The role of resilience, delayed gratification and stress in predicting academic performance

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Transition to university is an important and potentially stressful life event for students. Previous studies have shown that resilience, delay of gratification and stress can affect the academic performance of students. However, none have shown the effect of these factors in predicting academic performance, hence the current study aimed to look at the predictive power of the combined effect of these factors on first-year undergraduate student's academic performance. One-hundred-and-seventy-six first-year Psychology undergraduates from the University of Birmingham were recruited. All participants completed five scales (Demographic questionnaire, CD-RISC-25, Perceived Stress scale, College Students' Stressful Event Checklist, and Academic Delay of Gratification scale). Linear Multiple Regression was conducted using the Stepwise method to assess for predictors of students' academic performance. Results indicated that UCAS scores (previous academic performance) were the only significant predictor for first-years' academic performance.
Keywords: *Academic performance.*

ATTENDING UNIVERSITY is becoming a more and more common event: the UK tertiary education enrolment ratio rose from 19 per cent in 1980 to 60 per cent in 2011 (The World Bank, 2013). Obtaining a place at university is increasingly more competitive; 583,501 applicants competed for about 400,000 degree courses places in 2011 (UCAS, 2012). Moreover, getting into university may be considered an important but potentially stressful life event for students (Fisher & Hood, 1987), and may even potentially lead to an increase in the vulnerability of students in developing mental illness – Topham and Moller (2011) found that about 25 per cent of the university students in UK reported they had quasi-clinical levels of psychological distress. There is also an observed increasing suicide rate among full-time higher education students; suicides grew by 47 per cent for female students and 36 per cent for males between 2007 and 2011 (Office for National Statistics, 2013). This not only indicates potential high stress level in students, but also implies that students may have low resilience in coping with academic stress and large changes.

Penny and Armstrong-Hallam (2010) conducted a survey assessing the relationship between students' stress-coping strategy and academic performance. They found that students with poor academic performance, (thus experiencing high academic pressure), were more likely to binge drink. Students with poor academic performance reported that they perceived drinking as an effective stress-coping strategy, as it allowed them to be pressure-free. Moreover, they found that students who used drinking as their stress-coping strategy were less capable in delaying gratification. Students drank whenever they felt stressed and enjoyed the feeling of being pressure-free, rather than dealing with the cause of high academic stress; over 20 per cent of them skipped class the day after drinking, hence they continued to have poor academic performance.

These studies demonstrated the importance of resilience, delay of gratification and stress in affecting students' well-being and academic performance. A number of other studies suggest that these factors also influence future success (e.g. Harackiewicz et al., 2002; McLafferty, Mallet & McCauley, 2012;

Wiggins & Blackburn, 1969). However, none have demonstrated the combined effect of these factors, thus the present study aimed to address this issue and assess the role of these factors on academic performance.

Resilience

Resilience describes a process whereby people bounce back from adversity and go on with their lives. It is a dynamic process highly influenced by protective factors, (Dyer, 1996). Protective factors have been defined as the specific competencies that are necessary for the process of resilience to occur. The defining feature of a protective factor is a modification or adaptation of the person's response to a risk situation. A number of factors have been identified as having important roles in facilitating positive adaptation. Werner (1989) clustered protective factors into three major categories: (a) personal attributes of the individual, for example, gender and locus of control; (b) affectional ties within the family; and (c) existence of external support systems which arise at school or within the community (Smokowskia, Reynoldsa & Bezruczko, 1999).

Alternatively, resilience has been defined as the ability to cope with and adapt to adversity and changes (Reich, Zautra & Hall, 2010); this may buffer people from the effect of stress (McLafferty et al., 2012), thus suggesting a possible relationship between resilience and stress. Petrie (2010) found a significant negative correlation between perceived stress score and resilience score in adolescents with cystic fibrosis: the higher the resilience level, the lower the perceived stress level. Frigborg et al. (2006) also found similar result, with individuals with high resilience score reporting less stress, implying a protective effect of resilience against stress. Resilience is a multi-dimensional concept; previous studies have found multiple protective and risk factors for resilience and that resilience affects academic success – Natriello, McDill and Pallas (1990) found that children from poverty and minority groups (which are examples of risk factors for low resilience), also had a higher risk of academic failure. However, this varies between individuals, as minority children with higher self-efficacy, self-esteem and strong interpersonal skills (which act as protective factors for resilience), may still have outstanding achievements (Wang, Haertel & Walberg, 1994). Borman and Overman (2004) also found that minority students, who were equipped with protective factors, (such as school support, a greater engagement in academic activities and a strong locus of control), achieved good mathematic scores. Gonzalez and Padilla (1997) demonstrated that not only did a supportive school environment protect students' performance from the influence of the risk factors of resilience, but family and peer support also had the same protective effect for resilience; they were positively correlated with resilience and were significant predictors of resilience. This suggested a strong correlation between resilience and academic performance in students, and it is possible that resilience is a significant predictor of students' academic performance.

Psychosocial and demographic factors

Previous research has shown that psychosocial and demographic factors are correlated significantly with academic performance. For example, social supports have a direct impact on academic performance, specifically peer and parental support (Dennis, Phinney & Chuateco, 1996). Moreover, Catling, Mason and Jones (2013) conducted a study with Psychology undergraduate students to find the predictors for academic performance using multiple regression. They found that peer support was a significant predictor for academic success.

There is also an observed gender difference in the relationship between resilience and academic performance. Sun and Stewart (2007) reported that female participants showed higher resilience than males, as well as performing better academically. Furthermore, parents' education levels affect

students' academic achievement (Buchmann & DiPrete, 2006); they found that a mother's education level had a significant impact on their daughter's academic achievement. Further studies found that students' previous academic attainment, that is, high school grades, was another significant predictor of current and future academic performance (Harackiewicz et al., 2002). Hackett et al. (1992) demonstrated that not only was past academic performance a predictor for academic performance, but also that performance expectations, clear career prospective and encouragement from school predicted academic success significantly. Additionally, it should be noted that age is significantly correlated with resilience and academic performance (Abubakar & Adegboyega, 2012): resilience levels increase as students age, and thus they develop better skills in performing well (Fergus & Zimmerman, 2005).

Delay of gratification

Delay of gratification is defined as the ability to omit an immediately available reward to satisfy current impulses in favour of pursuing the remote yet important goal (Bembenutty & Karabenick, 1998). It is an essential element for social-cognitive development, which affects individual's future achievement. Mischel, Ebbesen and Zeiss (1972) found that the longer a child can delay their gratification, the higher chance of future success. This process is strongly correlated with academic performance; Mischel, Shoda and Rodriguez (1989) found that children who delayed their gratification for longer obtained higher SAT scores when they were in their teens. Additionally, Mischel, Shoda and Peake (1988) found that 4- and 5-year-olds who were able to wait longer became more socially and academically competent adolescents, as rated by their parents. Mischel et al. also found that delay in gratification in university students in academic settings, specifically Academic delay of gratification (ADOG) was found to be correlated with study time, help seeking, expected and final grades, test anxiety, and learning strategies. Moreover ADOG was associated with self-efficacy, high task value and intrinsic and extrinsic motivation. All these factors were also significantly correlated with academic success (Bembenutty & Karabenick, 2004).

Stress

Stress is defined as a psychological arousal state that results from excess demand over our adapting ability (Sanders & Lustington, 2002). Stress can be measured by perceived stress and life event stress. Both measures are significant indicators for stress and have influential effects on performance. Lloyd et al. (1980) found that life event stress – including first semester of university life, was negatively correlated with the academic performance of first and second year students. They also suggested life events as the predictor of academic performance; this was especially effective for predicting academic performance if the detrimental life events happened within 12 months before the academic assessments. Moreover, stress is negatively correlated with academic performance before and after students attend university (Stewart et al., 1999). The concept of stress in relation to performance is best captured by the Yerkes-Dodson law (Yerkes & Dodson, 1908). It suggests that moderate stress can facilitate one's performance. However, chronic stress not only undermines our ability to perform well (high academic stress is correlated strongly with lower grades; Gillock & Reyes, 1999; Struthers, Perry & Menec, 2000), but also causes us to be ill, both physically, weakening our immune system, (Kiecolt-Glaser & Glaser, 2002) and psychologically, general adaption syndrome (Selye, 1956).

More importantly, the study conducted by Mischel et al. (1988) suggested that there was a correlation between stress, resilience and delay of gratification: stress is negatively correlated with resilience and delay of gratification. They found that children who delayed their gratification for longer would later develop higher resilience in coping with stress and

frustration in life. This highlighted the possibility of stress, resilience and delay of gratification being predictors of students' academic performance, and the potential to offer guidance to universities in identifying those who are in need, and maximise students' ability to strive for future success. Therefore, based on the existing evidence, within the present study we would expect to observe that stress, resilience and delayed gratification would predict academic performance, and that the combined effect of stress, delay of gratification, resilience and demographics variables would provide a stronger prediction than when they are predicting academic performance individually.

Method

Participants

One-hundred-and-seventy-six first year Psychology undergraduates (161 females and 15 males, age range=17 to 37, M_{age}=18.5, *SD*=1.59) (ethnicity – White: 152, 86 per cent; Asian: 11, 6 per cent; Chinese: 8, 5 per cent; Mixed: 4, 2 per cent and other: 1, 1 per cent) were recruited from the Research Participation System (RPS) in the University of Birmingham.

Measures

Demographics questionnaire

Participants were assessed for their age, gender, ethnicity, first language, number of siblings, parents' education level and profession: inferred economic status, their profession and UCAS scores (previous academic performance). Moreover a four-point-scale for measuring expectation of first semester performance, support from peers, family and school was included, in order to remove the effect of these confounding variables on stress, delay of gratification and resilience.

Connor-Davidson resilience scale 25 (CD-RISC-25)

This is a 25 items self-rating scale. Participants rate according to how much the statement applied to them over the last month, such as, 'I am able to adapt when changes occurs'. The score ranges between 0=not true at all, 1=rarely true, 2=sometimes true, 3=often true and 4=true nearly all the time. The final score of the scale ranged from 0 to 100: the higher the score, the greater the resilience. CD-RISC-25 has high internal consistency reliability of Cronbach's alpha ranging from 0.78 to 0.91. It also has a strong test-retest reliability (r=.78 to .88; Khoshouei, 2009).

Perceived stress scale (PSS)

This PSS consists of 14 items regarding feelings and thoughts of last month, rating on a five-point Likert scale (ranging from 0=never, 1=almost never, 2=sometimes, 3=fairly often and 4=very often). An example of the items is 'In the last month, how often have you felt nervous and stressed?' Items 4, 5, 6, 7, 9, 10 and 13 are reversed: the scores are rated in the opposite direction, for example, 'In the last month, how often have you dealt with irritating life hassles?' The internal consistency of this scale is high (Cronbach's alpha=.84; Cohen, Kamarck & Mermelstein, 1983) and it showed convergent validity: highly correlated with the subscale of DASS-21 for stress (Andreou et al., 2011).

Academic delay of gratification scale (ADOGS)

This scale is a 10-item scale which is designed to measure the delay of gratification in University students (Bembenutty & Karabenick, 1998). Each item consists of one immediately available option and one delayed alternative. For example, (A) miss several classes to accept an invitation for a very interesting trip, or (B) delay going on the trip until the course is over. Participants respond by choosing on a four-point Likert scale, namely, Definitely choose A, Probably choose A, Probably choose B and Definitely choose B. The response of each item is coded by the score range from 1 to 4, with the scoring for item 2, 7 and 10 reversed. A high score indicates the student can delay gratification for longer. . This scale has an acceptable Cronbach's alpha of 0.77, indicat-

ing good internal consistency reliability. It also has high construct validity that it is strongly correlated with self-regulation (Bembenutty & Karabenick, 1998).

College student's stressful event checklist

College student's stressful event checklist (Holmes & Rahe, 1967) consists of 32 stressful life events but only 31 were used, as one of the items, 'having to repeat a course', is not applicable to participants in this study. Participants complete by indicating an X if that event has occurred in their life or they are expecting it to happen soon within this year. The higher the score, the more stressed the person is and higher chance of illness in the coming year. Above 300 indicates severe stress, 150 to 300 indicates moderate stress and less than 150 indicates mild stress. It showed predictive validity for stress-related illnesses (Bieliauskas & Webb, 1974), and high test-retest reliability (r=.71; Horowitz et al., 1977).

Procedure and design

Participants signed up voluntarily through the Research Participation Scheme (RPS) system within weeks three to eight of the first term. Their responses were kept anonymous as they were only identified by their RPS numbers. RPS credits were given upon completion of the five questionnaires. At the end of the academic year individual average academic performance scores were taken for each participating student.

Results

Due to the missing data, out of the 176 data points, only 162 were analysed. A Pearson Correlation coefficient test was conducted with Bonferroni correction (p<0.001; due to the large number of independent variables). There were five positive correlations: between the mother's and father's educational levels ($r(176)$=.46, p<.001), indicating that parents have similar education levels, and between age and life events ($r(176)$=.29, p<.001), indicating that as one gets older they encounter more stressful life events). Unsurprisingly, the results also showed a significant positive correlation between a father's education level and his profession ($r(176)$=.40, p<.001), and a significant correlation between a mother's education level and her profession (r=(176)=.33, p<.001). Moreover, perceived stress scores was negatively correlated with CD-RISC-25 scores (r=(176)=–.57, p<.001), hence the higher students' perceived stress, the lower their resilience (see Appendix 1 for all correlations).

Linear multiple regression analysis was conducted, using the Stepwise method. Age, parents' education and profession level, UCAS scores, resilience scores, ADOG scores, perceived stress and life event stress scores were entered into the regression analysis as the predictor variables for predicting students' academic performance. The results showed a significant model of prediction ($F(1,160)$=6.51, p=.012), however, UCAS score was the only significant predictor of academic performance of first-year undergraduate students (t=2.2, p=.012).

Discussion

Although it is surprising that the findings from the present study did not support any of our expectations: resilience, delay of gratification and stress (perceived stress and life event stress) as a significant predictor for students' academic performance, there are other studies which support this finding – Elizondo-Omana et al. (2010) conducted a study on resilience and academic performance of first-year college students who were either taking the course for the first time or who had failed the course and were retaking. They found that there were no significant associations between students' grades and resilience levels, and resilience did not predict students' academic performance. Li (2005) assessed the self-regulated learning of middle school students and found that academic delay of gratification predicted metacognitive strategies but not the academic achievement of students. Furthermore, Zajacova, Lynch and Espenshade

(2005) assessed disadvantaged college first-years' self-efficacy and stress level. They found that although both were significant predictors for academic performance, the predictive power of stress for academic performance was not as strong or consistent as that of self-efficacy. Hence the relationship between these factors and academic performance may not be as robust as previous studies have suggested.

Despite the non-significant finding of resilience, stress and delay of gratification as predictors for academic performance, the present study showed UCAS score was the significant predictor for students' academic performance and found some significant correlations which were consistent with the findings of previous studies. UCAS scores can be seen as participants' previous academic performance, which significantly predicted academic performance: the higher the previous academic grades, the better the current academic performance. This finding was supported by various studies: Harackiewicz et al. (2002) and Hackett et al. (1992) both found prior academic achievement was correlated with academic performance, thus was a significant predictor of academic achievement. However, UCAS scores may not have the same level of predictability as previous studies have suggested, as it only accounted for a small variation of academic performance in this study. Despite its small predictive power, UCAS score only correlated with academic performance, implying that students who performed well in the past will continue to perform well in the future, and remain unaffected by demographic and psychosocial factors. It is also possible that students who performed well have developed better study and examination skills from previous successful experience, so continued to perform well. Abbott-Chapman, Hughes and Wyld (1992) showed supportive evidence for the interpretation that learning skills was an influential factor for academic success.

Life event stress was positively correlated with age. This may be explained by the Challenge Model of Resilience (Fergus & Zimmerman, 2005), which suggests that individuals will face more adversities as they age. With continued exposure to adversities and the successful overcoming of them, a better stress-coping strategy can be developed, thus potentially reducing the impact of stress on performance. However, the findings showed the opposite: life event stress increases as they age, which may suggest that participants were lacking an adequate stress-coping strategy.

The negative correlation between resilience and perceived stress illustrated what is captured in the definition of resilience. Moreover, there was supportive evidence for this finding: Petrie (2010) and Frigborg et al. (2006) both conducted a correlational study and found negative correlation between perceived stress and resilience; the higher the resilience level, the lower the stress level. This suggested that resilience acts as a buffer against stress, and is important for individuals' mental well-being.

There have been observed gender differences in resilience and stress levels – Stroud, Salovey and Epel (2002) recruited 24 men and 26 women, and found that men showed higher cortisol level – a biological indication of stress, to academic challenges than females. This is also supported by Sun and Stewart's study (2007), who used 1164 female and 1109 male students, and found that girls reported more protective factors of resilience than boys, that is, higher level of communication, empathy, help-seeking and future aspiration. Therefore, females were less likely to experience high levels of stress, compared to boys. Moreover they found that girls were more resilient than boys, confirming the lower stress level of females. Therefore this may provide an explanation for the current findings: more female than male participants were recruited (due to a nine-to-one gender ratio within our cohort), amplifying these differences, thus the result showed a significant correlation between stress and resilience.

However, Sarwar et al. (2010) found a result opposing this explanation, in that they recruited 75 female and 52 male students in testing for the relationship between resilience and academic performance, and found that there was no relationship between resilience and academic performance, and males were more resilient than females. This opposing evidence could be explained by cultural differences: Sarwar et al. (2010) used participants from Pakistan, which is a male-dominant society, and thus females might in some cases be viewed as the weaker sex and, therefore, be well protected and hence have a lower resilience than men (Siegmann, 2010). However, previous studies did not show a consistent pattern of the effect of gender on resilience and stress, and therefore their effects on academic performance. Hence future studies could use gender as a categorical factor and run a logistic regression between resilience, stress and academic performance in order to justify this explanation.

There were also gender differences in using past academic performance in predicting future academic achievement. Power, Robertson and Baker (1987) found that females outperformed male students when they were at university, even if both female and male secondary students had the same university entry grades, hence the result of UCAS scores as a significant predictor should be interpret with caution.

There may be individual differences in the use of learning strategies; the ability to delay gratification and continue to study for long hours may not be suitable for everyone, hence it did not guarantee outstanding academic performance (Plant et al., 2005). Moreover previous studies which found ADOG as a significant predictor for academic performance have also taken learning strategy into account (Bembenutty & Karabenick, 2004), which may explain why delay of gratification did not predict academic performance. Hence future studies might measure learning strategy as a variable in order to capture its potential effect on delay of gratification.

Based on the current findings, it is possible to suggest that universities can use UCAS scores to anticipate students' academic performance and identify the potential low achievers, thus providing adequate academic support for them. One possible intervention that could be suggested to universities is that they could hold workshops for stress management skills, in order to equip students with adequate stress coping strategies in overcoming stress, hence enhance students' resilience level and consequently raising student's academic performance.

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Appendix 1: Correlations between independent variables and academic performance.

Correlations

		academic_performance	age	father_edu	mother_edu	father_prof	mother_prof	ucas	resilience	preceived_stress	ADOGS	life_event
academic_performance	Pearson Correlation	1	-.034	.007	.029	-.024	-.101	.198*	-.002	-.091	.020	-.103
	Sig. (2-tailed)		.656	.923	.703	.753	.189	.012	.982	.233	.799	.180
	N	172	172	172	172	172	172	162	172	172	172	172
age	Pearson Correlation	-.034	1	.096	.064	-.026	.087	.048	.214**	-.191*	.067	.289**
	Sig. (2-tailed)	.656		.203	.397	.732	.252	.540	.004	.011	.374	.000
	N	172	176	176	176	176	176	166	176	176	176	176
father_edu	Pearson Correlation	.007	.096	1	.461**	-.402**	-.094	.054	-.027	-.010	-.092	-.008
	Sig. (2-tailed)	.923	.203		.000	.000	.215	.486	.725	.898	.224	.913
	N	172	176	176	176	176	176	166	176	176	176	176
mother_edu	Pearson Correlation	.029	.064	.461**	1	-.118	-.331**	.119	.027	-.103	-.022	-.090
	Sig. (2-tailed)	.703	.397	.000		.119	.000	.125	.722	.173	.772	.235
	N	172	176	176	176	176	176	166	176	176	176	176
father_prof	Pearson Correlation	-.024	-.026	-.402**	-.118	1	.101	-.118	-.045	.068	.037	-.086
	Sig. (2-tailed)	.753	.732	.000	.119		.184	.130	.554	.372	.622	.256
	N	172	176	176	176	176	176	166	176	176	176	176
mother_prof	Pearson Correlation	-.101	.087	-.094	-.331**	.101	1	-.036	-.114	.159*	.043	.238**
	Sig. (2-tailed)	.189	.252	.215	.000	.184		.643	.132	.035	.569	.001
	N	172	176	176	176	176	176	166	176	176	176	176
ucas	Pearson Correlation	.198*	.048	.054	.119	-.118	-.036	1	.087	-.116	.011	.094
	Sig. (2-tailed)	.012	.540	.486	.125	.130	.643		.267	.135	.891	.226
	N	162	166	166	166	166	166	166	166	166	166	166
resilience	Pearson Correlation	-.002	.214**	-.027	.027	-.045	-.114	.087	1	-.569**	.064	.078
	Sig. (2-tailed)	.982	.004	.725	.722	.554	.132	.267		.000	.402	.301
	N	172	176	176	176	176	176	166	176	176	176	176
preceived_stress	Pearson Correlation	-.091	-.191*	-.010	-.103	.068	.159*	-.116	-.569**	1	.019	.073
	Sig. (2-tailed)	.233	.011	.898	.173	.372	.035	.135	.000		.803	.339
	N	172	176	176	176	176	176	166	176	176	176	176
ADOGS	Pearson Correlation	.020	.067	-.092	-.022	.037	.043	.011	.064	.019	1	-.127
	Sig. (2-tailed)	.799	.374	.224	.772	.622	.569	.891	.402	.803		.093
	N	172	176	176	176	176	176	166	176	176	176	176
life_event	Pearson Correlation	-.103	.289**	-.008	-.090	-.086	.238**	.094	.078	.073	-.127	1
	Sig. (2-tailed)	.180	.000	.913	.235	.256	.001	.226	.301	.339	.093	
	N	172	176	176	176	176	176	166	176	176	176	176

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 2: Demographic Questionnaires.

1. Your age:.....

2. Gender:
   Male ☐ Female ☐

3. What is your ethnic group?
   (a) White ☐
   (b) Mixed ☐
   (c) Asian ☐
   (d) Black ☐
   (e) Chinese ☐
   (f) Other ethnic group (please state):.....

4. Please select the following which best suit your identity.
   (a) Home student ☐
   (b) EU student ☐
   (c) International student ☐

5. Please state your first language:.....

6. How many numbers of siblings do you have?.....

7a. Please state your father's education level
   (a) Primary school ☐
   (b) GCSE ☐
   (c) A-level ☐
   (d) Degree ☐
   (e) Above degree ☐

7b. Please state your mother's education level
   (a) Primary school ☐
   (b) GCSE ☐
   (c) A-level ☐
   (d) Degree ☐
   (e) Above degree ☐

8a. Please state your father's profession (if applicable):.....

8b. Please state your mother's profession (if applicable):.....

8c. Please state your current or most recent profession (if applicable):.....

9. What is your current residential status?
   (a) Halls (city campus) ☐
   (b) Other local student accommodation ☐
   (c) With parents (house/ apartment) ☐
   (d) With partner or spouse (house/ apartment) ☐
   (e) Alone (house/apartment) ☐
   (f) With friends (house/apartment) ☐
   (g) Other (please specify): ☐

10. What was the total from your UCAS points (if applicable)?.....

11. Please list the A-levels you have obtained with grades (if applicable):
e.g. Accounting, Anthropology, Archaeology, Art and Design, Biology, Business studies, Chemistry, Chinese, Computing, Critical Thinking, Dance, Drama, Design & Technology, Economics, English Language, English Literature, Environmental Studies, French, General Studies, Geography, Geology, German, Greek, Government and Politics, History, Italian, Law, Mathematics, Music, Philosophy, Physical Education, Physics, Psychology, Religious Studies, Sociology, Spanish
.....

12. Please list the A/S levels you have obtained with grades:
e.g. Accounting, Anthropology, Archaeology, Art and Design, Biology, Business studies, Chemistry, Chinese, Computing, Critical Thinking, Dance, Drama, Design & Technology, Economics, English Language, English Literature, Environmental Studies, French, General Studies, Geography, Geology, German, Greek, Government and Politics, History, Italian, Law, Mathematics, Music, Philosophy, Physical Education, Physics, Psychology, Religious Studies, Sociology, Spanish
.....

13. Please state any other academic qualifications:
e.g. ESOL, BTEC courses, Foundation Learning, Cambridge Nationals, IELTS, SAT, LCCI
.....

14. Overall, did you obtain the grades you anticipated you would receive? Yes ☐ No ☐

15. How well do you think you will perform in your first semester?
(Please rate on a four-point scale 1=poor, 4=excellent).....

16a. How much peer support you have received when you face challenges?
(Please rate on a four-point scale; 1=poor, 4=excellent) .....

16b. How much family support you have received when you face challenges?
(Please rate on a four-point scale; 1=poor, 4=excellent) .....

16c. How much support you have received from the school when you face challenges?
(Please rate on a four-point scale; 1=poor, 4=excellent) .....

17. Do you hope to study psychology at a postgraduate level?
Yes ☐ No ☐ Unsure ☐
If yes please provide details:.....

18a. Have you joined or intend to join any clubs or societies at the university?
Yes ☐ No ☐ (If No, then move to 18b)
Please specify: .....

18b. If not do you intend to.
Please specify: .....