the interview, participants were asked to identify any aspects of their experience of the transition that had not been explored, any areas that were identified were then discussed.

Quantitative Procedure

An online survey presenting the participant information sheet (Appendix V) and collecting consent (Appendix W), demographics, contact details and pre-intervention scores on the

measures (Appendices L, M, N & O) was created using onlinesurveys.ac.uk. Following completion participants were provided with an online profile, username, and password for the website hosting the online intervention.

In September 2019, participants were invited to begin and complete the nine-module online compassion-based intervention. Participants were advised that the intervention was expected to take four weeks (two modules per week, plus the final module on the last week) to complete. Due to poor engagement with the website, the researcher sent one reminder email a month later encouraging participants to access the website and providing an opportunity for participants to raise any issues they may have with accessing the intervention or the tasks themselves.

In November 2019, the researcher contacted participants to ask them to complete the post-intervention measures and the questionnaire on how they had found taking part in the research study and any feedback they had on the website.

Upon completion of the study, participants were sent an email with a debrief statement and asked to contact the researcher if they would like to be provided with details about the outcome of the study. Those who stated they would were sent a short summary sheet of the overall findings.

Data Handling and Analyses

Qualitative Analysis

The qualitative data collected in the interviews was analysed using thematic analysis (Braun & Clarke, 2006). The author analysed the data using the six steps as set out by Braun and Clarke: (1) familiarisation with the data, (2) generation of initial codes, (3) generation of themes, (4) review of the themes, (5) definition and naming the themes and finally (6) production of the report. A sample of the initial coding for a transcript is provided in

Appendix X. Four of the transcripts that had been initially coded were reviewed by an independent reviewer. The independent reviewer confirmed existing codes and highlighted possible codes that had been missed. All suggestions were discussed, and an agreement was reached in every case.

Quantitative Analysis

Assuming a moderate correlation of 0.5 between measures on the same participant pre-and post-intervention, a sample size of 13 would be required to detect a moderate effect size with 80% power.

Changes between pre- and post-intervention scores on the HADS, WEMWBS and CEAS were analysed with SPSS 26 (IBM Corp, 2019) using the Wilcoxon signed-ranks test.

Responses to the feasibility questionnaire were collated and are presented in the results.

Results

Qualitative results

Five main themes were generated from the analysis. Appendix Y provides examples of supporting quotes for some of the subthemes. The diagram below shows the main themes and how they relate to each other. The transitionary process appeared to involve both a period to *adjustment* to University, and the co-occurring *relational impact.* While there did seem to be a relationship between how successful adjustment had been and how relationships had been impacted, these two themes were felt to be greatly influenced by the presence or absence of *common humanity*, *communication,* and *support* which inhabited the space where adjustment and relational impact overlap.

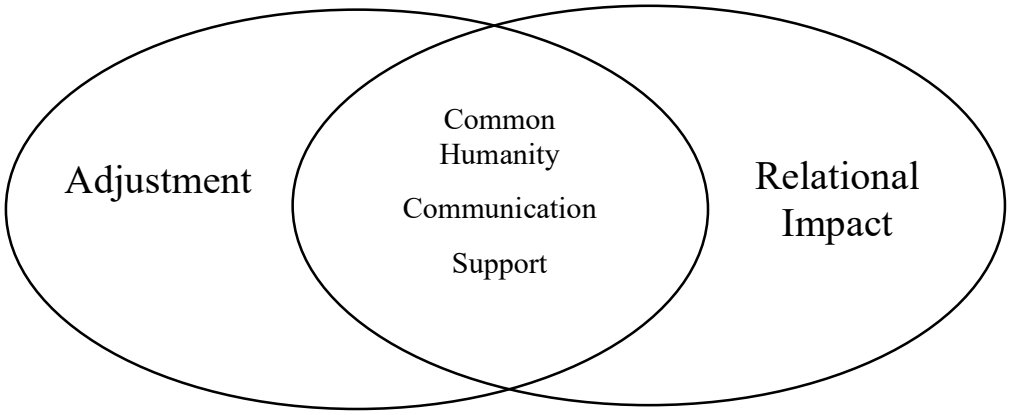


Figure 1. Diagrammatic representation of how the main themes relate to each other.

Adjustment

This theme referred to the process of preparing for and then experiencing the transition to University. The process of adjustment was described by students as something that occurred over time in two distinct phases comprising pre-arrival and a settling in period. Expectations appeared to play an important role in terms of both excitement of what was to come but also anxiety. A mismatch between expectations and reality appeared to be a shock to the system in many cases.

Expectations and pre-arrival

The majority of participants referenced an often-unspoken assumption that they would attend University, with many feeling that it was the only viable option available to achieve their dreams. There was a sense of inevitability in many participants, for example participant 8 described how they had been preparing for university for a long time.

Participant 8: "both my parents went to university, it's kind of the standard route…… it's kind of something from when you're very young…… you're going to do…… I think that's a very strange concept…… you kind of automatically assume you will go to university just because it is the done thing now for quite a lot of people"

The expectations around the benefits of becoming independent, the chance to form new bonds and being able to start afresh somewhere new seemed to be an important part of adjusting.

Participant 1: "I'm gonna go to my own place and I'm gonna be free to do whatever and I don't have to do the dishwasher at five o'clock or clean the shower with a toothbrush anymore and it's going to be great"

Participant 5: "I feel like University's just a bit of a chance to have a fresh start …… when you go to uni no one knows kind of the friendship group you were in…… no one really cares about like the grades you got or anything like that. It's kind of just who are you and what are you like, so it's a bit of a chance to…… drop any kind of drama or whatever from high school and just be like okay fresh start like new people, new me"

Despite the excitement of what could be, the students' worries, and anxieties increased as the point of transition came closer. This appeared to be due to an overwhelming number of unknowns, which could at times lead to the students contemplating the worst-case scenarios.

Participant 2: "[I was] stressing about making friends and things because I kept getting in my head about it, which made it harder to start"

Participant 9: "two weeks before I went to uni I was like oh my entire God, my entire life is going to change…… you spend so long doing your a levels, planning for this next step, but when that next step sort of becomes a reality, it's…… different from knowing you will go to being like I go in three days, I go in a week,…… I move in tomorrow, like that's so so different from sort of knowing it's coming a long way off"

The students responded to their worries in a variety of ways. Some tried to prepare as best they could for the upcoming transition which appeared to give them a sense of control.

Participant 9: "I'm really really organised and I make a lot of lists and I make a lot of plans and timetables and schedules because that's how I cope with like when I'm not sure about how I'm going to do something…… before I went, I sat down and I wrote what my weekly shopping list might be and how much it would cost and how much it would cost me to buy everything that week and how much I'd have left over for socialising and that really helped that actually set my mind at ease a lot coz I knew I wouldn't have a particularly big budget…… I planned out when I would eat my meals a month before I went to University, like it was bad…… but that's how I coped and I didn't follow the plan when I got there anyway so it didn't really matter but um just planning it made me feel like more secure"

While others took this a step further and attempted to plan in advance conversations or the day-to-day.

Participant 1: "I very much planed it in my head. I was very much right I'm going to go to Uni and I'm going to say this at this point and I'm going to say that"

A few students found it helpful to start forming connections with individuals in advance of making the transition, but this was not without its challenges.

Participant 5: "we had a fresher's group chat……and we spoke quite a lot um over the summer so…… when you arrived…… you kind of recognised faces…… in freshers week it was so nice to have people that you already felt like you could ask ohh you know how was this holiday or whatever because you already knew them a little bit"

Participant 8: "we had…… a big group chat…… I think it is helpful coz they gave us good information on it…… but I think um that was a bit unhelpful in that…… it made me more anxious if I didn't feel I could talk on it or if I did say something I'd be scared that people would be judging what I'd say"

Arrival and Settling In

The arrival at University came with many changes and new experiences which felt overwhelming and difficult to balance at times. At this point it became clear that expectations often did not meet with the reality of the transition which at times seemed psychologically challenging. It seemed that it was quite unhelpful to the students to be faced with an unexpected reality, as the situations they had attempted to plan for often did not play out as anticipated, leaving them feeling slightly out of control.

Participant 1: "I expected to come to Uni and to be in from Monday to Friday nine till five…… have loads of work sort of pilling up and …… constantly have something to do …… and have flatmates who wanted to get their pj's on and put a facemask on and sit there and watch a movie…… and oh we haven't got enough time to do everything in a day…… and my god was it different"

Despite this, the consensus was that it had still been helpful to prepare before making the transition as a way to manage anxieties about the upcoming adjustment.

Participant 2: "I think just doing something rather than nothing did help me actually not stress out a bit because at least if I did go wrong I could say that I tried rather than just do nothing"

It was generally acknowledged that upon arrival, students were faced with a number of adjustments across different areas of their life.

Participant 5: "it's a lot all at once, like it's not just changing academics, it's changing like everything, like your friendship group, your like where you live, you know it's like a lot of changes at once"

Students felt it was helpful to be kept busy in the first few weeks…

Participant 8: "[In freshers week] we had like a lot of things to break up the day so it almost didn't give me time to be stressed or scared by the fact that I was away from home or that you know I was in this whole new weird scary situation"

…this ultimately led to difficulties juggling everything the students wanted to get involved in…

Participant 7: "it's quite encouraged that you get involved you know with college sports and things like that and obviously you want to make friends so it was at times quite difficult to…… manage the social side of things and the extracurriculars and studying and like sleeping…… I think generally you kind of end up sacrificing a part of one for a little while and then you kind of get back to it"

…or feeling excluded if they enjoyed different things to their peers or found it harder to make friends.

Participant 1: "because I didn't drink, I didn't get ready in the evening, ……. I wasn't in the photos to go out……I missed the jokes from the night out, I missed the conversation……. and because I wasn't included the following morning I got all the stories about the night out and what they did and they were all excited to tell me but it's not the same as being there, it's very different being outside it and …… an outsider is what I came to feel like"

Participant 3: "first week I was pretty much isolated coz I didn't know what I was doing and I was just stressed out"

The students were also adjusting to the changes in teaching style/approach.

Participant 5: "[it's] more independent reading rather than kind of a list of content and like here's the formulas you need to know……. I'm not really a fan of that, I'm still getting to grips with it because I like to sort of have a checklist of like this is what I need to know and I can

kind of tick it off, whereas at uni…… it['s] tricky to know what to do and making those decisions by yourself, [you'd] normally have a teacher telling you like what you need to learn and how you need to learn it"

After the initial arrival period and 'freshers' had passed, students began to settle in, for some this was a time for reflection…

Participant 1: "I came back after Christmas and I'd sort of really had time to think about the transition and what I'd done and actually was it as bad as it seemed"

Participant 3: "when I first got here I was, like probably an eight on the scale of worrying about those things, but then I started talking to people and actually getting on my course and they went down to like a two or a three"

…and learning what worked best for you as an individual.

Participant 6: "I try to stay more organized and just, erm I noticed that I can't really do work during the day…… I discovered during the holidays that I understand lectures much better if I just watch them at home for some modules because I can take my time to grasp them"

For others, settling in was difficult and the end of 'freshers' came with a new set of challenges.

Participant 9: "the first month after freshers was really really really difficult, getting used to not having anything on in the evening and no one to talk to and just sitting down really and like stuff like that was really really strange…… it went from being very social all the time every day to being like cool well you've made friends now I hope……after freshers……worries really hit home because sort of reality sinks in once you get past that first couple of like crazy party weeks and you're like well this is actually the degree now"

Relational Impact

This theme referred to the fact that while it may be the individual student who is experiencing the actual transition to University, the transition can have wider effects on the existing relationships in their life, as well as coming with the opportunity to form new bonds and grow within yourself. Thus, two subthemes are presented: Interpersonal relationships and Intrapersonal relationships.

Interpersonal relationships

Students generally reported that they felt that relationships had improved in their family following the transition. This seemed like a period of development and growth but also a time of adjustment.

Participant 1: "I'm gonna have my own place and ……when they come and visit it will be like …… all this time that I've spent at home, you've taught me something and I'm grateful for that but I'm grateful to have my own space where we get on better"

Participant 5: "I feel like it has made us closer, because [my sister] appreciates me when I'm back, rather than me kind of always being there and being annoying…… my parents ask about her more, because they're not asking about both of us at the dinner table, it's like just her……. I think she likes it"

Although there was a positive impact it was also acknowledged that the transition involved an adjustment for the whole family. Participant 8 felt their parents might find this challenging with a change to routine but also a sense of loss.

Participant 8: "it would be the first time they've been living alone together in like over twenty years…… it would definitely change their routine…… the dynamic of the house would be very different…… my parents would also……. miss me um they're so used to me being at home"

As the majority of the students' friends had also made the transition to University, it was generally accepted that it may be harder to keep in touch.

Participant 5: "I don't speak to my home friends at all apart from when I'm home, so it's definitely like catch ups at the end of term…… in term we're all so wrapped up in our own things and so busy that we don't really have the chance"

Although the frequency of contact may have reduced, most students felt confident that while they may have been able to spend less time together, their existing friendships had been largely unaffected by the transition to University.

Participant 8: "I didn't have to worry about kind of keeping up with my friends at home because I knew I'll just see them when I get home and I'll message them a bit…… I knew they'd always be my friends no matter what"

Participant 9: "I was never worried really about my friends remaining my friends…… I knew they would always be there for me, because I would always be there for them"

This contrasted with students who had been in romantic relationships at the point of transition who acknowledged that this had been quite difficult.

Participant 5: "I don't think I quite realised like we would be so busy, like we just barely spoke…… we visited each other once or twice…… I spent the whole time stressing about the work I had to do when I got back…… always in the back of my mind I was like…… I've not spoken to him in four days…… I'm just forgetting he exists"

Participant 9: "he knew all of a sudden I would go from being very dependent on him and seeing him a lot to being very independent and…… in a social circle he wasn't familiar with so like new friends he'd never met, like new people, and cliché as it is, new boys that he didn't know and like didn't necessarily trust"

The students had been particularly looking forward to forming new bonds, this was harder for some.

Participant 2: " I'm okay with talking to people and doing group work with them but [I]……still find it difficult to make friends and haven't really made friends here but I think I'm okay with that because I've got my other friends"

It was felt that in order to make friends, you need to prioritise getting to know new people.

Participant 5: "you need to put a bit of effort in with new friends…… with new friends…… for the first like month or so you always feel like you have to agree to the plans and if they ask you to do something, you can't be like oh no I can't really be bothered, like you either need to be busy or you're there"

Intrapersonal relationships

It was commonly mentioned that University is often described as a place where you 'find yourself'. It was acknowledged that this can be very challenging, especially if you feel you have lost aspects of your identity during the transition.

Participant 8: "it made me question a really important aspect of myself and kind of my identity and if you're in a new place with loads of new people there's nothing kind of there to anchor you to everything that you associate with yourself, you have to have like a lot of will power to be like this is who I am"

Some students felt they needed to alter aspects of their personality, or had noticed this in others, in order to fit in.

Participant 1: "in the beginning …… I was very much oh I'll be whatever they want me to be and I I became a very much a mouldable person and if if someone didn't like something I made sure that I didn't do that"

Participant 6: "I noticed that they were struggling with like trying to find a friendship group…… they er presented themselves one way during first term and then you come back for second term and they are a completely different person…… some people just sort of put on a persona at first because that's how they want people to perceive them and then…… they see that…… it's not really working, they should probably just try to be themselves"

Others described a sense of freedom in finally being able to explore aspects of their self-identity and become who they really wanted to be. This increase in self-awareness appeared to lead to growth and development.

Participant 4: "I think I'm definitely a lot more open with who I am and what I believe…… I was a different person in school than I was at home, than I was in Church…… it was my way of coping…… then coming to University, those two people are more and more the same every month"

Participant 8: "[University] is a fresh start…… you might be able to be even more yourself without behaving with those extra expectations……. with my home friends …… you naturally act the way they expect you to because that's what they know you as so I think going somewhere where none of them where…… was really daunting, but it was also very freeing"

Common Humanity

Neff (2003) defines 'common humanity' as "seeing one's experiences as part of the larger human experience rather than seeing them as separating and isolating" (Neff, 2003, p.89). Gilbert (2009) draws on similar ideas, describing how we all just "find ourselves here" and try to learn to cope with our 'tricky brains' in the best way that we can. Students described relating their experiences to that of others in three distinct ways which form the subthemes: learning from others, shared distress, and comparison.

Learning from others

The majority of students interviewed discussed that as part of their preparation for the transition to University they had spoken to someone who had already experienced the transition or sought this insight through online formats, this was felt to be very helpful.

Participant 1: "I think it's just hearing that someone else has felt the same …… and looking at where they've gone, you're not necessarily going to end up on the same path or with the same end result but I think it was reassuring"

Participant 2: "my tutor did talk about how when it was her first day and her father drove her there she was in tears and I think that kind of knowing that it's the same for even your tutor"

It became clear that it felt most useful for the students to be able to gain insight about the transition and University experience from their peers. These shared experiences seemed to be trusted by students to help recognise they were not alone. This contrasted with official or University produced information which was viewed as less accurate. The portrayal of the idealised version of the University experience did not seem helpful or valid.

Participant 4: "the students were very real and open and honest…… having the students there made things kind of like, very realistic, like okay, this is what's it actually like…… whereas the University and the professional side of things are very much like, it's going to be the best time of your life"

Participant 5: "they…… really helped actually and I feel like coming from an actual video of someone at uni telling you these things, it's a lot more reassuring than kind of just a PDF document on the uni website that's like who even knows when this was written"

Shared distress

Before making the transition, the students described a feeling of being in the 'same boat' with their peers.

Participant 4: "I feel like it's kind of like doing your exam, waiting for results day, like everyone is under the same stress, under the same pressure…… everyone doesn't know what to do"

The fact that those around them shared their worries and anxieties appeared to make it more acceptable to feel what they were feeling whilst also reducing the isolation of being the only one experiencing that.

Participant 8: "I just remember everyone…… saying yeah we're really scared so I think it almost made it easier because everyone felt the same way and there wasn't some kind of stigma or anything to be scared to go to University"

Participant 9: "I think if it was just me, I was the only person going through it I probably would've been losing my mind but the fact that everyone I knew…… went to uni, everyone's in the same boat, like there's no use being worried about anything"

'Shared distress' also appeared to be helpful once students had transitioned to University, reducing isolation and acting as a motivator to continue when it felt very hard.

Participant 5: "[the] biggest like stresses that people have erm is just…… impostor syndrome, feeling like they're not up to scratch, erm but…… if everyone is feeling like we have imposter syndrome then like clearly we don't coz all of us are feeling the same"

Participant 5: "at University with loads of other people around you going through the same thing in the same boat erm you kind of motivate each other…… when you're so like demotivated and then you go to the library and you see everyone else working hard it's like

okay come on, this is what we signed up for, but if you are at your own desk it's just so much harder"

Comparison

While learning from peers and shared distress had largely felt helpful to the students, this was often because feelings or worries were shared. When students compared themselves to others who were coping or had coped 'worse' or 'better' than them, this led to a mismatch which caused distress. This could be a problem even if they were doing better than others.

Students with older siblings who had already made the transition to University reflected that many of their expectations of how they might manage the transition to University were based on their siblings experiences and things they had struggled with. This could lead to an expectation or fear that they would also struggle.

Participant 3: "my brother…… dropped out of Uni coz it was too much for him so I guess I was worried I was going to do the same thing"

Participant 9: "my older brother…… found his first year really difficult, like he missed home a lot, and he's quite similar to me…… and he came home a lot so I was quite worried that I'd find it really difficult being away from home"

After making the transition, many students commented that they found themselves in a more competitive environment at University than there had been at college. There also appeared to be a shift in what 'doing well' academically looked like and how important this was to the students.

Participant 5: "I think…… there's more like competitiveness…… than there was at college…… at college, you'd…… know I might not be the best…… but I'm probably not

going to be the worst…… whereas at [University] I feel like if you're not on your top form, like you're going to be the worst"

This element of competition led to comparison to how others were coping academically, with a drive to be doing 'better' than others. When it was confirmed that you were not the 'worst', it was comforting to recognise that your peers may be finding it challenging too.

Participant 2: "as long as I'm……on the average or just above it it does kind of reinforce in me that I'm doing okay and other people are finding it equally as difficult as me"

However, when it appeared that their peers were not struggling in the same way as they were, this led to a rise in self-doubt and a questioning of their abilities.

Participant 7: "some people on my course…… were really not having a difficult time……it just kinda makes you feel like you're not trying hard enough or that you're not able to deal with it…… can kind of make you feel little bit insecure"

In addition to academic comparison, students found themselves comparing themselves socially to their peers.

Participant 8: "I didn't realise how cultured so many people were and how accomplished a lot of people were so I think that can be a bit daunting…… I knew I had extra things that I could do but…… you know am I am I on the same level as these people and then I'd also have the…… worry of…… why am I worrying about all these things and why should I compare myself to anyone else…… kind of beating yourself up"

Students also compared their experience to that of their friends at other Universities through social media, this was felt to be very unhelpful particularly if you were struggling at the time.

Participant 5: "when you go on social media…… and you see everyone posting pictures with…… all of their new flatmates and going out and things, and you're there like, I'm drowned in work, It's not very helpful"

Participant 9: "my friends are very invested in each other and like what we're up to in our social lives and seeing my friends, at least on the social media surface value, having a really lovely time with their brand new mates and like hanging out all the time…… and seeing that and knowing I wasn't very close with my flatmates was really difficult"

Overall, students seemed to benefit from 'common humanity' at times of worry when those they were learning from or their peers shared their struggles; in these times struggles were able to be seen as "part of the larger human experience". However, it became more challenging for students when there appeared to be a mismatch between how they were coping compared to those around them. If they were doing 'better' than their peers, feelings of achievement were experienced. However, if they perceived themselves to be doing 'worse', students felt separated and isolated from others.

Communication

Worries and feelings were communicated in different ways by the students, this appeared to be impacted by how the students were coping at the time and also the context of the relationship they had with the person they were talking to. This theme appeared to broadly fall into two sub-themes, helpful and unhelpful. It seemed that there was a time for open and honest communication and a time when true feelings were hidden or not communicated, whilst this was recognised as unhelpful, it also appeared to serve a function of a defence.

Helpful

Generally, the students spoke positively of the importance and helpfulness of open conversations with others in their life during the build up to University starting. These

conversations typically resulted in the students receiving reassurance or experiencing a sense of common humanity as described above.

Participant 1: "The teachers that supported me, how they helped me in the transition between sixth form and Uni were really just sitting and having an open conversation"

Participant 9: "if I was ever worried about something, I usually had someone I could relate to, someone who could talk to me about it, and like if I ask them had the exact same like set of fears and worries"

Conversations did not always explicitly focus on worries or the concerns of others and at times this was communicated in more subtle ways e.g., through jokes or the odd comment.

Participant 8: "we didn't really talk about [the transition] that much but…… my mum would say…… send me a text once in a while or maybe try and call us on Friday nights…… it would just be things like her saying I would quite like you to communicate with me and she said I'll send you a few things in the post"

Participant 4: jokes……weren't jokes…… people being like……if you come back with a baby we're going to kick you out…… things that I know isn't true but it just shows that they have like, that concern……my dad and I had like proper sit down conversations of like, so if you are going to go clubbing and you are going to be drinking, make sure you do this, this, this and this……some people were serious about it but other people kind of just joked about it"

Open and honest communication was also discussed as a useful tool when navigating new relationships such as with flatmates or friends.

Participant 1: "I think it was just providing that area to talk I think we all did that for each other and I think that…… the biggest thing out of everything is communication…… and

understanding and if you don't have an understanding of something, go and give yourself an understanding of it"

Participant 9: "I brought it up to one of them that I felt quite like excluded, and from there they invited me to everything, they like text me all the time to make sure like if I want to come, like they'd leave the door open so I could get in and stuff like that, so yeah erm every time I asked for help, i got the help I needed"

Less Helpful

While honest communication was widely thought of as helpful, there were times when such conversations had the opposite effect.

Participant 1: "I talked to my brother …… I mentioned was going to University …… he said don't go …… that made it worse for me because then I was a bit like well he's the only one in our family that's been, so he's the only one who's got a fair idea and it's like am I making the right decision"

Participant 9: "having conversations, as much as they were important and necessary, having conversations like we won't break up will we……. kind of like perpetuated the idea that something could go wrong…… he would suggest things I hadn't even like considered……I don't wanna say we shouldn't have spoken about it coz we definitely should have done, but maybe putting each other at ease more so than we gave each other worries"

When asked what worries/concerns others may have held about them making the transition to University, participants were often unsure. While the students were able to tell that their parents did have worries, they often were hidden or not spoken about.

Participant 1: I didn't notice …… she was quiet on the topic of me going to Uni and she was sort of a bit teary but I didn't really think much of it …… you just sort of justify it in every

other way because you don't really want to see it…… I went and gave my mum a hug and my god it was like opening the flood barriers …… I think I hadn't seen it because she was trying to put on such a happy face and excitement for me going and she was so proud of me"

Participant 5: "I think they probably did have concerns but it didn't surprise me that they didn't always like speak to me about them…… they just kind of let me decide whether what I'm doing is working or not and then if it's not working then it's up to me to ask them for help"

Participant 2: "I think I did kind of feel more worried than other people but I'm not sure if …… they put on a brave face so to speak and didn't really show they were…… worried"

The approach taken by parents to not share their worries with their children was then mirrored when the students made the transition and struggled to adjust.

Participant 3: "[I was] kind of putting on that face because I didn't want them to worry about me, I was like nah i'll be fine……. but…… that's my way of saying I feel like I want to come home already"

Participant 5: "[I] used to message them so much to like reassure them that I was doing okay like I would never send them pictures……like two am crying in the library but if I'd…… just made a really good stir fry…… or like…… here's a picture from rowing or oh look at this sunset…… I was really conscious of like you know show them I'm doing okay and then I won't get any annoying phone calls like checking I'm okay"

Participant 7: "I think I generally you know maybe called my parents every once in a while but I didn't didn't really…… discuss things…… too much…… I was quite enjoying just being in the uni environment and telling my parents about how much fun I…… was having but keeping the work stress and stuff just to my friends"

The students seemed to feel a pressure to present an ideal picture of their time at University, which meant that they were not always transparent about their difficulties when communicating with loved ones. This appeared to be both a defence and a protection mechanism for the students. They defended themselves from being vulnerable to exposure about how hard they were finding things and also protected their loved ones from feeling worried about them.

Participant 9: "there's that stereotype that you absolutely love University, you find yourself at uni and it's amazing……. I didn't really want to be like……. I hate it here, this is horrible, I'm struggling, I feel very alone…… I felt like I should have been enjoying myself a lot more, and I didn't want to at least appear like I'd made a bad choice or like I shouldn't have gone"

Participant 2: "I just don't want to ruin people's moods, if they're having a good day, I don't want to be like "I'm really anxious today", just kind of kills off the mood"

Whilst this strategy may have felt useful to the students in the short-term, the unintended long-term consequence of the students not presenting an accurate picture of how they were managing with the transition often meant that others did not notice the distress they were feeling.

Participant 9: "I only went home say for the first two months once, twice, I went home more often after that, but I tried to stick it out for as long as I could, coz I was like I'm never going to get used to it if I go home like it's always going to be scary if I go home every weekend, so I was……. making a conscious effort to like be at uni and I think because of that my parents thought I was loving it, my parents were like oh she's having fab time, she doesn't want to come home, it wasn't so much that as like I just tried to cope with it"

Support

‘Support’ overlapped with the other themes but seemed to cover the three flows of compassion which formed the subthemes: to self, from others, and to others. It appeared that it was more of a challenge to support the self during the transition and initial adjustment to University as there was a sense that students were just keeping their head above water during this time. As they got used to their University life, students had more energy to focus on how to support themselves in a maintainable way. Students received a range of support from others, with the support from college often being academically focused. University support was felt to be helpful, but peer support was the most highly regarded. Students tended to support others in the ways that they had been supported or that had felt helpful to them.

To self

There was a general feeling that the transition to University can be overwhelming at times due to the increase in responsibilities and demands on time. The result of this was that students found it difficult to prioritise their own wellbeing.

Participant 5: “trying to balance…… looking after like our bodies as well like exercising and…… when people are having deadlines…… the rant about oh I'm behind in this and I’m behind in this, is always finished by…… I've had to have so many like takeaways this week coz I just don't have time to cook so now like my skins breaking out…… so I feel like…… that piles up”

Participant 8: “because I was anxious about a relationship with a boy, it meant that I wasn't spending as much time on my work…… so as a result I would get more anxious about that, so I think putting myself under any kind of extra emotional strain when you are already very stretched thin by just the environment that you're in is a really really bad idea”

As the students settled into University life, they were able to reflect on strategies that felt beneficial and identify ways of coping that felt less helpful.

Participant 3: "[I was] staying in my room, like blinds closed window barely open……. [a] dark, quite muggy environment doesn't particularly lead to a better mental state……. but now like my blinds are mostly open, I keep my room really clean and tidy. I keep my window open so it just feels like better now like it's actually an open place"

Other things that the students identified that they could do to support themselves included taking breaks, getting involved with new opportunities and adding structure to the day.

Participant 1: "I think it's just a a brief oh I'm having a panic, okay go and get a cup of tea, come back to it oh actually everything's rosy, I've already done it six times, just need to stop repeating myself"

Participant 9: "I kept making my lists and my plans and my weekly plans and I did my weekly shop at the same time every week, and I found some extracurricularly type things to get on with ……. they were all really really useful things to like add some structure so it was less like go to lectures and then other than that it's a free for all, do whatever you want……. keeping busy was really really key for me in coping"

From others

It was generally agreed that college/sixth forms provided practical support to the students which mainly focused on achieving the grades and applying to get into University. Less priority was placed on emotional support and preparing students for the major life transition they were about to undertake.

Participant 5: "We had a lot of support in terms of applying……. but there was literally nothing about uni life at all"

Participant 8: "[my college] didn't really do anything that focused on the transition to University……. they prepared us in terms of getting in and our a levels……. my school wasn't

big on the transition in terms of your lifestyle…… or even kind of saying this is what the academic workload would be like"

Overall, students were aware of the support that their University offered and were positive about the options available. It felt important to the students that there were a variety of methods available to access support, with services run by fellow students often referred to as feeling more accessible. This is similar to the ideas described in the 'common humanity' theme that peers are a more reliable source of information and that the feeling of shared distress can be very beneficial.

Participant 2: "they had …… all the different sort of you can get counselling or if you need the extra money you can get a bursary …… it did help me a bit knowing that I could go to someone if I needed it and that it would be confidential …… I think that that also sort of helped me knowing that there was someone and a way to get help if I needed it"

Participant 9: "[they provided] information about everyone's probably having the same worries as you, here's how we're going to combat it, if you're having any trouble these are the places you can go, here's six emails that you can email if you want a guy, a girl, somebody who does your course, somebody who doesn't, someone your age, someone adult, whatever you want there was always someone you can get in touch with, which was really helpful"

In addition to general support options that could assist with a range of difficulties, the students also discussed specific support that was in place that had supported them with their individual worries, often these worries were around keeping up academically and managing finances.

Participant 2: "knowing that they'll use PowerPoints that [I] can access after and that they can record the lectures and I can listen to them if I do miss a bit, I think that has kind of helped me stay not fall behind"

Participant 3: "they have like breakdowns of what's been paying in and what's paying out which is way more reassuring to see…… I have this much this month, this is how much i'll owe at the end of my time here"

Participant 4: "I came from a low income household, so they……. gave like additional support where they could and it definitely helped……. being able to……. pay for trips when I'm going on like societies and competitions……. if I can't pay for the membership then I can't compete, and if I can't compete then I can't put it on my CV and it kind of like limits my opportunities"

As well as support from their University, students also valued the reassuring presence of their loved ones and the support of their friends at University.

Participant 1: "I think really the best thing you can have is just the just the reassurance and support that should anything go wrong you just you can go back home"

Participant 3: "talking to me, reassuring me…… nothing really life changing but it's always nice to have someone there when you need it"

To others

Students provided support to their loved ones in similar ways to how they received support, this included involving family members in the important moments, offering reassurance, and maintaining regular contact. In a similar way to what was highlighted in the 'communication' theme, there was also a sense of protecting loved ones and not wanting them to worry.

Participant 1: "I think …… the best thing for her was anything I got from open days or from the website or whatever just pinging it across to her and saying look at this and building up context of saying this is where I'm going to go"

Participant 3: "the best I could do really was reassure just……. there's nothing you can really produce to prove before you go that you're not going to spend too much money or whatever"

Participant 4: "calling people and making sure they had heard my voice, that I'm alive, that I'm safe……. University is going well, things like that……. making sure that I called them at regular times"

The students provided support to their peers by taking them out of the University environment.

Participant 1: "I helped……. with the loneliness by saying right let's go out, I think taking yourself out of the flat when you've got so used to sitting in it because as well as it being our home of course it's also where our desks are, where our computers are, where our textbooks are so really you're not ever leaving it apart from to go to a lecture and even then you're just taking the work with you to another room……. I think really just getting out, socialising and moving around and going outside was a big thing"

Participant 8: "generally checking in on them, like talking to them……. writing a note and like leaving chocolate or like suggesting we go and do something, um like organising fun things to do"

They also supported their friends by simply being there and always having time to listen to their distress.

Participant 2: "I just kind of let them rant at me about the issues they have……. just kind of take some stress off them"

Participant 4: "knowing that she [could] call me at whatever time she wanted and I'd be there, you know having a shoulder to cry on"

Quantitative results

No significant changes were found for any of the subscales (Table 2). There were no significant differences in demographics or subscale scores between participants who just completed the pre-intervention measures and those who completed both the pre- and post-intervention measures.

Table 2. *Total Mean Score and Standard Deviations of Measured Variables Pre- and Post-Intervention.*

Scale	Subscale	Pre-mean (SD)	Post-mean (SD)	*z* score	*p* value
HADS	Anxiety	10.38 (4.60)	11.13 (3.36)	12.00	.750
	Depression	5.25 (3.45)	4.50 (3.51)	5.50	.581
WEMWBS	Total	43.63 (8.03)	44.13 (6.96)	20.00	.778
CEAS	Self-Compassion Engagement	37.88 (9.45)	36.25 (10.93)	11.50	.672
	Self-Compassion Action	24.50 (5.71)	23.50 (7.15)	13.50	.528
	Self-Compassion Total	62.38 (13.61)	59.75 (14.52)	8.00	.309
	Compassion to others Engagement	43.88 (13.28)	43.38 (11.78)	6.00	.684
	Compassion to others Action	28.63 (9.33)	29.38 (8.03)	15.00	.339
	Compassion to others Total	72.50 (22.49)	72.75 (19.64)	9.00	.752
	Compassion to others Engagement	28.13 (13.57)	27.88 (15.06)	10.00	.916
	Compassion to others Action	19.25 (10.42)	20.50 (10.54)	21.50	.624

	Compassion to others Total	47.38 (23.56)	48.38 (24.70)	22.00	.574

Calculations were based on the eight participants who completed pre- and post-intervention measures and accessed the intervention.

Feasibility and acceptability of the intervention

Most participants (3) had become aware of the research through social networking sites. Two participants had been told about it by their college or University. One participant could not recall and three declined to answer.

When asked about their expectations of taking part in the research, two participants stated they had not had any expectations with one participant reporting they were not sure. Others identified that they "thought [they] would gain skills in understanding how to be as compassionate as possible" and would "[learn] new coping mechanisms". Another participant simply stated that their expectation had been met. Again, three declined to answer.

The response to the measures was largely positive: the measures were "[a] good starting point for understanding your mental state", "necessary to help [them] work out what [their] issues were", "clearly set out and easy to complete" and "quite helpful". Another participant acknowledged that the measures were "a little confusing at first but once [they] got into it, [they] understood it". One participant stated they could not remember what they had thought and three declined to answer.

Of the nine participants who completed the post-intervention measures, eight reported that they had accessed the intervention while one reported they had not.

The participants who took part in the intervention did not report any issues with accessing the website, two declined to answer. There was variety in the number of modules participants completed, with two participants struggling to remember, two reporting they had completed two or three and one participant completing all of the modules.

When asked if there was any particular reason why they had not completed all the modules, participants stated either they had completed them all or they had not due to time constraints and being very busy once at University. This was also reflected in the response from the participant who had not accessed the modules who stated that this was due to lack of time, they also noted that they would have been more likely to access the website if they had been provided with more information.

Two participants identified that some of the modules were more enjoyable to complete than others and one participant felt the modules could be improved by asking fewer questions.

Three participants reported that they had learnt skills from the course that they were now putting into practise. One participant reported they had learnt that "self-compassion is really important", while another identified they now used "the breathing exercise". Similarly, another participant stated that they now "incorporate more breathing techniques into [their] everyday life" and gave an example that "before [their] class tests [they] did some breathing exercises to try and calm [themselves].

In regard to the transition, again there was variety in the responses, one participant reported that they are "really enjoying university [and they] found the transition okay as [they were] already quite independent". Another participant had noticed a shift stating that "it wasn't stressful and then assignments were given". The final response came from a participant who acknowledged that they did and are "finding it extremely hard" but felt that "before, [they] would probably have blamed [themselves] for feeling certain ways, but now [they] understand that sometimes our brains just can't help certain thoughts or feelings and [they've] had more compassion for [themselves and] not beaten [themselves] up for feeling certain ways".

Discussion

This study aimed to explore the transitionary period from college to University in relation to compassion. A mixed methods approach was utilised. The qualitative element of the study explored the experiences of students who had recently transitioned to University in relation to the flow of compassion and the two psychologies of compassion, while the quantitative element explored the feasibility and impact of delivering an online compassion-based intervention to college students transitioning to University.

Five main themes were generated from the discussions with the first-year undergraduate students: adjustment, relational impact, common humanity, communication, and support. The two main themes (adjustment and relational impact) seemed to play a large part of the transitionary process.

Adjustment to University life occurred over time, consistent with previous findings it seemed there were many changes the students had to adjust to (Terry et al., 2013) e.g., living away from home, meeting a new social group, and being in a different academic environment. Pre-transition, students had several expectations of what their transition to University would be like and there was commonly a reported feeling of being both excited and worried about the same things. As the transition grew nearer, worry became the predominant emotion and students attempted to cope with this by trying to control what they could through preparation. The students' high expectations were often not met leading to a loss of control; this mismatch was challenging for some. It seemed that students were largely in their threat system (Gilbert, 2009) pre-transition and on initial arrival; to cope with these feelings they were exhibiting drive responses (Gilbert, 2009) by attempting to have control over the situation and prepare, but when expectations were not met, were firmly back in the threat system. Additionally, students were very driven to make connections and get involved in all University had to offer; at times this was helpful as it enabled students to socialise, make friends and explore

new hobbies. However, this also led to a threat of missing out and feeling unable to say no to social commitments when it became clear that it was not possible to balance all of the student's newfound priorities. All students did describe a period of settling in and over time adjusting to the reality.

The transition also had an impact on both interpersonal and intrapersonal relationships. Existing relationships e.g., family and friends appeared to be strengthened by the upcoming transition with relationships improving and a focus being placed on spending time together. This is encouraging as research suggests that being able to maintain family relationships during the transition is a protective factor (Masten, 2013). Romantic relationships however came under strain due to the uncertainty of if the relationship would survive the transition to University. Students had been particularly worried about making new friends and this was easier for some than others. Consistent with the literature, in the face of this social challenge, the students' self-esteem was threatened (Hurst et al., 2013) and they wanted to be accepted (Chu, 2016). Prosocial relationships and social engagement have been found to be protective factors that promote college adjustment (Galatzer-Levy et al., 2012). In order to fit in, some students altered aspects of their personality. However, students also identified a growth in self-acceptance, describing a sense of freedom to be their authentic selves.

Adjustment and relational impact were greatly influenced by the presence or absence of common humanity, communication, and support.

Common humanity (Neff, 2003) appeared to be both helpful and unhelpful depending on the context. Students particularly benefited from learning from others, identifying that the opinions and experiences of their peers felt more reliable and valid than the generic information provided by Universities. Additionally, students were reassured and able to engage with the soothing system when worries were shared and there was a sense of being in

the same boat, this appeared to make students feel less isolated. Common humanity was less helpful when students compared themselves to others who were seemingly coping 'better' than themselves, this led to feelings of threat, as well as separation and isolation from others.

The students communicated in a range of different ways, and this was impacted on by who they were speaking to. It appeared that open and honest conversations were easier to have with those who shared their distress, relating back to the sense of common humanity. It transpired that the students had often not had conversations with those around them that focused on the worries their loved ones had about the upcoming transition. It seemed that true feelings were at times hidden or not communicated, this seemed to be due to a desire from parents and loved ones to help the student feel excited and optimistic about the upcoming transition and the student in turn wanted to protect their loved ones from worrying about them or becoming overly intrusive. The two psychologies of compassion (Gilbert, 2014) seemed particularly evident in this theme and the theme of support. Throughout the transition, students seemed to notice their own distress and make assumptions that their loved ones were aware of the distress they were experiencing and that loved ones were experiencing their own distress in regard to the transition (engagement). However, whilst shared distress was helpful to students, it may have also furthered the assumption that you should experience feelings of threat and anxiety in the transition and therefore just need to accept this. This assumption and the barriers to open and honest communication may have meant that distress was not always noticed (engagement) and was therefore often not alleviated or prevented (action).

Finally, in relation to support, the two psychologies of compassion (Gilbert, 2014) and the flows of compassion (Gilbert, 2014) seemed particularly prominent. Students appeared to be able to receive and give support from their peers prior to the transition. However, as they arrived at university, there was a sense that students needed to prioritise settling into their

new lifestyle and self-compassion was lacking. As the students adapted to university, they seemed to have more energy to focus on how to support themselves, learning how to engage with their soothing system (Gilbert, 2009) and increase compassion to the self. Support from others varied, with a potential barrier for the students receiving helpful support from loved ones being that feelings were hidden or uncommunicated at times in order to protect their loved ones from worrying. Whilst this may have felt helpful to the students in the short-term, this also led to a misunderstanding of how they were coping meaning that support was not always offered when needed. Support provided by colleges was often academically focused. University support was felt to be helpful with a variety of options, but peer support was the most highly regarded. This is consistent with research finding that individuals are more likely to utilise informal support rather than seek formal support e.g., counselling (Hodges et al., 2007). This may in part reflect the figures that demonstrate that counselling services are often underutilised (Unite, 2019) along with the fact that some students do not disclose mental health difficulties for fear of stigmatisation (Pereira et al., 2020). Students tended to support others in the ways that they had been supported or that had felt helpful to them. It was also discussed that the students themselves needed to have adjusted and settled in before they felt able to provide support to their peers at University.

The qualitative element of the study found no significant changes pre- to post-intervention on any of the subscales measured (depression, anxiety, subjective wellbeing, compassion to self, compassion to others, compassion from others). While no significant changes were reported, levels of anxiety had increased, whilst depression scores had lowered, this is supported by findings that suggest the transition to University is a time of heightened anxiety but not a particularly depressive time (Cooke et al., 2006). Due to this being a pilot study, feasibility and acceptability was accessed. There were feasibility issues the researcher had not predicted that presented barriers to students engaging with the intervention. The greatest barrier

appeared to be a lack of time to dedicate to the intervention, with some indicating that once they had started University it was not possible to continue with the modules. This is reflected in the high rate of attrition from those who expressed interest in the study, to those that accessed the intervention. Despite this, evaluations of the intervention were largely positive with participants identifying skills that they had learned and were employing in their everyday life.

Limitations

Across the qualitative and quantitative elements of the study, students who wished to participate were required to approach the researcher and therefore were self-selected. Research suggests that those who are the most distressed may be less likely to seek help (Cigularov et al., 2008), this is perhaps reflected in the pre-intervention scores of participants who took part in the quantitative element of the study. Over 52% of students were non-cases or at the 'mild' cut-off score (8-10) on the anxiety scale of the HADS, whilst over 72% of students did not reach the 'mild' cut-off score (8-10) and were non-cases on the depression subscale. Research into web-based compassion interventions has found that improvements in wellbeing and anxiety only occur in students with high baseline anxiety (McEwan et al., 2018). It is therefore possible that the low anxiety and depression scores pre-intervention limited the effect that could be observed at post-intervention. Additionally, by not including a comparison condition it is not possible to observe if the intervention was effective at minimising the impact on depression, anxiety, subjective wellbeing and compassion that would have taken place if the participants had not received the intervention at all.

It is also important to acknowledge the biggest limitation in relation to the quantitative element of the study which is the high level of attrition. While it was expected that there would be a degree of attrition, this was much higher than the researcher had anticipated. The

students commented in the feasibility questionnaire responses that it was difficult to commit the time required to complete the intervention once they had started University. Another potential explanation for the rate of attrition is that some participants were waiting a number of months from when they expressed their initial interest in the research to when they were able to access the intervention due to difficulties in making the website fit for purpose. Additionally, research into the use of online interventions has found that attrition is much higher in online interventions compared to face-to-face therapy (Ybarra & Eaton, 2005). Retention rates of online interventions can be as low as 1% (Lauder et al., 2007) with participants often not progressing past the first two modules (Griffiths & Christensen, 2007). The high rate of attrition limited the depth of analysis that could take place and was likely a key factor in the lack of significant findings. This assumption is strengthened by the positive qualitative feedback the course received.

While participants from the qualitative element of the study did attend different universities, only three Universities were attended overall. Therefore, the experiences the students shared may be representative of a small section of Universities, rather than the transition to University overall, therefore the generalisability of the results is limited.

Implications, Areas of Future Research and Conclusions

Due to the limitations in the included studies, it is difficult to make direct recommendations. Overall, the findings suggest that compassion does play a valuable role in the transition to University and previous research strongly indicates that higher levels of compassion can improve wellbeing (Fong & Loi, 2016). Throughout the semi-structured interviews, all students reported that the transitionary period is both an anxious and exciting time. Whilst adjustment to University was more challenging for some then others, all participants reported struggling at some point during the process. This gives further strength to the argument that

this is an important time period in young people's lives that requires further exploration in order to identify the most appropriate recommendations for how students can be supported at this time. There was consistency in the fact that colleges provided practical advice that was focused on getting students accepted into University, it would perhaps be useful for colleges to include some further education around University life e.g., how to manage your finances, some problems you may face etc. Students were largely positive about the support they had received from the University during and after the transition, however it was highlighted that it was beneficial for students to be made aware of the possible avenues of support before making the transition and this had not happened in all cases. Whilst the information received from the University was helpful, there was a strong feeling that peer support and the chance to learn from others was the most beneficial. It could be helpful for colleges to ask past students to return to talk about their transition to University or for Universities to have current undergraduate students available to answer questions. The adjustment to University also impacted the loved ones around the individual and there was a real sense of students wanting to protect their loved ones from seeing how worried they were or if they were struggling. In a similar way, there also seemed to be a protective aspect to parents not sharing their own worries and concerns with young people. Future studies could benefit from including loved ones in interviews about the transition to better understand these barriers to open and honest communication.

As the quantitative element of the research was a pilot study, issues with feasibility and acceptability were expected. Findings from the questionnaire suggest that the intervention was well received by students and beneficial to them in the transition to University. Future research is required with a larger sample and the inclusion of a control group to be able to make comments about the effectiveness of an online compassion-based intervention. The feedback on feasibility also indicates that such an intervention would need to be timed well

and perhaps concluded before the participants start University as by this point students are often too overwhelmed and busy to continue to engage with such an intervention. It may also be beneficial for future research to explore the impact of baseline scores on the effectiveness of the intervention as it may be possible that such an intervention is only effective for students who are already struggling and therefore may not be as proactive and preventative as had been hoped.

In conclusion, the presented study demonstrates that compassion is a valuable aspect of the transition from college to University that requires further exploration.

References:

Andrews, B., Hejdenberg, J., & Wilding, J. (2006). Student anxiety and depression: comparison of questionnaire and interview assessments. *Journal of Affective Disorders*, *95*(1-3), 29-34.

Andrews, B., & Wilding, J. M. (2004). The relation of depression and anxiety to life-stress and achievement in students. *British Journal of Psychology*, *95*(4), 509-521.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, *55*(5), 469.

Bewick, B., Koutsopoulou, G., Miles, J., Slaa, E., & Barkham, M. (2010). Changes in undergraduate students' psychological well-being as they progress through university. *Studies in Higher Education*, *35*(6), 633-645.

Binder, P. E., Dundas, I., Stige, S. H., Hjeltnes, A., Woodfin, V., & Moltu, C. (2019). Becoming Aware of Inner Self-Critique and Kinder Toward Self: A Qualitative Study of Experiences of Outcome After a Brief Self-Compassion Intervention for University Level Students. *Frontiers in Psychology*, *10*, 2728.

Bjelland, I., Dahl, A. A., Haug, T. T., & Neckelmann, D. (2002). The validity of the Hospital Anxiety and Depression Scale: an updated literature review. *Journal of Psychosomatic Research*, *52*(2), 69-77.

Bowlby, J. (1973). *Attachment and Loss: Volume II: Separation, Anxiety and Anger.* The International Psycho-Analytic Library, 95, 1-429. London: The Hogarth Press and the Institute of Psyco-Analysis.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology,* 3(2), 77-101.

Busseri, M. A. (2015). Toward a resolution of the tripartite structure of subjective well-being. *Journal of Personality*, *83*(4), 413-428.

Chu, Z. (2016). *The First Year Experience on an Urban Campus: A Case Study Exploring the Impact of First Year Programs on Student Perceptions of Belonging, Adjustment, Success, and Support.* (Dissertation, Georgia State University).

Cigularov, K., Chen, P. Y., Thurber, B. W., & Stallones, L. (2008). What prevents adolescents from seeking help after a suicide education program? *Suicide and Life-Threatening Behavior*, *38*(1), 74-86.

Conley, C. S., Kirsch, A. C., Dickson, D. A., & Bryant, F. B. (2014). Negotiating the transition to college: Developmental trajectories and gender differences in psychological functioning, cognitive-affective strategies, and social well-being. *Emerging Adulthood*, *2*(3), 195-210.

Cooke, R., Bewick, B. M., Barkham, M., Bradley, M., & Audin, K. (2006). Measuring, monitoring and managing the psychological well-being of first year university students. *British Journal of Guidance & Counselling*, *34*(4), 505-517.

Dalai Lama. (1995). *The Power of Compassion*. Delhi, India: HarperCollins.

De Clercq, M., Roland, N., Brunelle, M., Galand, B., & Frenay, M. (2018). The delicate balance to adjustment: A qualitative approach of student's transition to the first year at university. *Psychologica Belgica*, *58*(1), 67.

Dundas, I., Binder, P.-E., Hansen, T. G. B. & Stige, S. H. (2017). Does a short self-compassion intervention for students increase healthy self-regulation? A randomized control trial. *Scandinavian Journal of Psychology, 58*, 443–450.

Ekman, P. (2003). *Emotions revealed.* New York, New York: Times Books.

Evans, N. J., Forney, D. S., & Guido-DiBrito, F. (1998). *Student Development in College: Theory, Practice, and Research.* San Francisco, CA: Jossey-Bass.

Ferrari, M., Hunt, C., Harrysunker, A., Abbott, M. J., Beath, A. P., & Einstein, D. A. (2019). Self-compassion interventions and psychosocial outcomes: A meta-analysis of RCTs. *Mindfulness*, *10*(8), 1455-1473.

Fong, M., & Loi, N. M. (2016). The Mediating Role of Self-compassion in Student Psychological Health. *Australian Psychologist*, *51*(6), 431-441.

Galatzer-Levy, I. R., Burton, C. L., & Bonanno, G. A. (2012). Coping flexibility, potentially traumatic life events, and resilience: A prospective study of college student adjustment. *Journal of Social and Clinical Psychology*, *31*(6), 542-567.

Gilbert, P. (2009). *The Compassionate Mind*. Robinson.

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology*, *53*(1), 6-41.

Gilbert, P., Catarino, F., Duarte, C., Matos, M., Kolts, R., Stubbs, J., Ceresatto, L., Duarte, J., Pinto-Gouveia, J., & Basran, J. (2017). The development of compassionate engagement and action scales for self and others. *Journal of Compassionate Health Care, 4*(1), 4.

Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: an evolutionary analysis and empirical review. *Psychological Bulletin*, *136*(3), 351.

Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9(1), 139-145.

Griffiths, K. M., & Christensen, H. (2007). Internet-based mental health programs: A powerful tool in the rural medical kit. *Australian Journal of Rural Health*, *15*(2), 81-87.

Gunnell, K. E., Mosewich, A. D., McEwen, C. E., Eklund, R. C., & Crocker, P. R. (2017). Don't be so hard on yourself! Changes in self-compassion during the first year of university are associated with changes in well-being. *Personality and Individual Differences,* 107, 43-48.

Hodges, C. A., O'Brien, M. S., & McGorry, P. D. (2007). Headspace: National Youth Mental Health Foundation: making headway with rural young people and their mental health. *Australian Journal of Rural Health*, *15*(2), 77-80.

Hoffman, M. L. (1981). Is altruism part of human nature? *Journal of Personality and Social Psychology*, *40*(1), 121.

Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *Journal of Adolescent Health*, *46*(1), 3-10.

Hurst, C. S., Baranik, L. E., & Daniel, F. (2013). College student stressors: A review of the qualitative research. *Stress and Health, 29*(4), 275-285.

IBM Corp. (2019). *IBM SPSS Statistics for Windows, Version 26.0.* Armonk, NY: IBM Corp.

Ierfino, D. (2017). *An initial evaluation of an online compassion focused therapy intervention for self-esteem* (Doctoral dissertation, Canterbury Christ Church University).

Irons, C., & Beaumont, E. (2017). *The compassionate mind workbook: A step-by-step guide to developing your compassionate self*. Robinson.

Jimenez, C. J., Perez, T. A., Prieto, F. S., & Navia-Osorio, P. M. (1989). Behavioural habits and affective disorders in old people. *Journal of Advanced Nursing*, *14*(5), 356-364.

Keltner, D., Haidt, J., & Shiota, M. N. (2006). *Social Functionalism and the Evolution of Emotions.* In M. Schaller, J. A. Simpson, & D. T. Kenrick (Eds.), *Evolution and Social Psychology* (115–142). Psychosocial Press.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*(6), 593-602.

Keyes, C. L. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior,* 43(2), 207-222.

King's Fund. (2018). *How is the NHS performing? December 2018 quarterly monitoring report,* The King's Fund, 21 December 2018. See: https://www.kingsfund.org.uk/publications/how-nhs-performing-december-2018#mental-health

Laidlaw, A. H., Hunter, J., Turvey, T., Stillman, M., Warren, R., & Ozakinci, G. (2014). The development and evaluation of a flexible training course:" Understanding and developing compassion". *Journal of Evidence-Based Psychotherapies, 14*(2), 149-157.

Lauder, S., Chester, A., & Berk, M. (2007). Net-effect? Online psychological interventions. *Acta Neuropsychiatrica*, *19*(6), 386-388.

Lindsey, S. (2017). *Examining the psychometric properties of the compassionate engagement and action scales in the general population* (Doctoral dissertation, University of Essex).

Lisspers, J., Nygren, A., & Söderman, E. (1997). Hospital Anxiety and Depression Scale (HAD): some psychometric data for a Swedish sample. *Acta Psychiatrica Scandinavica*, *96*(4), 281-286.

Macaskill, A. (2013). The mental health of university students in the United Kingdom. *British Journal of Guidance & Counselling*, *41*(4), 426-441.

Marsh, S. (2017). *Number of university dropouts due to mental health problems trebles*, The Guardian, 23 May 2017. See: https://www.theguardian.com/society/2017/may/23/number-university-dropouts-due-to-mental-health-problems-trebles

Masten, A. S. (2013). *Risk and Resilience in Development.* In P. D. Zelazo (Ed.), *Oxford Library of Psychology. The Oxford Handbook of Developmental Psychology, Vol. 2. Self and Other* (579–607). Oxford University Press.

McEwan, K., & Gilbert, P. (2016). A pilot feasibility study exploring the practising of compassionate imagery exercises in a nonclinical population. *Psychology and Psychotherapy: Theory, Research and Practice*, *89*(2), 239-243.

McEwan, K., Elander, J., & Gilbert, P. (2018). Evaluation of a web-based self-compassion intervention to reduce student assessment anxiety. *Interdisciplinary Education and Psychology, 2*(1), 1-24.

Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*(2), 85-101.

Neff, K. D. (2008). *Self-compassion: Moving beyond the pitfalls of a separate self-concept.* In H. A. Wayment & J. J. Bauer (Eds.), *Decade of behavior. Transcending self-interest: Psychological explorations of the quiet ego* (p. 95-105). American Psychological Association.

Neff, K. D., Hsieh, Y. P., & Dejitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, *4*(3), 263-287.

Office for National Statistics. (2016). *Total number of deaths by suicide or undetermined intent for Students aged 18 and above in England and Wales, 2014,* 23 May 2016. See: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/adhocs/005732totalnumberofdeathsbysuicideorundeterminedintentforstudentsaged18andaboveinenglandandwales2014.

O'Kelly, R. (2020). Keep calm-students still want to study. *WONKHE.* 9th July 2020. See: https://wonkhe.com/blogs/keep-calm-students-still-want-to-study/

Pereira, S., Early, N., Outar, L., Dimitrova, M., Walker, L., Dzikiti, C., & Platt, C. (2020). *University Student Mental Health Survey 2020.* March 2020. See: https://www.diginbox.com/go/files/Mental%20Health%20Report%202019%20(2020).pdf.

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, *69*(4), 719.

Sandeman, G. (2016). Surge in students struggling with stress. *The Times, 11 July 2016.*

Schlossberg, N. K., Goodman, J., & Anderson, M. L. (2012). *Counseling adults in transition: linking schlossberg's theory with practice in a diverse world*. Springer Publishing Company.

Sevinç, S., & Gizir, C. A. (2014). Factors Negatively Affecting University Adjustment from the Views of First-Year University Students: The Case of Mersin University. *Educational Sciences: Theory and Practice*, *14*(4), 1301-1308.

Shaver, P., Schwartz, J., Kirson, D., & O'connor, C. (1987). Emotion knowledge: further exploration of a prototype approach. *Journal of Personality and Social Psychology*, *52*(6), 1061.

Smeets, E., Neff, K., Alberts, H., & Peters, M. (2014). Meeting suffering with kindness: Effects of a brief self-compassion intervention for female college students. *Journal of Clinical Psychology*, *70*(9), 794-807.

Sober, E., & Wilson, D. S. (1998). *The Evolution and Psychology of Unselfish Behavior*. Cambridge, MA (Harvard University Press) 1998.

Spinhoven, P. H., Ormel, J., Sloekers, P. P. A., Kempen, G. I. J. M., Speckens, A. E. M., & Van Hemert, A. M. (1997). A validation study of the Hospital Anxiety and Depression Scale (HADS) in different groups of Dutch subjects. *Psychological Medicine*, *27*(2), 363-370.

Sprecher, S., & Fehr, B. (2005). Compassionate love for close others and humanity. *Journal of Social and Personal Relationships*, 22, 629–651.

Stewart-Brown, S., & Janmohamed, K. (2008). *Warwick-Edinburgh Mental Well-being Scale. User guide. Version, 1*. Warwick Medical School, University of Warwick.

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation. *Health and Quality of Life Outcomes*, 5(1), 63.

Terry, M. L., Leary, M. R., & Mehta, S. (2013). Self-compassion as a buffer against homesickness, depression, and dissatisfaction in the transition to college. *Self and Identity*, *12*(3), 278-290.

Thorley, C. (2017). Not By Degrees: Improving student mental health in the UK's universities. *IPPR: London, UK*.

Unite. (2019). *The new realists: Unite Students Insight Report*, September 2019, p.23.

Vitterso, J. (in press). *Handbook of Eudaimonic Well-Being*. New York: Springer.

Wasylkiw, L. (2015). Students' perspectives on pathways to university readiness and adjustment. *Journal of Education and Training Studies*, *4*(3), 28-39.

Webb, E., Ashton, C. H., Kelly, P., & Kamali, F. (1996). Alcohol and drug use in UK university students. *The lancet*, *348*(9032), 922-925.

Ybarra, M. L., & Eaton, W. W. (2005). Internet-based mental health interventions. *Mental Health Services Research*, *7*(2), 75-87.

Zessin, U., Dickhäuser, O., & Garbade, S. (2015). The relationship between self-compassion and well-being: A meta-analysis. *Applied Psychology: Health and Well-Being*, *7*(3), 340-364.

Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica*, *67*(6), 361-370.

Part 3: Appendices

Appendix A: Reflective Statement

Empirical research

Choosing a research topic

I recall attending the research fair held at the University and feeling incredibly overwhelmed and out of my depth. I was still finding my feet on the course and the concept of adding in an additional thing to worry about (research) paralysed me. It appeared that my fellow trainees were brimming with research ideas whilst I felt clueless and had no idea what I was interested in. Reflecting on my avoidance of the research component of the Doctorate at the time ironically led me to my area of interest, student wellbeing. As an undergraduate student, I had struggled with the transition to University and, following the loss of multiple family members, my mental health. Completing my undergraduate dissertation at a time when I was feeling incredibly low and self-critical had left me with negative connotations of research and critical beliefs about my own abilities. The possibility of contributing to research aiming to support students making the transition to University made me feel enthusiastic about research for the first time in a long while. Around the same time, I began to learn more about Compassion Focused Therapy (CFT), an approach that felt very foreign to me, however I recognised that the key concepts and ideas would have been very helpful to me during my undergraduate degree and may just help me through the doctorate. Luckily, I was able to find supervisors passionate about compassion and willing to allow me to relate this to an area of passion for myself, thus the focus of the empirical paper was created.

Ethical approval

The process of obtaining ethical approval was relatively straightforward for me due to going through University ethics. I am appreciative of how quickly the ethics committee responded

to the multiple amendments I ended up submitting which reduced some pressure at a stressful time.

Quantitative study-Recruitment

I had originally intended to simply recruit students from local colleges and sixth forms, however after contacting as many as possible, I was disheartened how few replied or expressed interest in the project. I wonder if this was due to the drive often found in college/sixth form environments on getting into University and the lesser focus placed on the impact of the transition and adjustment. I changed my strategy and started to recruit through social media and an advert post and was pleasantly surprised each time the number of completed surveys on the host website increased. At this point, I was feeling optimistic about the research.

Quantitative study-Intervention

Unfortunately, the project did not go to plan. I was grateful to be granted permission to use the website which provided the intervention course; however, this came along with many hurdles I did not foresee. I greatly underestimated the number of changes that would need to be made to the website for it to be appropriate to use and the amount of time this would take. As I did not have the rights to the website or the skills to make the changes myself, this meant that I then had to rely on other people to get the intervention up and running. This was incredibly frustrating as many delays were outside of my control and I felt powerless to move the project forward. It is highly likely that the delay in providing the intervention to participants who had completed the baseline measures early on is one of the main reasons why the rate of attrition was so high. This experience left me feeling that all my doubts about my own research abilities had been confirmed and I felt increasingly negative towards the research process.

Quantitative study-Analysis

The rate of attrition was very high in the study, reducing the depth of analysis that it is possible to carry out. It was really disheartening to find that there were no significant results in the quantitative analysis. I believe there may have been a different outcome if more participants had completed the post-intervention measures. However, as the participants who did not access the intervention also did not complete the post-intervention measures, I can only speculate that this was a barrier to engaging with the intervention.

Qualitative study-Recruitment

I had originally intended to recruit from two local Universities by attending lectures for first year students and presenting about my research. I was grateful how many lecturers warmly welcomed me into their classes, but I found presenting to be quite a nerve-racking experience. Slowly, several students expressed interest in the research and consented to an interview. Then, the COVID-19 pandemic arrived and once again my research hit a stumbling block. I was quicker to regroup this time around, recognising that whilst there were some factors outside of my control, there were options I could explore and I was not in fact powerless this time. I switched to recruiting through social media platforms and advertising virtual interviews. Surprisingly, I found it easier to recruit participants in 'lockdown' as people generally had more free time and wanted to support others.

Qualitative study-Interviews

Having never conducted a research interview before, it was a learning curve. The more interviews I did, the more comfortable I became with not sticking to a script and instead following a structure whilst giving space to discuss what felt important to the participants. I really enjoyed the process of the interviews and hearing about the experiences of students who made the transition to University.

Qualitative study-Analysis

I felt very out of my depth with qualitative research, having no prior experience, this felt like a massive risk. I found the process of transcribing the interviews incredibly challenging, due to my Dyspraxia, the speed of my typing is quite slow, this means that this seemingly simple task took me an incredibly long time. When it came to generating themes, I initially used a 'post-it note method' that my fellow trainees had utilised. This involved writing down the initial codes on post-it notes and then grouping them together to generate themes. Again, this 'method' was really hard for me, it took me hours to write out the codes on post-it notes and was very tiring trying to write clearly enough that I would be able to quickly read the themes. This meant that I would often avoid this task due to the critical inner voice it would invoke in me. On reflection, I should have recognised sooner that this 'method' was not the right approach for me but I found it really hard and quite embarrassing to let go of a method that worked for everyone else and admit that it was too difficult for me. My partner suggested that I use an online spreadsheet instead to keep track of my codes and group them together and once I started doing this I quickly felt motivated again to continue with the research. After developing some initial ideas about themes, I really enjoyed the process of whittling these down and seeing the pieces fit together.

Systematic Literature Review

Finding a question

Finding a question was a tricky process. I heeded advice from older trainees to start early and tried many times to find a question only to keep hitting a brick wall when the topic had already been covered or literature was non-existent. I took a longer break from the SLR than I should have due to this frustration and became so wrapped up in my research project that the SLR rarely got a second thought. I think one difficulty I had was overcomplicating my

question. I found it really helpful to mind map ideas with my fellow trainees, as often when you are so involved in a project, you can miss the obvious. I also sought support from the University, which was incredibly helpful, it was really reassuring to hear that I was on the right track and be provided with some guidance to find my question. Once I knuckled down and gave into the fact that it was going to a process of finding something that worked, I was able to find a question that interested me.

Literature Search

I found myself really enjoying the literature search. It was very calming to have a clearly set out process that I could simply follow with fewer decisions to make. This effectively silenced the inner critic for a short period of relief as I could finally feel that I was doing something the 'right way'.

Synthesis

The synthesis was mostly enjoyable and helped me to see the included studies in more detail and begin to see areas where the literature as a whole could be improved. At times it was difficult to manage the quantity of studies included in the review and to recall the finer details of the authors research. By now, I had realised that I worked a lot better off an Excel spreadsheet and quickly put one together with the key areas I would need to quickly recall, this also allowed me to effectively group and compare studies on various aspects.

Write up

The idea of getting to the point of the write up always felt so far away but when I did imagine it, I pictured myself in the post-grad lounge surrounded by my fellow trainees, willing each other on. Due to COVID-19, this was not to become reality. It has certainly been a rollercoaster to write this thesis in the living room of my small flat. At times, the words came thick and fast and I felt proud of what I was accomplishing. At other times, I was paralysed

by self-doubt, fearing I sounded 'stupid' and was about to be exposed for the imposter I am. This led to an unhelpful pattern of writing, doubting, deleting, and then avoiding, with little being achieved. Eventually, I found a more helpful process of writing whatever came to mind and taking breaks to complete other parts of the write up when I started to feel overwhelmed, returning to edit later with a fresh pair of eyes. Due to delays in data collection and the write up, I was still writing my thesis when I started working full time on placement. It was really hard to balance the commitments of placement and research and it felt that I was always falling behind with one or the other. I spoke to other trainees and my placement supervisor and we agreed that I would take a week of annual leave and purely focus on my thesis, this was incredibly helpful, and I decided to take this approach for the rest of the write up. By setting realistic, achievable goals with my research supervisors and their continuous encouragement, slowly, but surely, the write up came together.

Final Reflections

I think it would be truthful to say that the research element of the course has been one of the greatest challenges I have ever faced. I struggled with my feelings whilst writing this reflective statement; I was fearful I appeared too negative, whilst also worrying I was exposing myself to judgement by being vulnerable with how difficult I have found this process, but I have always believed that honesty is the best policy. Whilst the process has not always been enjoyable, I am grateful for how much I have learned about myself as a person and a researcher. Reflecting on how critical my inner voice can be led to me to recognise that it could be beneficial to work on this in the hope that I could let some compassion in. It also made me realise how lucky I am to have so many supportive people in my life who have picked me up and helped me keep going. Writing this statement has highlighted to me how much I have learnt and developed as a researcher, there are many lessons I will take from what worked well and not so well for me as an individual, particularly to work in a way that I

have adapted to fit my needs rather than wanting to be seen as able to do things the ‘right way’. I wonder if my experience of this project would have been different if it had been something I had chosen to undertake, rather than an essential component of the course and at times a barrier to qualifying. I hope to explore this in qualified life and continue to grow from the lessons I have learned.

Appendix B: Epistemological Statement

The purpose of this statement is to present the researchers understanding of ontology and epistemology and to relate this to the methodology used in the Systematic Literature Review and the Empirical Paper presented in this thesis.

Ontology can be defined as a theory of assumptions that we make about the nature of reality (Easterby-Smith et al., 2002), while epistemology is related to knowledge, in particular what should be considered acceptable knowledge (Bryman, 2004).

Those who hold a 'positivist' or 'post positivist' epistemological position argue that there is a singular reality which can be discovered and measured i.e., that the social world can be studied in a similar way to the natural world (Bahari, 2010). It is thought that the researcher should engage with the research in a value-free way as much as is possible (Bahari, 2010). 'Positivist' or 'post positivist' researchers typically employ a deductive approach and a quantitative methodology to develop knowledge by examining cause and effect, testing theories and using measurements and observations (Cresswell, 2003).

On the other hand, the 'interpretivist' or 'constructionist' epistemological position views reality as a social construction resulting in many different versions of reality. It is thought that is should be acknowledged that findings will be influenced by the researchers own values and perspectives (Bahari, 2010). 'Interpretivist' or 'constructionist' researchers usually take an inductive approach and utilise a qualitative methodology to develop knowledge (Cresswell, 2003).

The so called 'paradigm wars' references the debate between the epistemological stances of quantitative and qualitative research (Bryman, 2006). This debate gave rise to the incompatibility thesis which argued that quantitative and qualitative methodologies should not and cannot be mixed (Howe, 1988).

Johnson and Onwuegbuzie (2004) reject the incompatibility hypothesis and present a third paradigm, that of ‘pragmatism’. ‘Pragmatists’ suggest that "in order to discover the meaning of the idea [we must] ask for its consequences” (Dewey, 1920). In practise this means selecting the methodology that will best be able to answer the question. Johnson et al. (2004) present a mixed methods methodology as a viable option that does not aim to replace quantitative or qualitative methodology but seeks to draw strengths and reduce the weaknesses of both approaches by combining them.

Prior to commencing the doctorate course, the researcher held a ‘positivist’ epistemological stance. On reflection, this was largely due to these beliefs dominating the researcher’s undergraduate course with little focus placed on alternative ways of thinking. When considering the approach for the empirical research, the researcher automatically moved towards a ‘positivist’ stance with quantitative methodology appearing safe and familiar. As the researcher moved through the doctorate course and new ideas and ways of thinking were presented, the researcher questioned their original stance and through discussions with her supervisor settled on a mixed methods approach. The researcher now feels strongly aligned with a ‘pragmatist’ epistemological position, feeling that what is most important is to attempt to fully answer the research question using the methodology that would best enable this to happen. The questions asked in both the Systematic Literature Review (SLR) and the Empirical Paper are novel with relatively limited existing research which could assist in determining specific hypothesis to be tested, therefore a mixed methods methodology was felt to be the most appropriate in expanding the knowledge in this area in an inclusive and unrestricted way. In the SLR, qualitative, quantitative, and mixed methods studies are reviewed. While in the empirical paper, a mixed methods approach was utilised. A qualitative aspect explored experiences of students in depth, while a quantitative aspect examined the feasibility and impact of the intervention.

In conclusion, the researchers' epistemological stance has changed over time and has been influenced through new learning and experiences. The researcher now feels strongly aligned with a 'pragmatist' position and this is consistent with the mixed methods methodology utilised in both the SLR and empirical paper.

References

Bahari, S. F. (2010). Qualitative versus quantitative research strategies: contrasting epistemological and ontological assumptions. *Sains Humanika*, *52*(1).

Bryman, A. (2004). Encyclopedia of social science research methods. *Encycl. Soc. Sci. Res. Methods*, 1143-1144.

Bryman, A. (2006). Paradigm peace and the implications for quality. *International journal of social research methodology, 9*(2), 111-126.

Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. *Sage publications.*

Dewey, J. (1920). Reconstruction in philosophy. *Dover.* Originally published in, 2004.

Easterby-Smith, M. T., & Thorpe, R. (2002). R. and Lowe, A. (2002). *Management research: An introduction*, *2*, 342.

Howe, K. R. (1988). Against the quantitative-qualitative incompatibility thesis or dogmas die hard. *Educational researcher*, *17*(8), 10-16.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, *33*(7), 14-26.

Appendix C: Author Guidelines for submission to Journal of Social and Clinical Psychology

JOURNAL OF SOCIAL AND CLINICAL PSYCHOLOGY INFORMATION FOR AUTHORS

*The **Journal of Social and Clinical Psychology*** is devoted to the application of theory and research from social psychology toward the better understanding of human adaptation and adjustment, including both the alleviation of psychological problems and distress (e.g., psychopathology) and the enhancement of psychological well-being among the psychologically healthy. Topics of interest include (but are not limited to) traditionally defined psychopathology (e.g., depression), common emotional and behavioral problems in living (e.g., conflicts in close relationships), the enhancement of subjective well-being, and the processes of psychological change in everyday life (e.g., self-regulation) and professional settings (e.g., psychotherapy and counseling). Articles reporting the results of theory-driven empirical research are given priority, but theoretical and review articles are also welcome. Articles describing the development of new scales (personality or otherwise) or the revision of existing scales are not appropriate.

All submissions must be made electronically (preferably in Microsoft Word format) to **Thomas E. Joiner at** joiner@psy.fsu.edu. Only original articles will be considered. Articles should not exceed 8,000 words (text and references). Exceptions may be made for reports of multiple studies. Authors desiring an anonymous review should request this in the submission letter. In such cases identifying information about the authors and their affiliations should appear only on a cover page.

ABSTRACTS must be structured (**Introduction, Methods, Results, Discussion**) and succinct.

TABLES should be submitted in Excel. Tables formatted in Microsoft Word's Table function are also acceptable. (Tables should *not* be submitted using tabs, returns, or spaces as formatting tools.)

FIGURES *must* be submitted separately as graphic files (in order of preference: tif, jpg, bmp, gif; note that PowerPoint and PDFs are *not* acceptable) in the highest possible resolution. Figure *caption* text should be included in the article's Microsoft Word file. All figures must be in black and white.

PERMISSIONS: Contributors are responsible for obtaining permission from copyright owners if they use an illustration, table, or lengthy quote (100+ words) that has been published elsewhere. Contributors should write both the publisher and author of such material, requesting nonexclusive world rights in all languages for use in the article and in all future editions of it.

SUPPLEMENTAL MATERIALS: Supplemental materials will run **online-only** and should be no longer than the manuscript itself. If the material you wish to include is longer than the article, we will instead include a note that all supplemental material can be obtained, by request, from the author. Supplemental materials in the form of tables and figures must comply with the above table and figure instructions for the main article. Remember to include call-outs for all figures and tables within the supplemental material. Supplemental material files will be uploaded online as supplied. They will not be checked for accuracy, copyedited, typeset or proofread.

REFERENCES: Authors should consult the publication manual of the American Psychological Association for rules on format and style. All research papers submitted to the *Journal of Social and Clinical Psychology* must conform to the ethical standards of the American Psychological Association. Articles should be written in nonsexist language. **Any manuscripts with references that are incorrectly formatted will be returned to the author for revision.**

SAMPLE REFERENCES

Davis, C. G., & McKearney, J. M. (2003). How do people grow from their experience with trauma or loss?
Journal of Social & Clinical Psychology, 22, 477-492. https://doi.org/10.1521/jscp.22.5.477.22928
Dweck, C., & Wortman, C. (1982). Learned helplessness, anxiety and achievement. In H. Kron & L. Laux
(Eds.), Achievement, stress, and anxiety (pp. 93-125). Washington, DC: Hemisphere Publishing Group.
Levy, M. L., Cummings, J. L., Fairbanks, L. A., Masterman, D., Miller, B. L., Craig, A. H.,…Litvan, I. (1998).
Apathy is not depression. Journal of Neuropsychiatry and Clinical Neurosciences, 10, 314-319. https://doi.org/10.1176/jnp.10.3.314

Appendix D: Data Extraction Form

General Information	
Title of Paper	
Authors	
Year of Publication	
Participants	
Geographical Origin of Study	
Sample Size	
Age	
Gender	
Pre or post transition	
Time Points	
Subject Studied	
Inclusion/Exclusion Criteria	
Incentive	
Methodology	
Aims	
Design	
Intervention-Overall	
Intervention-Components	
Method of analysis	
Outcomes	
Attrition Rates	
Outcome measure used	
Follow-up	

Control condition	
Conclusions	
Main results	
Quality Score	
Strengths/Limitations	
Areas for future research	

Appendix E: Quality Checklist

Category of study designs	**Methodological quality criteria**	**Responses**			
		Yes	No	Can't tell	Comments
Screening questions (for all types)	S1. Are there clear research questions?				
	S2. Do the collected data allow to address the research questions?				
	Further appraisal may not be feasible or appropriate when the answer is 'No' or 'Can't tell' to one or both screening questions.				
1. Qualitative	1.1. Is the qualitative approach appropriate to answer the research question?				
	1.2. Are the qualitative data collection methods adequate to address the research question?				
	1.3. Are the findings adequately derived from the data?				
	1.4. Is the interpretation of results sufficiently substantiated by data?				
	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?				
2.	2.1. Is randomization appropriately performed?				

Quantitative randomized controlled trials	2.2. Are the groups comparable at baseline?				
	2.3. Are there complete outcome data?				
	2.4. Are outcome assessors blinded to the intervention provided?				
	2.5 Did the participants adhere to the assigned intervention?				
3. Quantitative nonrandomized	3.1. Are the participants representative of the target population?				
	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?				
	3.3. Are there complete outcome data?				
	3.4. Are the confounders accounted for in the design and analysis?				
	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?				
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the research question?				
	4.2. Is the sample representative of the target population?				
	4.3. Are the measurements appropriate?				
	4.4. Is the risk of nonresponse bias low?				

	4.5. Is the statistical analysis appropriate to answer the research question?				
5. Mixed methods	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?				
	5.2. Are the different components of the study effectively integrated to answer the research question?				
	5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?				
	5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?				
	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?				

Mixed Methods Appraisal Tool (MMAT), version 2018

Appendix F: Confirmation of ethical approval

[REMOVED FOR DIGITAL ARCHIVING]

Appendix G: Qualitative Study-Recruitment PowerPoint

[REMOVED FOR DIGITAL ARCHIVING]

Appendix H: Qualitative Study-Recruitment online advert

[REMOVED FOR DIGITAL ARCHIVING]

Appendix I: Quantitative Study-Recruitment email

To whom it may concern,

My name is Kerry Rowson and I am a Trainee Clinical Psychologist studying for my Doctorate at the University of Hull.

As part of my Doctoral research I am recruiting students who are in their final year at Sixth form College and plan to attend University later this year.

The study aims to develop compassion focused skills in students before they make the transition to University. **Participation in the study enables students to access a FREE online course** called Young Minds Be Kind which helps them learn about how and why our minds work the way they do; discover what compassion is and how it can help us with our difficulties; and also teaches various exercises for developing compassion and bringing compassionate understanding to experiences of self-esteem.

Please could you circulate the attached advertisement for the study to all students at your College in their final year?

If you have any questions, please do not hesitate to get in touch.

Kind regards,

Kerry Rowson
Trainee Clinical Psychologist

Appendix J: Quantitative Study-Recruitment advert

[REMOVED FOR DIGITAL ARCHIVING]

Appendix K: Quantitative Study-Recruitment online advert

[REMOVED FOR DIGITAL ARCHIVING]

Appendix L: Demographic Information

Forename * *Required*

Surname * *Required*

Gender * *Required*

- ☐ Male
- ☐ Female
- ☐ Other

Age * *Required*

What college do you currently attend?

Which University do you plan to attend?

Please provide an email address you regularly use and are happy to be contacted on. It is important that you will still have access to and be contactable on this email address once you attend University. * *Required*

Appendix M: Hospital Anxiety and Depression Scale

Hospital Anxiety and Depression Scale (HADS)

Tick the box beside the reply that is closest to how you have been feeling in the past week.
Don't take too long over you replies: your immediate is best.

D	A		D	A	
		I feel tense or 'wound up':			I feel as if I am slowed down:
	3	Most of the time	3		Nearly all the time
	2	A lot of the time	2		Very often
	1	From time to time, occasionally	1		Sometimes
	0	Not at all	0		Not at all
		I still enjoy the things I used to enjoy:			I get a sort of frightened feeling like 'butterflies' in the stomach:
0		Definitely as much		0	Not at all
1		Not quite so much		1	Occasionally
2		Only a little		2	Quite Often
3		Hardly at all		3	Very Often
		I get a sort of frightened feeling as if something awful is about to happen:			I have lost interest in my appearance:
	3	Very definitely and quite badly	3		Definitely
	2	Yes, but not too badly	2		I don't take as much care as I should
	1	A little, but it doesn't worry me	1		I may not take quite as much care
	0	Not at all	0		I take just as much care as ever
		I can laugh and see the funny side of things:			I feel restless as I have to be on the move:
0		As much as I always could		3	Very much indeed
1		Not quite so much now		2	Quite a lot
2		Definitely not so much now		1	Not very much
3		Not at all		0	Not at all
		Worrying thoughts go through my mind:			I look forward with enjoyment to things:
	3	A great deal of the time	0		As much as I ever did
	2	A lot of the time	1		Rather less than I used to
	1	From time to time, but not too often	2		Definitely less than I used to
	0	Only occasionally	3		Hardly at all
		I feel cheerful:			I get sudden feelings of panic:
3		Not at all		3	Very often indeed
2		Not often		2	Quite often
1		Sometimes		1	Not very often
0		Most of the time		0	Not at all
		I can sit at ease and feel relaxed:			I can enjoy a good book or radio or TV program:
	0	Definitely	0		Often
	1	Usually	1		Sometimes
	2	Not Often	2		Not often
	3	Not at all	3		Very seldom

Please check you have answered all the questions

Scoring:
Total score: Depression (D) _____ Anxiety (A) _____
0-7 = Normal
8-10 = Borderline abnormal (borderline case)
11-21 = Abnormal (case)

Appendix N: The Warwick–Edinburgh Mental Well-being Scale

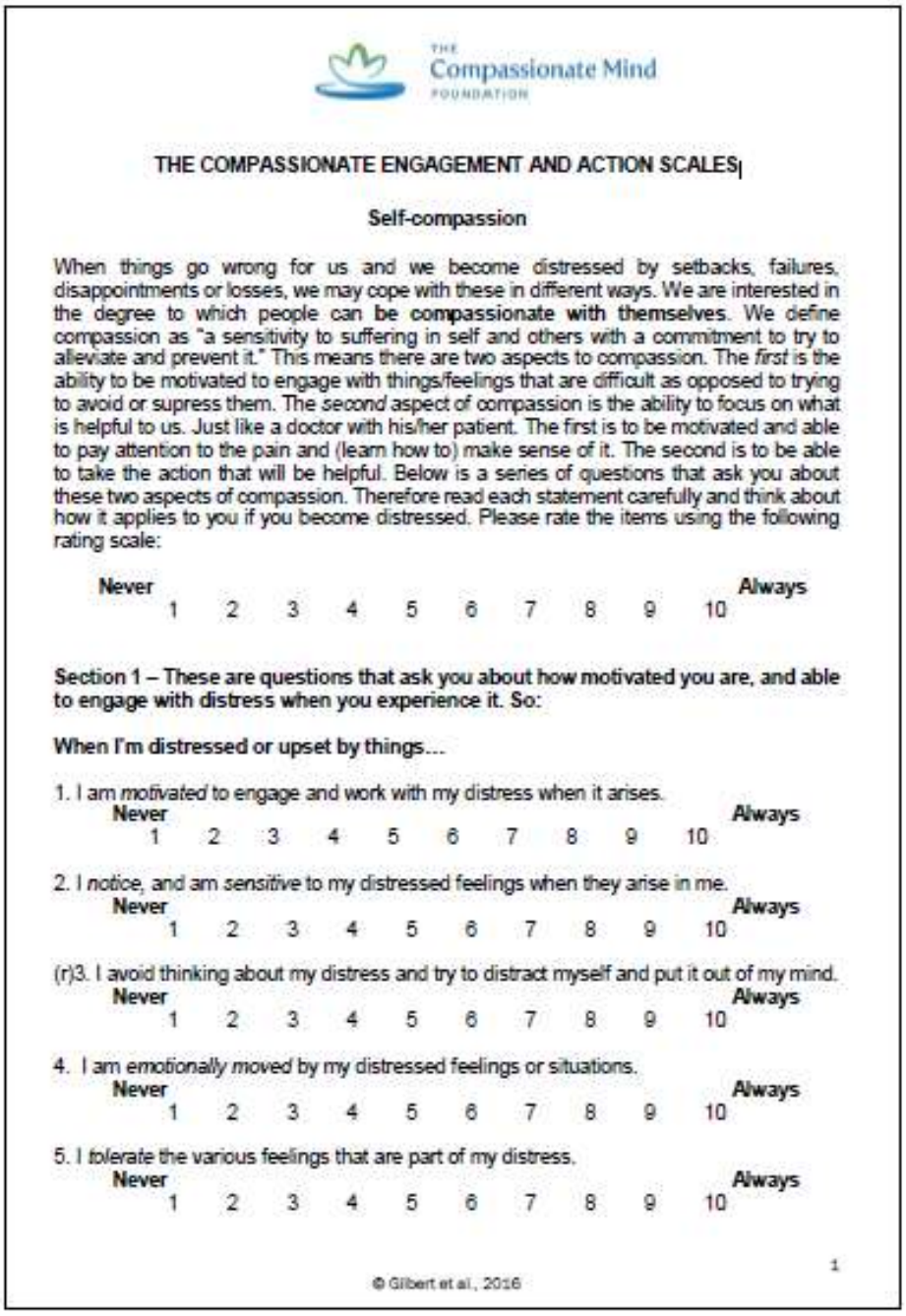
The Warwick–Edinburgh Mental Well-being Scale (WEMWBS)

Below are some statements about feelings and thoughts.
Please tick the box that best describes your experience of each over the last 2 weeks

STATEMENTS	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Warwick–Edinburgh Mental Well-being Scale (WEMWBS)

Appendix O: The Compassionate Engagement and Action Scales



THE Compassionate Mind FOUNDATION

THE COMPASSIONATE ENGAGEMENT AND ACTION SCALES

Self-compassion

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, we may cope with these in different ways. We are interested in the degree to which people can **be compassionate with themselves**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful to us. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you if you become distressed. Please rate the items using the following rating scale:

Never 1 2 3 4 5 6 7 8 9 10 **Always**

Section 1 – These are questions that ask you about how motivated you are, and able to engage with distress when you experience it. So:

When I'm distressed or upset by things...

1. I am *motivated* to engage and work with my distress when it arises.
Never 1 2 3 4 5 6 7 8 9 10 **Always**

2. I *notice*, and am *sensitive* to my distressed feelings when they arise in me.
Never 1 2 3 4 5 6 7 8 9 10 **Always**

(r)3. I avoid thinking about my distress and try to distract myself and put it out of my mind.
Never 1 2 3 4 5 6 7 8 9 10 **Always**

4. I am *emotionally moved* by my distressed feelings or situations.
Never 1 2 3 4 5 6 7 8 9 10 **Always**

5. I *tolerate* the various feelings that are part of my distress.
Never 1 2 3 4 5 6 7 8 9 10 **Always**

1

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6. I *reflect on* and *make sense* of my feelings of distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

(r)7 I do not tolerate being distressed.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

8. I am *accepting, non-critical and non-judgemental* of my feelings of distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

Section 2 – These questions relate to how you actively cope in compassionate ways with emotions, thoughts and situations that distress you. So:

When I'm distressed or upset by things…

1. I direct my *attention* to what is likely to be helpful to me.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

2. I *think* about and come up with helpful ways to cope with my distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

(r)3. I don't know how to help myself.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

4. I take the *actions* and do the things that will be helpful to me.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

5. I create inner feelings of *support, helpfulness and encouragement.*

Never 1 2 3 4 5 6 7 8 9 10 **Always**

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

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Compassion to others

When things go wrong for other people and they become distressed by setbacks, failures, disappointments or losses, we may cope with their distress in different ways. We are interested in the degree to which people can be **compassionate to others**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you when **people in your life** become distressed. Please rate the items using the following rating scale:

Never 1 2 3 4 5 6 7 8 9 10 **Always**

Section 1 – These are questions that ask you about how motivated you are, and able to engage with other people's distress when they are experiencing it. So:

When others are distressed or upset by things...

1. I am *motivated* to engage and work with other peoples' distress when it arises.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

2. I *notice* and *am sensitive* to distress in others when it arises.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

(r)3. I avoid thinking about other peoples' distress, try to distract myself and put it out of my mind.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

4. I am *emotionally moved* by expressions of distress in others.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

5. I *tolerate* the various feelings that are part of other people's distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

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6. I *reflect on* and *make sense* of other people's distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

(r)7 I do not tolerate other peoples' distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

8. I am *accepting, non-critical and non-judgemental* of others people's distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

Section 2 – These questions relate to how you actively respond in compassionate ways when other people are distressed. So:

When others are distressed or upset by things...

1. I direct *attention* to what is likely to be helpful to others.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

2. I *think about and come up* with helpful ways for them to cope with their distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

(r)3. I don't know how to help other people when they are distressed.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

4. I take the *actions* and *do the things* that will be helpful to others.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

5. I express feelings of *support, helpfulness and encouragement* to others.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

THE Compassionate Mind FOUNDATION

Compassion from others

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, others may cope with our distress in different ways. We are interested in the degree to which you feel that **important people in your life can be compassionate to your distress**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful to us or others. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to the **important people in your life** when you become distressed. Please rate the items using the following rating scale:

Never 1 2 3 4 5 6 7 8 9 10 **Always**

Section 1 – These are questions that ask you about how motivated you think others are, and how much they engage with your distress when you experience it. So:

When I'm distressed or upset by things...

1. Other people are actively *motivated* to engage and work with my distress when it arises.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

2. Others *notice* and *are sensitive* to my distressed feelings when they arise in me.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

(r)3 Others avoid thinking about my distress, try to distract themselves and put it out of their mind.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

4. Others are *emotionally moved* by my distressed feelings.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

5. Others *tolerate* my various feelings that are part of my distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

THE Compassionate Mind FOUNDATION

6. Others *reflect on* and *make sense* of my feelings of distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

(r)7. Others do not tolerate my distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

8. Others are *accepting, non-critical and non-judgemental* of my feelings of distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

Section 2 – These questions relate to how others actively cope in compassionate ways with emotions and situations that distress you. So:

When I'm distressed or upset by things...

1. Others direct their *attention* to what is likely to be helpful to me.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

2. Others *think about* and come up with helpful ways for me to cope with my distress.

Never 1 2 3 4 5 6 7 8 9 10 **Always**

(r)3. Others don't know how to help me when I am distressed

Never 1 2 3 4 5 6 7 8 9 10 **Always**

4. Others take the *actions* and do the things that will be helpful to me.

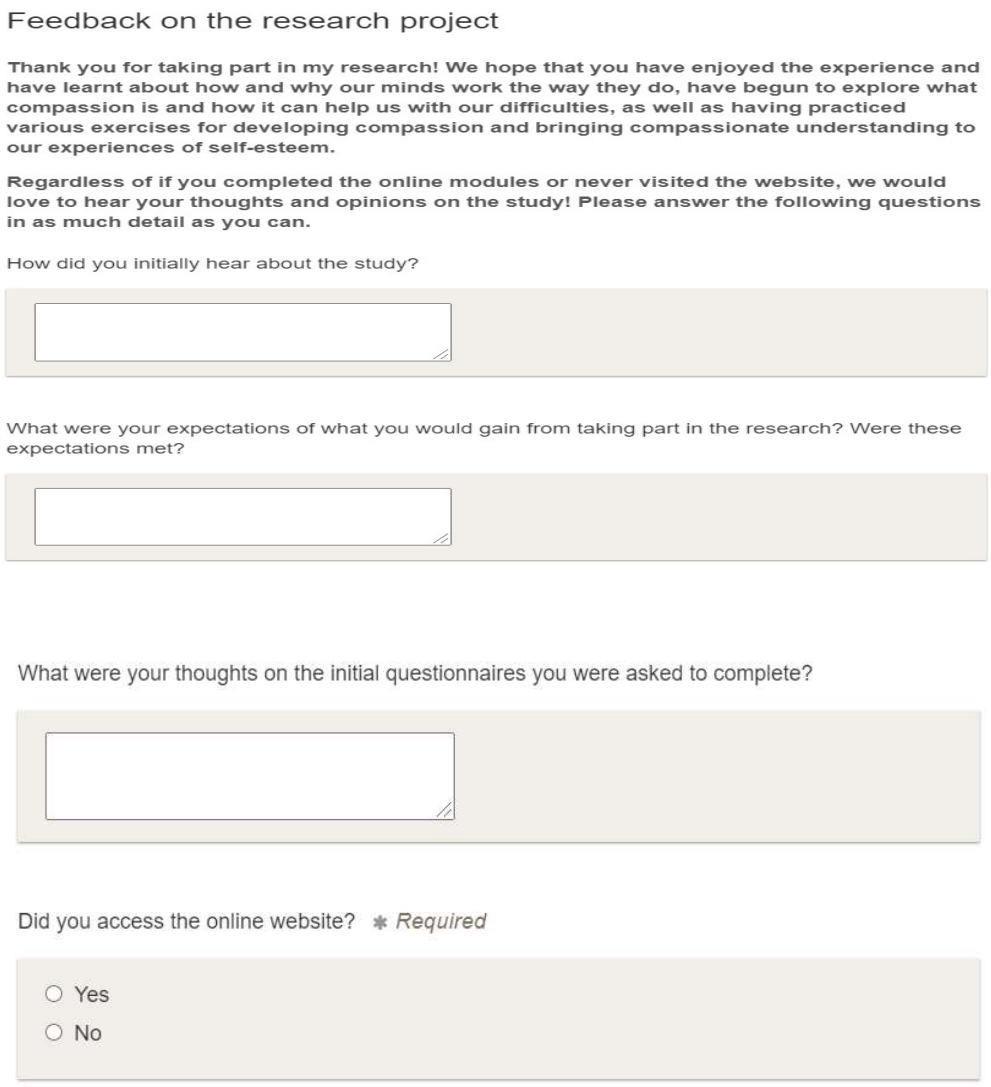
Never 1 2 3 4 5 6 7 8 9 10 **Always**

5. Others treat me with feelings of *support, helpfulness and encouragement.*

Never 1 2 3 4 5 6 7 8 9 10 **Always**

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

Appendix P: Feasibility Questionnaire



Feedback on the research project

Thank you for taking part in my research! We hope that you have enjoyed the experience and have learnt about how and why our minds work the way they do, have begun to explore what compassion is and how it can help us with our difficulties, as well as having practiced various exercises for developing compassion and bringing compassionate understanding to our experiences of self-esteem.

Regardless of if you completed the online modules or never visited the website, we would love to hear your thoughts and opinions on the study! Please answer the following questions in as much detail as you can.

How did you initially hear about the study?

What were your expectations of what you would gain from taking part in the research? Were these expectations met?

What were your thoughts on the initial questionnaires you were asked to complete?

Did you access the online website? * *Required*

- ○ Yes
- ○ No

For those that answered yes:

How easy was the website to access? Did you have any problems with this?

How many of the nine modules did you complete?

If you did not complete all the modules, was there any particular reason for this?

Were any modules more enjoyable to complete than others? If so, which ones?

Is there any way you think the modules could be improved?

Are there any skills you have learnt that you have put into practise? Please give examples of this.

How did you find the transition to University? Did this study influence your transition in any way?

Is there anything else you would like to add?

For those that answered no:

What factors played a part in why you did not access the website?

Is there anything that would have made you more likely to access the website?

How did you find the transition to University? Did being part of this study influence your transition in any way?

Is there anything you think could improve the study?

Is there anything else you would like to add?

Appendix Q: Qualitative Study-Participant Information Sheet

INFORMATION SHEET FOR PARTICIPANTS
The transition from College to University: A feasibility and exploratory study of the role of compassion during this transitional period.

I would like to invite you to take part in a research interview. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. You can contact me on the email address provided if there is anything that is not clear or if you would like more information.

What is the purpose of the research interview?

We go through many periods of transition throughout our life and often one of the most exciting is the transition from college to University. For many, this can be a time of developing independence and an opportunity to try new things and meet different people. Equally, this transition can be accompanied by an increase in responsibility, as well as changes in identity, lifestyle, social environment, and living arrangements. It can be difficult to adjust to all these changes, which may explain why it is common for students to experience a decline in their well-being at this time.

The study as a whole aims to increase understanding of the impact of this transition on students and the research interviews are an important aspect of this process.

Why have I been invited to take part?

You are being invited to participate in a research interview because you are above the age of 16, and have recently made the transition to University.

Do I have to take part?

Participation is completely voluntary. You should only take part if you want to and choosing not to take part will not disadvantage you in any way.

What will happen if I take part?

If you do decide that you would like to take part in a research interview, I will be in touch via email to arrange the best way to conduct the interview (via telephone or in person) at a convenient date and time for you. On the arranged date/time, we will have a conversation which will last around 30-60 minutes. I will ask you about your experiences of compassion in relation to your transition to University. I will audio record the discussion. There are no right or wrong answers and I am only interested in your opinions, your beliefs and your experience of transitioning to University.

What are the possible risks of taking part?

We are always required to tell you about any risks should you agree to take part in research. For many, talking about personal experiences with another individual can be an enjoyable and positive experience. However, it is possible that some of the topics

discussed may cause you some distress i.e. reflecting on times that have been more difficult or upsetting.

If you do become upset at any point during the interview, you can stop taking part at any time, without providing us with an explanation. Possible sources of support are provided at the bottom of this form.

What are the possible benefits of taking part?

We cannot promise that there will be any direct benefits from taking part in the research interview. However, it is hoped that the information you give us will help us to understand more about the transition to University, particularly in relation to compassion. Sometimes people find it useful to have the opportunity to talk about their experiences.

Will taking part in this study be kept confidential?

Your data will be processed in accordance with the General Data Protection Regulation 2016 (GDPR).

All of the personal information that you provide will be kept strictly confidential. Any information that could be used to identify you will not be used in the research. Direct quotes from the discussion may be used in research publications and presentations but you will not be identified in these. To protect your anonymity you will be assigned an identification (ID) number or pseudonym. This will ensure it will not be possible to identify you from the information you provide. To protect the security of the audio recordings an encrypted recording device will be used. After the research is completed, all of the audio recordings will be destroyed. Anonymised transcripts of the recordings will be stored securely in an on-line storage repository at the University of Hull for a period of ten years. The only time that information cannot be kept confidential is if you disclose something that suggests that you or someone else is at risk of serious harm. If this happens during the interview the researcher will need to contact appropriate authorities to ensure that you and other people are safe. It is unlikely that this will happen and the researcher will try to discuss this with you.

Your contact details will be held securely for the duration of the research but then destroyed when the research is complete.

Data Protection Statement

The data controller for this project will be the University of Hull. The University will process your personal data for the purpose of the research outlined above. The legal basis for processing your personal data for research purposes under GDPR is a 'task in the public interest' You can provide your consent for the use of your personal data in this study by completing the consent form that has been provided to you**.** Information about how the University of Hull processes your data can be found in the Research Privacy notice which will be given to you.

You have the right to access information held about you. Your right of access can be exercised in accordance with the General Data Protection Regulation. You also have other rights including rights of correction, erasure, objection, and data portability. Questions, comments and requests about your personal data can also be sent to the University of Hull Information Compliance Manager, Mr Luke Thompson

(l.thompson3@hull.ac.uk**).** If you wish to lodge a complaint with the Information Commissioner's Office, please visit www.ico.org.uk.

What if I change my mind about taking part?

You are free to withdraw at any point of the study, including during the research interview, without having to give a reason. Withdrawing from the research interview will not affect you in any way. You are able to withdraw your data from the study up until data analysis has commenced, after which withdrawal of your data will no longer be possible as the data will have been anonymised and/or committed to the final report. If you withdraw before the point of analysis the data collected will be destroyed.

What will happen to the results of the research interviews?

The results of the research interviews will be summarised in a written thesis as part of a Doctorate in Clinical Psychology. The thesis will be available on the University of Hull's on-line repository https://hydra.hull.ac.uk/. The research may also be published in academic journals or presented at conferences.

Who should I contact for further information?

If you have any questions or require more information about the research interviews, please contact me using the following contact details:

Kerry Rowson

Clinical Psychology Doctorate programme

Allam Medical Building

The University of Hull

Cottingham Road

Hull

HU6 7RX

E-mail: K.Rowson@2017.hull.ac.uk

What if I have further questions, or if something goes wrong?

If you wish to make a complaint about the conduct of the study or the research interview, you can contact the University of Hull using either of the research supervisors details below for further advice and information:

Dr Philip Molyneux or Dr Timothy Alexander

Clinical Psychology Doctorate programme

Aire Building

The University of Hull

Cottingham Road

Hull

HU6 7RX

Tel: 01482 464106

Email address: P.Molyneux@hull.ac.uk; T.Alexander@hull.ac.uk

What support is available to me?
Should you become distressed at any point during the research or the interview, we would advise that you consider discontinuing your involvement in the study. It may also be helpful to discuss your distress with your GP or the student support services at your University. Confidential helplines are another available source of support that are available 24 hours a day. The Samaritans can be contacted on the following number: **116 123**.

Thank you for reading this information sheet and for considering taking part in this research.

Appendix R: Qualitative Study-Participant Consent Form

CONSENT FORM

Title of study: The transition from College to University: A feasibility and exploratory study of the role of compassion during this transitional period.

Name of Researcher: Kerry Rowson

Please Click to Confirm

1. I confirm that I am over 16 years of age and am currently studying at a University in the United Kingdom. ☐

2. I confirm that I have not received any formal psychotherapy (Cognitive Behavioural Therapy, etc.) in the last three months, nor do I plan to start formal psychotherapy during the course of the research. ☐

3. I confirm that I have read the information sheet dated 01/11/2019 (version 4) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

4. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected. I understand that from the point of data analysis, I cannot withdraw my anonymised data. I understand that the data I have provided up to the point of withdrawal may be retained or excluded from data analysis and this will be decided by the researcher. ☐

5. I understand that all the information I provide will be treated as confidential and used for research purposes only. ☐

6. I understand that the research interview will be audio recorded and that my anonymised verbatim quotes may be used in research reports and conference presentations. ☐

7. I am aware that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. ☐

8. I am aware that the results of the study will be written up for a doctoral thesis and submission to a professional journal. ☐

9. I agree to take part in the above study. ☐

Appendix S: Demographic Information

Forename * *Required*

Surname * *Required*

Gender * *Required*

- ○ Male
- ○ Female
- ○ Other

Age * *Required*

Please provide an email address you regularly use and are happy to be contacted on. This is important as I will be contacting you on this email address to arrange the interview. * *Required*

Appendix T: Semi-structured Interview Schedule

Semi-structured interview schedule

Hello, (participant name)

Thank you for agreeing to take part in this research interview. This will be more like a conversation and should take around 30-60 minutes. We will focus on your expectations and experience of your transition to University, as well as exploring your experiences of compassion in relation to your transition. There are no right or wrong answers, it is just about describing things the way you see them. Before we begin, do you have any questions?

Compassion:

So, to start us off……

When I say compassion, what does that bring to mind? How would you define compassion?

One way of thinking about compassion is that is involves being open to the suffering of self and others, in a non-defensive and non-judgemental way. Compassion is also thought to involve a desire to relieve suffering, as well as thoughts related to understanding the causes of suffering, and behaviours – acting with compassion.

Expectations:

These first few questions ask you to cast your mind back and think about your expectations of University and making the transition before you started the process.

1. Why did you want to go to University?
   What motivated you? Where did this drive come from?
2. What were you most looking forward to about starting University?
   Why were you particularly looking forward to these things? What did you imagine these things would be like?

Compassion to self:

1. Before you began University, what worries or concerns did you have about making this transition?
   Where did these worries/concerns come from? How worried were you about these things?
2. At that time, what did you do to help yourself with these worries?
   Is there anything you did to make yourself feel better? Did anything you did make you feel worse?
3. Had you had any worries like this in your life before?
   When was the last time you had similar worries? What did you do then?

Compassion from others:

1. Before you began University, what did other people notice about you?
   Did your family/friends/teachers pick up on how you felt? How did they know?
2. What did others try to do to help you with your worries?
   What did you find was the most helpful/least helpful?
3. What help did you expect to be available at University to help with these worries?
   How did you think this might help?

Compassion to others:

1. What worries or concerns did you notice that others had about you going to University?
   How did you know they had these worries? Why do you think they were worried about these things?
2. What did you do to help them with these worries?
   How did you know to do this?
3. What worries did you notice that your peers had about going to University?
   Were these similar or different to your own worries?
4. What did you do to help with these?
   What did you find was most helpful/least helpful?

Experiences:

These next few questions ask you about your experience of making the transition to University.

1. What support did you receive from sixth form/college?
2. How has it been going since you started University?

Compassion to self:

1. Thinking back to the worries that you had before making the transition, which of these have you noticed since starting University?
   How worried have you been about these things?
2. What have you done to help yourself with these worries/distress?
   Is there anything you did to make yourself feel better? Did anything you did make you feel worse?
3. How have things been different to your expectations before University?
   What has been similar?

Compassion from others:

1. Have others noticed these things affecting you?
   Is there a difference between people you knew before and new people you have met?
   Did your family/friends/teachers pick up on how you felt? How did they know?
2. What have others done to try and help you with your worries?
   What did you find was the most helpful/least helpful?
3. What support have you received from the University to help with these worries?
   How has this been different to your expectations before University?

Compassion to others:

1. What worries or concerns have you noticed in family/friends/teachers?
   How has this been different to your expectations before University?
2. What worries or concerns have you noticed in your friends who have gone to different Universities?
   What have you done to try and help them?
3. What worries or concerns have you noticed in your peers at this University?
   Have these been similar or different to your own worries?
4. What did you do to help with these?
   What did you find was most helpful/least helpful?

Appendix U: Definitions of Compassion

Participant Number	Definition of 'compassion'
1	*"Erm so compassion, if I was to be compassionate to someone else it would involve me thinking about their needs erm both maybe physically and emotionally. Erm and providing the support that they would need in order to either have those needs given to them or to be able to achieve those needs. So really it's sort of a form of support and al... like a form of love really, you've got to love the physical and the emotional side in order to help them it's (mumbles) ensuring someone can progress from one point where they are now to somewhere the same with an added bonus or better is how I would view it."*
2	*"Er feelings or positive feelings towards someone or something."*
3	*"Understanding and kind of agreeing with while helping someone else understand their emotions or just trying help someone while being compassionate. Use a word to describe itself."*
4	*"Erm I think I like the charity compassion and like the work they do, I don't know why. I just think of the charity maybe because I was like doing a bunch of research, but erm just kind of being a generally nice person when you don't need to be. Erm like I feel like if you're going to be nice coz everyone is being nice then that isn't really compassion. But like when someone does something bad and like you kind of reciprocate with being nice or if like you do something that pulls on your heartstrings like giving money to the homeless or like helping other charities and stuff like that then that's compassionate."*
5	*"Um, I would say friendship and like understanding and sort of awareness of differences I think is quite important coz obviously like people come from different backgrounds like understanding that um yeah like empathy I suppose, just being there for someone."*

6	*"So, being considerate of how other people feel, and erm trying to relate to them. Erm, so say they erm feel sad, you understand that, and you try to erm, you know make them feel better. Or say if you know about some of your friends that are worse off than you, erm sometimes you offer to do things that they usually wouldn't be able to afford and things like that…… So, it's really showing that you care about people who are, in different erm…… who experience different things and erm try to help, essentially."*
7	*"Uh I suppose I mostly think about like um being supportive of each other and understanding sort of the empathy side of things."*
8	*"Hmm … compassion it kind of… it's more than just having empathy for someone, it's also acting upon that and having um your actions be driven by shared emotional experiences and it strikes it strikes me as people being tied together by experiences that are hard or difficult, but bring about a positive outcome. So I think when you say compassion, I'd say erm things that are more personal than charity, erm just like just other than donating money, it would be actually volunteering for a cause or it can be applied in contexts in terms of friendship and family."*
9	*"Um sort of feelings of empathy for others, um being open about your emotions, being open toward other people's emotions, how situations might make them feel, how they might impact them, stuff like that. Um, not really sure really, I've never really sat and thought about the definition as much, it's just one of those things you know what it is to you. Um just I guess respecting other people's feelings and understanding how things might make others feel."*

Appendix V: Quantitative Study-Participant Information Sheet

INFORMATION SHEET FOR PARTICIPANTS

Title of study: A pilot study investigating the impact and feasibility of an online compassion focused intervention on level of compassion, subjective well-being and mood in college students transitioning to University.

I would like to invite you to participate in a research project which forms part of my doctoral thesis. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. You can contact me on the email address provided if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

We go through many periods of transition throughout our life and often one of the most exciting is the transition from college to University. For many, this can be a time of developing independence and an opportunity to try new things and meet different people. Equally, this transition can be accompanied by an increase in responsibility, as well as changes in identity, lifestyle, social environment, and living arrangements. It can be difficult to adjust to all these changes, which may explain why it is common for students to experience a decline in their well-being at this time.

The present study aims to develop compassion focused skills in students via an online course called Young Mind Be Kind before making the transition to University. On the course you will:

- Learn about how and why our minds work the way they do.
- Learn what compassion is and how it can help us with our difficulties.
- Learn and practice various exercises for developing compassion and bringing compassionate understanding to our experiences of self-esteem.

We hope this will help you when you go to University.

Why have I been invited to take part?

You are being invited to participate in this study because you are currently a student, above the age of 16, in your final year at college who is preparing to make the transition to University. It is hoped that this study would be of benefit to you and will help you and others with the transition to University. If you do not meet these criteria, or if you have been receiving formal psychological therapy (e.g. Cognitive Behavioural Therapy, counselling etc.) in the last three months or intend to start therapy during the study, you are not eligible to take part in the study at this time.

Do I have to take part?

Participation is completely voluntary. You should only take part if you want to and choosing not to take part will not disadvantage you in any way.

What will happen if I take part?

If you do decide that you would like to take part in the research, please click the next button at the bottom of the page.

You will then be asked to fill in a consent form, provide some basic information about yourself, including an email address you are happy to be contacted on, and complete a series of questionnaires.

Shortly after this, the researcher will email you with your individual login details for the online website. Once you have this, you will be able to access the online compassion course. There are nine interactive modules to complete in total, with each module taking between 20-30 minutes. We would ask that you aim to complete two modules a week over the course of four weeks as well as the review session at the end (module nine). We understand that things can often get in the way and take priority so do not worry if it takes you slightly longer to complete the modules, what is important is that you complete the full course.

When you have completed the intervention, you will be asked to fill in the same questionnaires as before. Around one or two months after you have started University we will ask you to complete the questionnaires for a final time. We will also ask you to fill in an additional questionnaire providing feedback about the course and exploring if this has helped you make the transition to University.

What are the possible risks of taking part?

We are always required to tell you about any risks should you agree to take part in research. The online course is designed to be an enjoyable and positive experience; however, it is possible that some of the topics discussed may cause you some distress e.g. sections on negative thoughts and feelings.

As part of the study you will be completing a questionnaire about your mood. If we notice that the scores on this questionnaire are outside the usual range we will email you and suggest that you consider seeking further sources of support. If this happens you will still be able to continue with the study if you wish to, unless you begin psychological therapy before completing the online course.

If you do become upset at any point during the study, you can stop taking part at any time, without providing us with an explanation. Possible sources of support are provided at the bottom of this form and on the ‘feel in crisis’ page on the online course.

What are the possible benefits of taking part?

We cannot promise that there will be any direct benefits from taking part in the study. However, it is hoped that by completing the online modules you could develop a deeper understanding of compassion, increase your level of self-compassion and compassion for others; and be able to receive compassionate from others more readily. We also hope that an increase in compassion might lead to improvements in

your well-being and a reduction in any symptoms of depression and anxiety. The aim of all of this is to make your transition to University a little more manageable so you can enjoy everything the experience has to offer.

Will taking part in this study be kept confidential?

Your data will be processed in accordance with the General Data Protection Regulation 2016 (GDPR).

All of the personal information that you provide will be kept strictly confidential. Any information that could be used to identify you will not be used in the research. Direct quotes from the discussion may be used in research publications and presentations but you will not be identified in these. To protect your anonymity you will be assigned an identification (ID) number. This will ensure it will not be possible to identify you from the information you provide. After the research is completed, any personal data will be destroyed. Anonymised research data will be stored securely in an on-line storage repository at the University of Hull for a period of ten years.

Your contact details will be held securely for the duration of the research but then destroyed when the research is complete.

Data Protection Statement

The data controller for this project will be the University of Hull. The University will process your personal data for the purpose of the research outlined above. The legal basis for processing your personal data for research purposes under GDPR is a 'task in the public interest' You can provide your consent for the use of your personal data in this study by completing the consent form that has been provided to you. Information about how the University of Hull processes your data can be found in the Research Privacy notice at https://www.hull.ac.uk/choose-hull/university-and-region/key-documents/data-protection.aspx.

You have the right to access information held about you. Your right of access can be exercised in accordance with the General Data Protection Regulation. You also have other rights including rights of correction, erasure, objection, and data portability. Questions, comments and requests about your personal data can also be sent to the University of Hull Information Compliance Manager, Mr Luke Thompson (l.thompson3@hull.ac.uk). If you wish to lodge a complaint with the Information Commissioner's Office, please visit www.ico.org.uk.

What if I change my mind about taking part?

You are free to withdraw at any point of the study, without having to give a reason. Withdrawing from the study will not affect you in any way. You are able to withdraw your data from the study up until data analysis has commenced, after which withdrawal of your data will no longer be possible as the data will have been anonymised and/or committed to the final report. If you do choose to withdraw from the study after data analysis has commenced, your data may be excluded or included in the study, this decision will be made by the researcher. If you withdraw before the point of analysis the data collected will be destroyed.

What will happen to the results of the study?

The results of the study will be summarised in a written thesis as part of a Doctorate in Clinical Psychology. The thesis will be available on the University of Hull's on-line repository https://hydra.hull.ac.uk/. The research may also be published in academic journals or presented at conferences.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

Kerry Rowson
Clinical Psychology Doctorate programme
Allam Medical Building
The University of Hull
Cottingham Road
Hull
HU6 7RX
E-mail: K.Rowson@2017.hull.ac.uk

What if I have further questions, or if something goes wrong?

If you wish to make a complaint about the conduct of the study, you can contact the University of Hull using either of the research supervisors details below for further advice and information:

Dr Philip Molyneux or Dr Timothy Alexander
Clinical Psychology Doctorate programme
Aire Building
The University of Hull
Cottingham Road
Hull
HU6 7RX
Tel: 01482 464106
Email address: P.Molyneux@hull.ac.uk; T.Alexander@hull.ac.uk

What support is available to me?

Should you become distressed at any point during the research, we would advise that you consider discontinuing your involvement in the study. It may also be helpful to discuss your distress with your GP or the student support services at your college or University. Confidential helplines are another available source of support that are available 24 hours a day. The Samaritans can be contacted on the following number: **116 123**.

Thank you for reading this information sheet and for considering taking part in this research.

Appendix W: Quantitative Study-Participant Consent Form

CONSENT FORM

Title of study: A pilot study investigating the impact of an online compassion focused intervention on level of compassion, subjective well-being and mood in college students transitioning to University.

Name of Researcher: Kerry Rowson

Please Click to Confirm

1. I confirm that I am over 16 years of age, am currently studying at a college in the United Kingdom and plan to attend University in 2019. ☐

2. I confirm that I have not received any formal psychotherapy (Cognitive Behavioural Therapy, etc.) in the last three months, nor do I plan to start formal psychotherapy during the course of the research. ☐

3. I confirm that I have read the information sheet dated 21/06/2019 (version 2) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

4. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected. I understand that once I have completed any measures, the intervention or the questionnaire, I cannot withdraw my anonymised data. I understand that the data I have provided up to the point of withdrawal may be retained or excluded from data analysis and this will be decided by the researcher. ☐

5. I understand that all the infomation I provide will be treated as confidential and used for research purposes only. ☐

6. I understand that any quotes provided by myself will be anonymised and may be included in publications and conference presentations. ☐

7. I am aware that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. ☐

8. I am aware that the results of the study will be written up for a doctoral thesis and submission to a professional journal. ☐

9. I would like to request a brief summary report when the study is completed. ☐

10. I agree to take part in the above study. ☐

Appendix X: Example of Data Analysis

Transcript	Initial Comments
P: Um… I think if it was just me, I was the only person going through it I probably would've been losing my mind but the fact that everyone I knew more or less coz I'd say maybe like seventy five percent of the people I know went to uni, everyone's in the same boat, like there's no use being worried about anything, Oh my God i'm so alone I've got no one to talk to about this, it's so terrifying, like everyone was literally doing the exact same thing. And all my all my close friends went to University, like different universities up and down the country, so if i was ever worried about something, I usually had someone I could relate to, someone who could talk to me about it, and like if I ask them had the exact same like set of fears and worries.	Worries would have felt overwhelming if coping with alone, fact that worries were shared with peers and others were having a similar experience was helpful. Peers were available to talk to and usually shared same concerns/worries.
I: Brilliant, and kind of before you went to University and I guess you were in that I guess kind of waiting period, erm did anybody notice anything particular about you or did anyone kinda pick up that you were having these worries? P: Um prior to getting my results I was really really worried, am I allowed to swear? I: Yeah, yeah that's fine. P: (laughs) I was really worried that I'd completely fucked it, like um I came out of my exams incredibly like stressed and nervous, like I don't think i did horribly, but I was like what if I'm one grade short? What if i did all that work, i put all that time and effort in and I don't even get where I want to go? I was really really stressed sort of the threeish weeks before results day, before I even found out I was going to uni, even though I knew I'd find a uni place somewhere, like I was really really terrified that i wouldn't get where I wanted to go. And people at work were like you're really quiet at the moment, erm my parents were like you're very stressed, like why don't you try and sort of like either forget about it until you have to think about it, and yeah people definitely noticed that I'm stressed, a lot of people told me I was being weird. But um, I don't know, I didn't think I was being weird but clearly I was so yeah no.	Lots of pressure on results day/after final exams, have goals in mind, uni you are aiming for, want hard work to pay off. People around picked up on stress/worry, noticed this and tried to suggest ways to cope e.g. try to think about something else.
I: What did the people who kind of had noticed there was maybe something going on with you at that time, what did they do to kind of help you with that? P: Um most people's advice was just don't worry about it for now, like there's it's with exams obviously there's nothing you can do once it's done, like you walk out the exam room, you can't you can't go back, you can't change your answers, so people's advice was usually try not to worry about it, which is completely correct like don't get me wrong, but also it's not the most constructive advice, it's like oh yep, you've got me, I've forgotten about it, good job, thanks the advice. But um nah at work a lot like coz it was often really busy whenever I was stressing people were like oh just come on here, come to this	Whilst most had good intentions, not as easy to just forget about worries/concerns, hard to stop worrying even if it is no longer in your control and you can rationally see that.

busier part, like just focus on getting your work done. Or like if I was at home, it be oh just find something to do, maybe like read some books, erm go see (boyfriend), like watch something good on TV, just find things to occupy you mind, occupy your time so you're not stressing about it. But once once I found out i got in where I wanted to go, which was (name of University), um I was very very happy and all of a sudden I was completely fine so. I: So what did it go like in terms of your worries? Did it feel like there was um almost like a peak before results and then after results it kind of went down a bit but then it went up again in that anticipation?	Stress quickly went away when uncertainty went away.
P: Yeah no, that is exactly how I would describe it. Like a few weeks, couple weeks before results, absolute manic panic central, and then absolutely fine for about two weeks, three weeks, four weeks, however long it was coz I can't remember, and then the two weeks before i went to uni I was like oh my entire God, my entire life is going to change ahh coz you spend so long doing your a levels, planning for this next step, but when that next step sort of becomes a reality, it's it's so different from knowing you will go to being like I go in three days, I go in a week, I go in ahh my God I move in tomorrow, like that's so so different from sort of knowing it's coming a long way off. I: Yeah and in that kind of I guess um anticipation period after you'd got your results, you knew you were going, and those worries were kind of resurfacing, was there anything in particular anyone did to help you at that point?	Stress becomes heightened just before making transition, anticipation of change, going into unknown, becoming a reality.
P: Um my mum was really good actually. My mum was like well you can worry about it or we can go shopping, you can make sure you've got all the things you need to go, I don't mean shopping like retail therapy, I mean like shopping for uni, making sure I had all the supplies I need, like i got my kitchen stuff, i got all my bedroom stuff, um books I needed, stuff like that, knowing that, like I say like i really like to be organised, like plan ahead, like having everything like again i had a list, and once I'd ticked all the things I needed off the list i felt a lot more ready and a lot more like prepared. And yeah and then everyone I know was so encouraging and so supportive, like there there genuinely wasn't a person who was like making me any worse, every single person I know was being so like thoughtful and compassionate about how I felt and what things I was worried about so yeah, no everyone was really supportive and encouraging and to be honest proud of me, so that made me feel a lot more calm. I: Was there anything that anyone did I guess in a way of trying to support you but actually was quite unhelpful at that time or or didn't maybe go quite the way they'd they'd anticipated it to?	Being prepared and getting everything in order was helpful, parents provided practical support with getting everything together. Knowing that those around you were supportive and encouraging was calming.
P: Um there's nothing really I can think of that anyone did that wasn't in some way helpful or constructive like even even erm sat being at work, like managers saying oh do you want more shifts, are you going to need less shifts, more shifts like, doing	Keeping busy at work felt helpful at the time, helped with finances.

more shifts now, which retrospectively wasn't helpful, but at the time I was really glad to be doing them, because A I was keeping busy and B I was making sure that I'd have enough money for the next couple of months and everything, so genuinely I don't think anyone was unhelpful and everything that people offered was in some way supportive or helpful so which I suppose is very lucky actually coz I can't imagine everyone had the same experience. I: And when you were kind of I guess having these worries at the time kind of before going to University, was there any help you were expecting there to be available at University to help with those worries?	
P: Erm… everyone has their like oh we've got these support services, like even on open days people would signpost them, like oh we've got this therapy, we've got this this, we've got these student services, so I knew they were there and I'd known from the get go that they were there but also they're not something I think I engaged with, I definitely in fact I didn't engage with them, because it was one of those things where again i felt like everyone's in the same boat and surely not everyone needs like help and support like surely you should just make friends and like be supportive for each other and that's sort of the route I went down, so I was more like peer supported. And like my hall committee especially and like fresher helpers were really really lovely and they're still some my really good friends so I guess that is a support service really isn't it? I didn't really think of that, but um yeah my hall committee were honestly fantastic and I'm on my hall committee now for next year coz I was like well they did that for me, i really want to do that for someone else, so yeah I think that was the most important part for me I guess.	Support services were signposted very early on so students were aware of the support available. Can be difficult to engage in support services as hard to know what are shared worries that are the 'norm' and when you may need support. Peer support was particularly helpful. Informal support system.

Appendix Y: Example of Supporting Quotes for Themes and Subthemes

Theme	Subtheme	Supporting Quote
Common Humanity	Learning from others	*"I think it's just hearing that someone else has felt the same …… and looking at where they've gone, you're not necessarily going to end up on the same path or with the same end result but I think it was reassuring"*
		"my tutor did talk about how when it was her first day and her father drove her there she was in tears and I think that kind of knowing that it's the same for even your tutor"
		"the students were very real and open and honest…… having the students there made things kind of like, very realistic, like okay, this is what's it actually like…… whereas the University and the professional side of things are very much like, it's going to be the best time of your life"
		"they…… really helped actually and I feel like coming from an actual video of someone at uni telling you these things, it's a lot more reassuring than kind of just a PDF document on the uni website that's like who even knows when this was written"
	Shared Distress	*"I feel like it's kind of like doing your exam, waiting for results day, like everyone is under the same stress, under the same pressure…… everyone doesn't know what to do"*
		"at University with loads of other people around you going through the same thing in the same boat erm you kind of motivate each other…… when you're so like demotivated and then you go to the library and you see everyone else working hard it's like okay come on, this is what we signed up for, but if you are at your own desk it's just so much harder"
		"biggest like stresses that people have erm is just…… impostor syndrome, feeling like they're not up to scratch, erm but…… if everyone is feeling like we have imposter syndrome then like clearly we don't coz all of us are feeling the same"
		"I just remember everyone…… saying yeah we're really scared so I think it almost made it easier because everyone felt the same way and there wasn't some kind of stigma or anything to be scared to go to University"
		"I think if it was just me, I was the only person going through it I probably would've been losing my mind but the fact that everyone I knew…… went to uni, everyone's in the same boat, like there's no use being worried about anything"

	Comparison	*"as long as I'm……on the average or just above it it does kind of reinforce in me that I'm doing okay and other people are finding it equally as difficult as me"*
		"my brother…… dropped out of Uni coz it was too much for him so I guess I was worried I was going to do the same thing"
		"I think…… there's more like competitiveness……. than there was at college…… at college, you'd…… know I might not be the best…… but I'm probably not going to be the worst…… whereas at [University] I feel like if you're not on your top form, like you're going to be the worst"
		"when you go on social media…… and you see everyone posting pictures with……. all of their new flatmates and going out and things, and you're there like, I'm drowned in work, It's not very helpful"
		"some people on my course…… were really not having a difficult time……it just kinda makes you feel like you're not trying hard enough or that you're not able to deal with it…… can kind of make you feel little bit insecure"
		"I didn't realise how cultured so many people were and how accomplished a lot of people were so I think that can be a bit daunting…… I knew i had extra things that I could do but……. you know am I am I on the same level as these people and then I'd also have the…… worry of……. why am I worrying about all these things and why should I compare myself to anyone else…… kind of beating yourself up"
		"my older brother…… found his first year really difficult, like he missed home a lot, and he's quite similar to me……. and he came home a lot so I was quite worried that I'd find it really difficult being away from home"
		"my friends are very invested in each other and like what we're up to in our social lives and seeing my friends, at least on the social media surface value, having a really lovely time with their brand new mates and like hanging out all the time…… and seeing that and knowing I wasn't very close with my flatmates was really difficult"