# Delivery features of apprenticeship courses: The influence on the mental health and wellbeing of apprentices

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**Abstract:** The mental health and wellbeing of apprentices in higher education has received little or no attention. Using Kingston University, London, UK, the reported study contributes to filling this gap by investigating the influence of higher education apprenticeship on the mental health and wellbeing (MHW) of apprentices. It used questionnaire survey's and analysed the results with descriptive (Frequency, mean score, percentages) and inferential (Kendall's tau-b tests) statistics. The study found the following mental health and wellbeing indicators where; 'stressed caused by the programme e.g. attending school' - ranks the highest means score (MS) of 3.90, followed by the apprentice experiencing 'comfortable and affordable living with a MS of 3.53. The Kendall's tau-b test shows 54 correlations between mental health and wellbeing, and measures of the characteristics of higher education apprenticeship. For example, there is a co-relationship between 'lack of clarity in the responsibilities of parties in the programmes and 'help with managing work-life balance'. The strategies for improving the MHW of the apprentices are not limited to being allocated more time to study, which has an MS of 4.28, lecturers being more approachable which has a MS of 4.54; and lecturers 'making it more clear what is expected of apprentices with an MS of 4.28. The recommendations include making the lecturers approachable to apprentices, demonstrating how the diverse circumstances of the apprentices have accommodation, and lecturers being explicit on their expectation of the apprentices.

#### **1** Introduction

The delivery of apprenticeship, which is different from the traditional (full-time) students, entails that apprentices' work, but have 20 per cent of the contracted time allocated to studying. By implication, they have a day a week to study, but in practice this is mostly allocated to lectures hence the students have to study during the weekends. They struggle to balance domestic, work and school responsibilities, and employers are unable to fulfil some of their obligations (Chankseliani and Relly 2015). These have implications for the mental health and wellbeing of the apprentices; as their retention and progression depends on this; according to Manoharan et al. (2017) the teaching Excellence Framework and National Student Survey. In particular, the findings of Umeokafor et al. (2020), one of the 2019/20 SADRAS projects, show that the delivery features of apprenticeship courses influence apprentices' mental health and wellbeing. However, the insight in this regard is limited. For example, it is unclear which specific features influence the indicators of mental health and wellbeing, and the extent to which these occur and the solution from the students' perspectives. The current study aims to fill these gaps, to investigate the influence of the delivery features of apprenticeship courses on the mental health and wellbeing of apprentices in KU and make empirical evidence-based recommendations. While there are numerous studies on apprenticeship, studies on the delivery features have received limited attention hence Umeokafor et al. (2020). In meeting this aim, the following questions are set to guide the study:

- What are the effects of apprenticeship delivery features on the mental health and wellbeing of apprentices in Kingston University?
- What can be done to improve the mental health and wellbeing of apprentices in Kingston University?

# 2 Research Approach

#### 2.1 Short discussion of the research method(s)

Following extensive review of literature, a questionnaire for the study was developed. One of the sections captured the demographics of the respondents, where the questions response options were in ordinary scale, for example, ranking from 1 to 5 where 1 is 'Strongly disagree'; 2 is 'Disagree'; 3 is 'Neither agree nor disagree'; 4 is 'Agree' and 5 is 'Strongly Agree'; 1 is 'very low', 2 is 'low', 3 is 'Average', 4 is 'High' and 5 is 'very high'. For the scale that captured the importance of the strategies for improving the MHW of apprentices, ranking from 1 to 5, 1 is 'Not important', 2 'Slightly important', 3 'Fairly important', 4 'Important' and '5 'Very important'. In March and April 2021, questionnaires were sent out to apprentices in Kingston (see section 2.2 for information regarding the population and sample and section 2.3 for the analysis). Before this, the research was advertised and invitations were sent out to respondents. In addition to this, respondents received participant information which covered steps to ensure that ethical issues were addressed. This includes but is not limited to: the aim of the research, that participation was voluntary, how their data will be used, and how their safety and security will be protected through the anonymization of the data. The study also received ethical approval from Kingston University Research Ethics Committee. However, one major problem that the study encountered was the lack of support from a few members of staff who were in the position to help with data collection, and the short time available to connect the data - because of the embargo on data collection in January and February of the year.

#### 2.2 The scale and scope of your research

There are 170 apprentices in the School of Engineering (160) and the Environment and Kingston Business School (10) as of 2020/2021 - the majority of the apprentices in the university. This is the population of the study in which there are 119 in the sample. Forty apprentices (33.6 per cent) of the sample size completed the survey. Figures 1 to 10 detail the configuration of the 40 respondents.

#### 2.3 Data analysis

The data collection instruments and spreadsheet were anonymised and stored in a password computer. Only the staff and student partner has access to them. The data was analysed with Statistical Survey for Social Science (SPSS) where frequency, mean score, percentages and Kendall's tau-b tests were conducted. The Kendall's tau-b test examined the correlation between the measures of the characteristics of apprenticeship programme delivery (MCAPD) and mental health and wellbeing (MHW) of apprentices. Both were also described with mean score and the percentages were identified just as Strategies for Improving Mental Health and Well-being.

# **3** Project findings

#### **3.1 Profile of Respondents**



Figure 1: Ownership structure of organisation

Figure 2: Description of nature of operation of the employer



Figure 3: Classification of your employer organisation







Figure 5: Respondents programme of study



Figure 6: Current level of study

Figure 7: Designation in your organisation



Figure 8: Respondents gender profile



Figure 9: Age Range of Respondents



Figure 10: Ethnicity of Respondents

The employer of the apprentices are skewed to large organisations, white apprentices and most of the apprentices are male.

## 3.2 Measure of the characteristics of higher education apprenticeship (MCHEA)

Table 1: Summary of the tabular presentation of the measures of the characteristics of higher education apprenticeship

Measure of characteristics of apprenticeship (MCAPD)	Code	Mean	Standard	Rank
			Deviation	
I appreciate that I will graduate with a professional	MCHEA 10	4.63	0.774	1
qualification (where applicable)				
I appreciate that I am being paid while studying	MCHEA 9	4.57	0.931	2
My employer prioritizes the business over my academic	MCHEA 2	3.47	1.176	3
programme				
There are communication difficulties between my	MCHEA 4	3.30	1.285	4
employer and KU				
I get fixed on-the-job-training	MCHEA 8	3.20	1.244	5
The responsibilities of the parties in my programme are	MCHEA 7	3.18	1.318	6
unclear and fragmented				
I triangulate what I learn in school and work	MCHEA 5	2.93	1.185	7
My employer struggles to meet their responsibilities in my	MCHEA 1	2.83	1.152	8
programme e.g. allocating me to the relevant department of				
my current module of study				
My school (KU) and my employer work together to support	MCHEA 6	2.75	1.193	9
me in the programme				
My employer works closely with my school (KU)	MCHEA 3	2.12	1.017	10

Table 1 shows that the benefits of apprenticeship in terms of career progression and financial benefit of the programme are the two characteristics of the programme which rank first and second. This is consistent with Umeokafor et al. (2020) where 'I appreciate that I am being paid while studying' ranks first with a MS of 4.63 and 'I appreciate that I will graduate with a professional qualification (where applicable)' ranks second with a MS 4.23.

## 3.3 Mental health and Well-being indicators including stressors (MHW)

Mental health and Well-being indicators including	Code	Mean	Standard	Rank
stressors MHW			Deviation	
Stress caused by the programme e.g. attending school	MHW 1	3.90	1.033	1
Having a comfortable and affordable living	MHW 12	3.53	1.012	2
Feeling of apprentices programme of study being worthwhile	MHW 16	3.50	1.301	3
Repercussions on self-esteem and self-efficacy	MHW 18	3.35	0.893	4
Extent of happy yesterday	MHW 14	3.05	1.260	5
Participation I decision-making that affect you at work	MHW 17	3.05	1.108	6
Negative thoughts, images, memories, and feelings (revisiting)	MHW 21	3.05	1.339	7
Apprentices extent of satisfaction with life nowadays	MHW 19	3.03	1.165	8
To what extent do you feel depressed in the past week	MHW 20	3.00	1.261	9
Level of anxiety yesterday	MHW 15	2.98	1.423	10
Being signposted to different services in the institutions	MHW 4	2.85	1.272	11
Apprentice employer providing enough time for independent	MHW 5	2.80	1.265	12
study				
Lack of personal tutor or pastoral support	MHW 7	2.65	1.388	13
Apprentice contribution to the content of the curriculum	MHW 3	2.63	1.030	14
Stress due to forced cohabitation with family	MHW 8	2.42	1.394	15
Access to chaplaincy and/or counselling services	MHW 11	2.40	1.297	16
Quick and detailed feedback on coursework	MHW 6	2.25	1.056	17
Links with mental health/wellbeing charities	MHW 13	2.18	1.279	18
Help with managing work and life	MHW 10	2.03	1.000	19
Sense of belonging to the school/university	MHW 2	1.93	1.047	20
Participation in societies or social events in school	MHW 9	1.30	0.883	21

Table 2: Extent of Mental health and Well-being indicators including stressors (MHW)

Table 2 shows that of the 21 mental health and wellbeing indicators, 'stress caused by the programme e.g. attending school' ranks the highest, followed by the apprentice experiencing 'comfortable and affordable living. The third is the 'feeling of apprentices' programme of study being worthwhile. Fourteen of the MHW indicators are above the mean midpoint of 2.50.

# 3.4 Kendal Tua-b test: Correlation between Mental health and wellbeing (MHW) and Measure of the characteristics of higher education apprenticeship (MCHEA)

All the MHWs and MCHEA were subject to further analysis, using the Kendal tau-b test to assess if there is a correlation among them. It shows that there are 54 correlationships in Table 3. For example, the highest ranking MHW indicator, stress caused by the programme e.g. attending school (MHW1) has two significant positive correlations with 'My employer struggles to meet their responsibilities in my programme e.g. allocating me to the relevant department of my current module of study' (MCHEA1) and 'The responsibilities of the parties in my programme are unclear and fragmented' (MCHEA 7). MHW1 also has negative correlations with 'My school (KU) and my employer work together to support me in the programme' (MCHEA6) and 'I appreciate that I will graduate with a professional qualification (where applicable)' (MCHEA10).

MCHEA	MCHFA1	MCHFA2	MCHFA	MCHFA	MCHFA	MCHEA	MCHFA7	MCHEA8	MCHFA9	MCHEA
MHW	WICHE/(I	WICH L/ 12	3	4	5	6	WICH L/ (/	WICHE/10	WICH LING	10
MHW 1	.288*					407**	.317*			281*
Sig (2 – tailed)	(.032)					(.002)	(.017)			(.049)
MHW 2	391**				.457**	.301*				
Sig (2 – tailed)	(.004)				(.001)	(.025)				
MHW 3	· · · /				.417**	.343*				.408**
Sig (2 - tailed)					(.002)	(.010)				(.004)
MHW 4		304*	323*	427**	.296*	· · /	292*	.258*		.382**
Sig (2 – tailed)		(.021)	(.015)	(.001)	(.023)		(.025)	(.049)		(.006)
MHW 5		391**	()	( /	(/	.322*	331*	()	.327*	(/
Sig (2 – tailed)		(.003)				(.014)	(.001)		(.020)	
MHW 6		, , 					,		, , ,	
Sig (2 – tailed)										
MHW 7							255*			.323*
Sig (2 – tailed)							(.049)			(.020)
MHW 8										
Sig (2 – tailed)										
MHW 9					.320*					
Sig (2 – tailed)					(.022)					
MHW 10	466**	446**			.322*	.506**	374**		.308*	.322*
Sig (2 – tailed)	(.002)	(.001)			(.017)	(.000)	(.005)		(.031)	(.025)
MHW 11										
Sig (2 –tailed)										
MHW 12							324*			
Sig (2 – tailed)							(.014)			
MHW 13		285*			.351**			.457**		
Sig (2 – tailed)		(.034)			(.008)			(.001)		
MHW 14		274*			.345**		287*			.333*
Sig (2 – tailed)		(.038)			(.008)		(.027)			(.017)
MHW 15				372**						
Sig (2 – tailed)				(.004)						
MHW 16	395**	359**			.390**	.379**	404**	.361**	.377**	.442**
Sig (2 – tailed)	(.003)	(.004)			(.003)	(.004)	(.002)	(.006)	(.007)	(.002)
MHW 17								.347**		.362*
Sig (2 – tailed)								(.009)		(.011)
MHW 18							.309*			
Sig (2 – tailed)							(.021)			
MHW 19					.362**					.343*
Sig (2 – tailed)					(.006)					(.015)
MHW 20							.309*			
							(.017)			

Table 3: Correlation between Mental health and wellbeing (MHW) and Measure of the characteristics of higher education apprenticeship (MCHEA)

Sig ( 2 –									
tailed)									
MHW 21									
Sig (2 – tailed)									
* Correlation is significant at 0.05 level (2-tailed)									
** Correlation is significant at 0.01 level (2-tailed)									

#### 3.5 Strategies for Improving Mental Health and Well-being of the Apprentices (SIMHW)

Table 4 presents the extent to which the strategies for improving apprentices MHW are important to them. The highest two strategies are that lectures/tutors should be more approachable, which has an MS score of 4.54 and 'the school/program demonstrating greater understanding of apprentices diverse circumstances and commitments and were more accommodating of these' with an MS of 4.54.

Strategies for Improving Mental Health and Well-being	Code	Mean	Standard	Rank
(SIMHW)			Deviation	
Lecturers/tutors being approachable to apprentices	SIMH W 1	4.54	0.913	1
The school/program demonstrating greater understanding of apprentices' diverse circumstances and commitments and were more accommodating of these	SIMH W 8	4.54	1.022	2
Lecturers being more clear or explicit of what they expect of students	SIMH W 2	4.28	1.099	3
Allocating apprentices more time for independent study	SIMH W 12	4.28	1.050	4
Lecturers increasing the level of individual support for student learning	SIMH W 4	4.15	1.065	5
The employer and school providing a platform for apprentices to speak up	SIMH W 13	4.15	0.875	6
The school and the employer showing commitment to tackling mental health and wellbeing	SIMH W 15	4.08	0.882	7
Improving the availability, range, and quality of services	SIMH W 6	4.03	0.959	8
Improving student engagement in learning by using a variety of activities	SIMH W 5	3.92	0.900	9
Lecturers and line manager at work facilitation or fostering interactions between them and the students	SIMH W 3	3.90	1.095	10
Surveying apprentices on views of improving my wellbeing	SIMH W 11	3.85	1.159	11
Employers providing apprentice with training on mental health	SIMH W 14	3.77	1.202	12
Increasing awareness and prompting the use of services	SIMH W 7	3.74	1.117	13
School fostering a more inclusive and caring sense of community among the student body	SIMH W 9	3.49	1.335	14
Involving apprentices in the co-creating of activities, programme and the university policies	SIMH W 10	3.36	1.246	15

Table 4: Summary of the Improving Mental Health and Well-being of the apprentices

# 4 Institutional impact of the project

- This study supports the findings of Umeokafor et al. (2020) in terms of higher education apprenticeship features and details the mental health and wellbeing indicators for apprentices. It shows the impact of students not having enough allocated independent reading time because of the delivery model of the programme.
- The study highlights the voices of apprentices, which are not usually heard. It shows among many what they view will improve their mental health and wellbeing, of which two examples are: being offered additional time for independent reading by the employer, and the lecturers being approachable.
- This is the first time that such a study has been conducted in Kingston University, if not, the whole of UK. Hence, unique insight has been provided therein.
- It supports the findings of Umeokafor et al. (2020), in drawing attention to the indicative underrepresentation of the apprentices from Black, Asian and Minority Ethic (BAME) backgrounds in Kingston University London. The implications of this include that their voices are also not heard despite the under representation.

# **5** Institutional recommendations

- To improve the MHW of the apprentices in the university, the institutions should develop strategies which significantly draw on the strategies in Table 4 not limited to focusing on making the lecturers more approachable to apprentices; demonstrating how the diverse circumstances of the apprentices have accommodation; and lecturers being explicit on their expectation of the apprentices. This does not mean that lecturers are approachable to students in general but there should be strategies that target apprentices.
- In addressing the time allocation related issues, given the model of delivery entails 20 per cent of learning in higher education, strategies to improve the level of independent reading among apprentices can include redesigning the module delivery model. This may mean that some modules of lessons are delivered remotely or hybrid (face-to-face and remotely), and the redistribution of modules across the years of study, if they are not equally distributed.
- The university should ensure an increase in the level of individual support for learning provided to apprentices. There is also a need to design personal tutor scheme or other means.
- Further research should offer qualitative insight into the discourse if recommended. This can be done through interviews and/or focus group discussions.

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