



**University of  
East London**

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**MRes Sport and Exercise Sciences**

**Evaluating the impact of an integrated Wellbeing Exercise Referral Scheme on physical and psychological health of University students in a London higher education institution**

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**23<sup>rd</sup> November 2023**

**I declare this is my own unaided work. It is being submitted in partial fulfilment for the MRes Sport and Exercise Science. I have not previously submitted this work for assessment.**

**I further confirm this is my final submission and agree that the thesis is ready for assessment.**



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## **Summary of events, presentations and training over the duration of the**

Sept 2021 - Developed and delivered the first iteration of the Wellbeing Exercise Referral Scheme whilst working as a Duty Manager as an adjunct to normal working responsibilities. The students on the scheme were all given a free of peak membership as encouragement to continue using the gym after they had finished the programme.

24<sup>th</sup> January 2022 - Commenced MRes to analyse impact of the intervention.

5<sup>th</sup> August 2022 - Promoted to Centre Manager at SportsDock.

Using the knowledge of the impact the scheme had on the students involved, initiated a shift in the culture of SportsDock towards being more student centred, encouraging more students to lead an active lifestyle.

October 2022 – Data capture started for 2022/23 Wellbeing Exercise Referral Scheme as part of this research project.

January 2023 – Passed Contemporary Theories in Sport Psychology module as part of the Mres.

6<sup>th</sup> March 2023 - Invited as a speaker to BUCS conference on the topic of the Wellbeing Exercise Referral Scheme and its benefits, in front of a room of industry leaders.

Managed SportsDock colleagues to deliver new and innovative projects such as wellbeing walks, library mindful sessions and activity events for World Mental Health day and Black History Month.

1<sup>st</sup> September 2023 – the 2<sup>nd</sup> iteration of the Wellbeing Exercise Referral scheme began using the recommendations gleaned from this study. At time of writing there has already been 6/7 fully engaged students, at this stage last year there was two.

On 25<sup>th</sup> October 2023 - Presented an infographic (Appendix E) to a group from the Newham NHS Early Help and Wellbeing department regarding the framework. After presenting and answering questions, the Lead of the group shared the infographic with 100+ contacts with the view to use Wellbeing scheme framework on collaborative projects. They also gave useful options for funding and grant applications to aid expansion suggestions.

7<sup>th</sup> November 2023 - Conducted a meeting with the Vice Chancellor, presenting her with the infographic and describing the vision of expansion to engage with more students. She was very enthusiastic about the idea and has organised a roundtable meeting with other members of the university to instigate using the framework to develop a multi discipline solution on the 18<sup>th</sup> January 2024.

TBC – A meeting with Director of HR Services to finalise the operational logistics of expanding the scheme to UEL staff.

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## Evaluating the impact of an integrated Wellbeing Exercise Referral Scheme on physical and psychological health of University students in a London higher education institution

### Abstract

**Aim:** This research study I conceptualised, delivered, and evaluated the impact that an integrated wellbeing exercise referral scheme (WERS) had on the physical and psychological health of university students.. The project has a specific focus on evaluation of outcome and process with a view to identifying areas for improvement for subsequent iterations of delivery.

**Method:** Following self-referral to the University Wellbeing Team, students were triaged into an week exercise referral scheme which was designed around Self Determination Theory (competence, autonomy, relatedness). Using a scaffolding approach to aid behaviour change, the aim is to increase participation in physical activity and operating alongside regular therapeutic intervention to enhance psychological wellbeing. .

**Measures:** The measures included academic engagement and attainment; time spent with Practitioner; wellbeing scores and physical activity measurements. Measures were taken pre, during and post intervention and each participant volunteered to undertake a post intervention interview. Demographics and time to complete the referral scheme were also measured to assess patterns and trends.

**Results:** A total of 817 students referred themselves to Wellbeing Team, 37 came through the scheme and nine fully completed the intervention. Eight of these (89%) had successful graduate outcomes against a backdrop of 77.3% completion rate for the wider university. Six out the nine participants needed less appointments following the intervention compared with a matched sample. All nine recorded a positive reduction in their PHQ-7 wellbeing scores and only 1 showed a small increase on the GAD-9.

**Conclusion:** The results indicate positive improvements in all three of the areas that the research study wanted to analyse. It is acknowledged the sample size of participants is small and further research is needed to confirm causality. The recommendations that were extracted from the analysis gives the opportunity to develop the referral framework over the next few years to increase its impact for more students.

## 1.0 Introduction

For many years researchers, theorists and practitioners have contested the nature and meaning of mental health (Mental Health Promotion 1.1, 2006.). There is a great deal of debate and confusion around what constitutes 'mental health', 'mental well-being', 'mental ill health' and 'mental illness' (Cattan & Tilford, 2006). Mental health is something that affects everybody in their lives and is best described as a continuum, with flourishing mental health at one end and languishing mental health at the other (Keyes, 2002). This view is consistent with the World Health Organisation's definition of mental health as "A state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (World Health Organization, 2004).

Clinical mental health illness diagnosis is prevalent among the population according to Rethorst et al., (2009), with approximately 14% of the global burden of disease being attributed to neuropsychiatric diseases (Prince et al., 2007). A study completed in 2014 analysed 175 surveys across 63 countries with the results showing that 30% of the population will have a mental disorder at some time in their lives (Marmot, 2014). This was backed up by research commissioned by the House of Commons in which they suggest that in the UK, 1 in 6 adults experience a common mental disorder such as depression or anxiety in their lifetime (Baker, 2020). Of significance is that the findings of Baker (2020) do not include the impact of the Covid – 19 pandemic which has further increased diagnosis of mental health disorders (Hossain et al., 2020). With all this in mind the British Medical Agency has made it very clear that the United Kingdom is in the midst of a mental health crisis;

*"The mental health crisis in this country is spiralling out of control and is failing some of the most vulnerable in society, as workforce capacity cannot keep pace with demand."* (BMA, 2022)

Keyes (2002) established that flourishing adults lead meaningful, happy, and productive lives, whereas languishing adults, although free of clinically relevant mental illness, describe their lives as empty and stagnant. The findings from the study by Keyes (2002) suggest those that fall into the languishing part of the continuum are more at risk of falling into clinical depression. As such, for these individuals' early intervention through mental health promotion should be the objective. The last 20 years have seen significant gains in developing and implementing early intervention services

for young people experiencing mental ill health (McGorry & Mei, 2018). These sub clinical interventions have been proven to reduce the negative consequences of delayed access to treatments and improve the longer-term outcomes for patients (Barkus et al., 2022).

It is accepted that the onset of mental disorders in adulthood peaks during the transition from childhood to adulthood and especially in young adults (16-24 years old) (Patel et al., 2007). As such given the high proportion of individuals in this age bracket that enter Higher Education (HESA, 2023) it appears that university populations should be a focus of early intervention work (Neill et al., 2020). It has been well reported that there are increasing concerns globally about the mental health of Higher Education students (Macaskill, 2013; Thorley, 2017). The number of students declaring a pre-existing mental illness to their university has more than doubled since 2014/15 (Lewis & Bolton, 2023). This issue seems to be more prevalent in global majority demographics, for example, (Arday, 2018) reported that among students South Asian women encountered higher rates of anxiety and depression (63.5% compared with 28.5% of white women) and among Afro-Caribbean men 3.1% compared with 0.2% of white men encounter psychotic disorders or episodes. It can also be deduced from the literature that those from low socio economic demographics have a higher risk of poor mental health (Tunstall et al., 2014). This is of particular importance to this research study as it takes place in a diverse student population that has many students from low socio economic backgrounds (University of East London, 2022).

As a result of this there have been documented increases in demand for services to support student mental health, where in some cases there has been a doubling in the number of students accessing help (Periera, 2018). Thorley (2017) researched that some universities have long waiting lists with up to 1 in 4 UK students waiting to use counselling services. Thorley goes on to suggest that at least a third of all universities don't have an explicit mental health and wellbeing intervention strategy. When considering interventions Revenson (1987) highlights that there is no 'magic bullet' formula, but part of the solution must lie in developing efficacious, cost effective, intervention that can be scaled up in order to deal with rising numbers of student referrals.

Crone et al., (2005) highlights schemes that improve physical activity as an example of an effective intervention strategy to help students with mental health illness. Although it is well established and widely known that regular physical activity can have a positive impact on physical and mental wellbeing, 31% of the population remain doing less than the 30 mins of moderate activity 5 days a week advised by the Department of Health (Hall et al., (2021); UK Chief Medical Officers' Physical Activity Guidelines, 2019). Harvey et al., (2018) concluded that the importance of undertaking regular leisure-time exercise as this was associated with reduced incidence of future depression and reduced mental wellbeing. Savage et al., (2020) studied the effect that due to the



pandemic lockdowns there was an association between reduction in physical activity rates which increased the perceived stress/ mental wellbeing of the participants in their study. Vinson & Parker, (2012) suggests that an effective way of improving physical activity rates is by referring people to an exercise specialist as their research showed it led to a longer term change in clients' physical activity levels.

This research study will conceptualise, deliver, and evaluate the impact that an integrated wellbeing exercise referral scheme has on the physical and psychological health of university students who are struggling with their psychological wellbeing. The project has a focus on evaluation of outcome and process with a view to identifying areas for improvement for subsequent iterations of delivery.

## **2.0 Literature Review**

### ***2.1 Mental health in educational settings***

The mental health of university students has been a focus of increasing concern in the UK, with evidence suggesting that large numbers of students are experiencing poor mental health while attending university (Hughes & Spanner, 2019). A report compiled by the Mental Health Charter explains that accurately estimating how many students experience poor mental health is difficult, as there is an absence of large scale, weighted prevalence studies. However, the numbers in some of the larger research surveys are still worthy of note (Hughes & Spanner, 2019). For example, the 2019 Student Academic Survey collected data from 14,000 UK students with the results concluding that between 2016 and 2019 there was significant reduction in all 4 of the criteria that the survey defined as student wellbeing. Happiness fell from 21% to 18%, life satisfaction from 16% to 14%, life worthwhile 22% to 17% and low anxiety rates dropped from 21% to 16% (Callender et al., 2021). The survey conducted by the Office for National Students in 2017/18 suggested that 27% of students rated life satisfaction as positive, 33% thought life was worthwhile, 33% scored positive on happiness and 37% reported low anxiety (Office for National Statistics, 2017.) A recent cross-national study estimated that 20% of students aged 18-22 experienced a mental disorder with anxiety from stress being the most common (Duffy et al., 2019). Stress has always been a major part of student's life due to the various pressures of studying in a new place and expectations of exams and coursework deadlines (Reddy et al., 2018). Higher stress levels in students are associated with a poorer quality of life and wellbeing, which then can influence and lead to insufficient sleep or poor subjective sleep quality (Gardani et al., 2021). The study completed by Duffy et al., (2019) stated that dealing with factors such as separation from family, developing a new social circle and having

autonomy and responsibility for the first time in their life could lead to developing or aggravating mental health issues. Evidently these stressors are prevalent in university students who might be moving away from home for the first time and living, in some case, a long distance from home. These changes can lead to social isolation which is closely linked to reduced physiological wellbeing and depressive symptoms (Kawachi & Berkman, 2001). Recently external factors such as the Covid 19 pandemic had a huge impact on student's stress with lockdowns exacerbating problems with social isolation (Kim & Jung, 2021). The high levels of constant stress and worry of the pandemic are related to disruptions in academic progress, drop out and failure (von Keyserlingk et al., 2022). This was reflected in the results of a study completed by Savage et al., (2020) where they report the average decline in mental wellbeing during lockdown was 4 points in the Warwick-Edinburgh Mental Wellbeing Score (WEMWBS), which exceeds the 3-point change that may indicate a meaningful decline. Following on from this, 2022/23 has presented students with further challenges with rising prices for food and energy, which has placed real and sustained budgetary pressures on millions of households (Patrick & Pybus, 2022). Batchelor et al., (2020) states that it is likely mental health illnesses are even more prevalent than is currently reported and a large percentage of students suffering from mental health disorders do not seek help for their issues (Duffy et al., 2019, Tuckett MA, 2010). The Insight Network surveyed 38,000 UK students in 2018 and one of the findings was that 3/4 students concealed mental health symptoms from their friends/ peers (Periera, 2018). Tuckett (2010) suggests that as high as 90% of students with emotional problems do not use the counselling options on offer with the stigma of having a disorder being the main reason they did not access help.

## ***2.2 Global majority at University of East London***

The findings of Tuckett (2010), Hussain et al., (2013) and Periera (2018), build on the issue of stigma and they all reference the fact that white students compared to students from the global majority were more likely to report their mental health issues. This is backed up by earlier research at Coventry University by Turner et al. (2007) who researched that global majority students were less likely to seek help when compared with white students. He went on to state that male students were less likely to seek help compared to female students. From these studies it can be deduced that a global majority male student is significantly less likely to report mental health issues than a white female student. This literature review supports this by the fundamental lack of robust research that has been conducted on mental health difficulties experienced by students from a global majority background. Ica, (2010), also suggested in their paper that those from a global majority background are more likely to be living in severe poverty in more deprived areas. This

contributed to Stansfield et al., (2017) conclusions, recognising the pattern that people living in deprived areas showed worse levels of wellbeing. This research study is set against a background of students from University of East London (UEL), and it is clear to see that UEL has a more diverse population than the entirety of the student population. According to the 2020/21 Higher Education Student Statistics Report (HESA) 56% of all UK students consider their ethnicity to be white and only 18% identify as being from a global majority background (*Figure 5 - HE student enrolments by personal characteristics 2016/17 to 2020/21 | HESA, 2022*). The University of East London's 2021 Annual report states "Our Students identify as 26% White, 24.5% Black, 33.9% Asian, 5.6% Mixed Heritage and 3.8% as 'other'" (University of East London, 2022). This report shows that UEL is much more diverse university which according to Tuckett (2010), Hussain et al., (2013) and Periera (2018) makes the mental health situation more challenging. It is even more paramount at an institution such as this to focus on improving access to services and increase mental health literacy amongst its community.

### **2.3 Mental Health literacy**

Mental Health literacy can be defined as "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" (Jorm, 2012). Mental health literacy skills are not simply about having more knowledge of mental health issues but also having the ability to self-diagnose, identify risk factors, administer self-treatment and locating where to find professional help. The research completed by Gorczynski et al., (2017) and Jorm (2012) around mental health literacy highlights that many people do not have the literacy skills to recognise any deterioration in their own mental health. According to Gorczynski et al., (2017) those that did manage to improve their mental health literacy skills demonstrated improved help seeking behaviours. Unfortunately, they also go on to state that those who did need the most help is the least likely to seek professional assistance, and so there are clear benefits for everyone to improve their mental health literacy. The National Student Survey (NSS) in 2015, reported that as many as 33% of students were unaware of where to go to access wellbeing support (All Party Parliamentary Group, 2015) and in the same study complete by NSS in 2017 this had risen further to 43.5% (Gorczynski et al., 2017). In a qualitative study completed with students, by Gulliver et al., (2012), one of the major themes to be extracted from the interviews, was that the young adults acknowledged a lack of awareness about the services available was a major barrier to seeking help. The conclusion from these studies suggests that there is a need to provide tailored and individual treatment specifically for more vulnerable people from different cultures and backgrounds (Gorczynski et al., 2017).

Recent improvements in students' mental health literacy could be a reason why demand for university mental health services has significantly increased. More specifically, universities have seen increases up to 25% in usage in wellbeing resources as well as the cases becoming more complex (Priestley et al., 2022). There will always be pressure placed on a university to be run as a viable, profitable business, the notion of "student wellbeing" therefore, will always be competing for resources and funding alongside other organisational factors that are often prioritised more highly (Burns et al., 2020). Priestley et. al (2022) suggested that there is a need to take a whole university approach as isolated interventions or services are not enough to combat the huge challenges that face Universities. A whole university approach gives the opportunity for prevention and early intervention, by providing well-resourced mental health services and a multi-departmental intervention it is recognised that all aspects of university life can support and promote mental health and wellbeing (Universities UK, 2018). In 2017, UK Universities, developed the 'Step for Change' Framework which established the call for universities to take a 'whole university approach' to university mental health. In 2019, Student Minds developed the Mental Health Charter to bring further clarity to the term 'whole university approach'. The aim of this was to create an evidenced informed charter and develop an award scheme which recognises those providers who demonstrate excellent practice (Hughes & Spanner, 2019). University of East London is one of only 7 universities who have achieved this Charter Award, (Student Minds, 2023).

#### ***2.4 Impact of poor mental health***

Mental health can be split into 6 main areas; self- acceptance, positive relations with others, personal growth, purpose in life, environmental mastery, and autonomy (Keyes, 2002). This view was also mirrored by Wang et al (2018) who stated that suffering from a mental health illness can cause significant distress by having a negative impact on social relationships, physical health and ability to study and retain information, therefore impacting on occupational attainment. A study that took place in New Zealand examined whether common psychiatric disorder between ages 18 and 25 was associated with negative economic and educational outcomes at age 30. They concluded that increasing episodes of psychiatric disorder has negative effects on life outcomes (Doran & Kinchin, 2019). A UK study went one step further and found that, in particular, male participants that were affected by common mental health disorders had an increased risk of long spells of psychiatric sickness absence, which meant they were less likely to remain in full time employment (Stansfeld et al., 2010). Keyes (2002) and Wang et al. (2018) both agreed that poor mental health has a detrimental effect on social relations with others and individuals who have improved mental health are more likely to have healthy relationships with friends and partners. In an article examining the

studies that have involved quitting smoking, it was reported that 7 out of 9 studies reported improvements in mental health after quitting smoking due to their physical health improving (Taylor, 2014.). In a similar study completed around nutritional lifestyle choices it was found that there was a strong association with low quality diet and high mortality risk. It also found that increased fruit consumption resulted in increased wellbeing and happiness (Mujcic & Oswald, 2016). Excessive drinking and abstention show negative effects on health outcomes and are predicted to worsen physical and mental health (Frisher et al., 2015). It can be deduced that all aspects of lifestyle choices such as, smoking, alcohol consumption, diet and levels of physical activity can have an impact on mental health (Ohrnberger et al., 2017).

As Barkus., et al (2022) suggested there are very positive sub clinical interventions that have proven to reduce mental ill health in the form of support groups, one-one support, or interventions to enhance natural networks. Hussain et al., (2013) believes that Universities are ideally situated to provide these networks, using methods such as health promotion programmes aimed at improving health literacy to prevent the onset of physical or mental ill-health. This combination of research supports the development of the Mental Health Charter Award by Student Minds and the aims they are trying to achieve.

A lot of research completed strongly indicates that physical activity should be used as an example of a coping strategy intervention as being active has such a positive effect on individual health and well-being (Rasciute & Downward, 2010), (A. Taylor et al., 2021), (Wilson et al., 2008). It is well reported that strenuous physical activity is associated with the release of endorphins, which creates a euphoric feeling of accomplishment (Leuenberger, 2006). In a study completed by Rethorst et al., (2009) they found strong evidence that supported the use of exercise to alleviate depressive symptoms. This comparison was a collection of historical studies where the intervention was varied in duration, exercise type and person delivery, they deduced that any form of physical activity intervention would generate positive outcomes. More recently, a study by Heissel et al., (2023) analysed similar studies and suggested that link between depression and activity is now stronger and more pronounced.

The research carried out by UKActive in 2020 called the British Active Students Survey (BASS) indicated that students that were active were happier, had less anxiety, better self-confidence and felt more socially included. It was also found that being active made them more confident of getting a permanent job after they finished their studies (British Active Students Survey: Higher Education 2019/2020 Report). It is important to note that the students who took part in this study were not selected due to any mental health issues and was a representation of the student population as a whole. The belief that physical activity has a positive effect on wellbeing is shared by University of

East London, who recognise the importance of promoting a physical activity lifestyle by putting health gain as a cross cutting institutional priority in its 10-year Strategic Framework, Vision 2028. This is combined with the University's Mental Wealth agenda which aims to instil lifelong skills to help increase employment preparedness of the students and improving physical activity cuts through many of the core competencies (University of East London, 2019). Combining physical activity alongside a one to one support in the form of a trainer and an exercise referral scheme could be an example of an extremely successful intervention if delivered correctly.

### ***2.5 Changing people's behaviour to exercise***

Despite physical activity being so important in alleviating depression and other mental health issues, Hall et al., (2021) still found that 31% of the population are doing less than the 30 mins of moderate activity 5 days a week advised by the Department of Health. Changing people's behaviour and improving adherence to exercise is a struggle and this has to be taken into account when developing physical activity interventions (Thomson & Mcadoo, 2015). A key element that contributes to adherence is motivation and Ryan and Deci's (2000) self-determination theory (SDT) aims to provide a theoretical framework designed to improve motivation in order to change behaviour. Self-determination theory (SDT) is a theory of motivation that has been applied across many settings in education and health care to understand and predict psychological well-being (Pretorius et al., 2019). Theoretically derived interventions based on SDT have been found to promote long-term sustained behavioural change in areas such as increasing physical activity (Flannery, 2017). SDT was derived from research examining factors that shape intrinsic motivation and engagement for more self-determined reasons and is linked with improved mental health (Wilson et al., 2008). The theory suggests that motivation and engagement diminish when offered extrinsic rewards such as rewards, competition, or threats. In contrast, positive feedback and choice are predicted to enhance experiences of competence and self-determination, fostering greater intrinsic motivation (Deci et al., 1999). Kotera et al., (2023) researched the importance of intrinsic motivation in UK graduate students and surmised that intrinsic motivation improves academic achievement, better retention, and greater wellbeing.

At SDT's core is the need to meet three psychological needs: autonomy, competence, and relatedness. (Deci & Ryan Richard, 2004). Cherry, (2022) broke these three competencies down further by stating that autonomy is the fact that people need to feel in control of their behaviours and that their direct action plays a major part in achieving their goals. To be able to achieve these goals they would need to gain competence and mastery of tasks, so they have the skills needed to

be successful. Lastly Cherry, (2022) said that people needed to experience a sense of belonging and attachment to other people which is the relatedness need in the SDT framework.

### ***2.6 SDT and Exercise referral schemes (ERS)***

One of the methods that used to change people's behaviour and encourage them to participate in physical activity, especially amongst the population who are suffering from ill health is by implementing a form of an exercise referral scheme (Morgan, 2004). In 2014 the National Institute for Care and Excellence (NICE) issued the Physical Activity: Exercise Referral Schemes Public Health Guideline (2014) which contains guidelines for exercise referrals to promote physical activity for people aged 19 and over. This guidance focused on sedentary or inactive people and how referral schemes should be structured to maximise adherence.

Many research studies around exercise referral schemes (ERS) have used SDT to understand motivation of participation in exercise and sport (Deci & Ryan Richard, 2004), (Markland & Tobin, 2009). This approach has been used in ERS studies as it provides considerable flexibility for understanding patterns of exercise behaviour, well-being outcomes associated with exercise participation, factors which promote more self-determined motives for exercise (Wilson et al., 2008).

During a research study completed by Duda et al. (2014) two exercise referral schemes were conducted alongside each other, one was based around the core competencies of SDT the other one was a standard exercise referral model. The SDT arm included weekly meetings, giving the participant the autonomy to shape their own program and it also included the flexibility to normalise failure and recalibration of programmes. The results from both interventions suggested that there was a similar increase in physical activity and overall health, but crucially the sample taking part in the SDT referral scheme experienced significantly less anxiety and depression symptoms 6 months after the referral scheme had finished. Added to this, Markland & Tobin, (2009) also studied the effectiveness of using SDT alongside an exercise referral scheme and found that there was a direct effect on intrinsic motivation when given autonomy. They found that the relatedness component was crucial to the success, supportive relationships with specific individuals gave a more general sense of connectedness with the environment. However, they found that there was no direct impact on motivation when expressing the competence angle of SDT alone and it needed all three elements to weave together to form a wider impact in motivation to exercise. These results suggest that this SDT theory is a suitable framework to base further exercise referrals on, however there are some mitigations of this study that must be taken in consideration. The samples were taken from public

run leisure centres, the majority of the sample were white and female reporting to be overweight, which means further analysis should be completed on a sample with varied demographics to understand the full effect of the combination of SDT and ERS'.

When looking at other literature surrounding ERS' there was a lot of information questioning the effectiveness of referral schemes due to inconsistencies in reporting, recording and the delivery of specific scheme (Crone et al., 2009). At present, the literature reviewing the impact of ERS is inadequate due to findings revealing inconsistent and weak evidence regarding the direct impact on PA levels, wellbeing, quality of life or health outcomes. (Rowley et al., 2018). This is in part due to the heterogeneity between schemes (e.g. Length, delivery venues, staff contact and content) (Oliver et al., 2021). The review of current literature found less emphasis surrounding the mental health of the participants, for example, Wade et al. (2020) studied the effectiveness of ERS using the National Referral Database and out of thirteen schemes that were analysed, only three measured the participants changes in wellbeing. It is reported that, in particular, referrals based on mental health diagnosis would naturally have less uptake and lower adherence than those with a physical health condition (Crone et al., 2009) A study conducted by Tobi (2017) investigated that the reason for the lower adherence in mental health patients was due to the nature of their diagnosis and that schemes have traditionally been designed to deal with physical conditions. Seime & Vickers (2006) argued that there still appears to be enough evidence to support the treatment of exercise to treat symptoms of poor mental health the challenge is to identify effective strategies to help patients with mental health diagnosis initiate and maintain good exercise habits. The literature surrounding this, including these references, all focus on studying the retrospective data from historical exercise referral schemes, there is little research conducted on live ongoing schemes. These studies also did not examine the ethnicity of the cohort and there seems to be a lack of review on this element of demographic, Tobi (2017) assumed that there would be a mix of demographics based on the area that the referral scheme took place. From the evidence established in the literature review, cultural ethnicity, gender and age has a big impact on mental health literacy and help seeking behaviours, more research should be done on how this effects adherence to interventions such as this.

### ***2.7 University of East London Wellbeing Exercise Referral Scheme***

The present study looks to provide a framework for a solution for the growing mental health issues among students groups by documenting the conceptualisation, delivery, and evaluation of a scheme in an East London higher education institution. In seeking to address limitations of previous work the current study implements a fully integrated exercise referral service with quantitative and



qualitative markers of outcome being recorded. It is hypothesised that the intervention group will display meaningful change in psychological wellbeing and activity levels from entry to exit of the programme. It is expected that the control group would show no change in the same timeframe. Deductive exploratory analysis of qualitative data will be structured around

- a) what aspects of SDT are considered to have positively influenced experiences in the study
- b) what aspects of the intervention were perceived to have been beneficial for improvement
- c) what elements of the intervention can be improved with specific reference to inclusive practice and culturally informed intervention.

### **3.0 Method**

#### ***3.1 Participants***

In total 817 students self-referred to the UEL health and wellbeing centre during the timeline of this project. Of this group, 37 students were referred to the wellbeing intervention based on the experience and judgement of the UEL Wellbeing practitioners during their initial consultations with the student. The practitioner's decision to refer the student to the scheme was based on the presentation of symptoms at a sub clinical level including depression, anxiety, or social isolation. The participants were also interviewed to understand better their sport and exercise history and discover if the student had a desire to engage in physical activity in the future. The study research team was not involved in the initial recruitment of the participants. This step was put in place to ensure that the study did not disrupt any of the existing wellbeing services that were available to students. In addition, the scheme ran alongside any services that the students would have received ordinarily from presenting at wellbeing services. As this project represents a live scheme running in an operational department, there is no set time when a student starts the intervention as it is entirely based on student self-referral and wellbeing practitioner triage.

Following ethical approval granted by University of East London, which is detailed in Appendix C, 37 participants entered the wellbeing referral programme. Of this group there were 13 male and 24 female students self-reporting a range of ethnic backgrounds. All ethnicities were self-report and collected at the point of referral: Arab (1); Asian Other (2); Bangladeshi (1); Black African (8); Black Caribbean (1); Indian (3); White British (9); White European (6); White African (1); White Caribbean (2); Unanswered (3). The participants were studying a range of different courses, all lived on campus or the surrounding areas and their age ranged from 10-54 years old with a mean age 29.24.

All participants provided informed consent having been outlined the requirements of the study at the point of referral, an anonymised copy has been added as Appendix B. Throughout the data collection and reporting of outcomes the participants were anonymised and coded using a code kept on a password protected document. The project was also risk assessed to confirm the safety of all participants and staff involved and is shown as Appendix D.

### ***3.2 Procedure***

When a student at UEL feels like they are suffering a deterioration in their mental health at any point during their studies, they can refer themselves to the UEL Wellbeing Team where they will be invited to an initial consultation. During this appointment they will be allocated a qualified clinical practitioner and asked to complete two wellbeing questionnaires; Generalized Anxiety Disorder (GAD-7) and Patient Health Questionnaire (PHQ-9) as a baseline to assess their overall wellbeing (see Measures section). The practitioner will decide on an appropriate course of treatment, depending on the student's needs.

As an adjunct to the existing treatment options the UEL wellbeing practitioner was at this stage also able to refer the student to the Wellbeing Exercise Referral Scheme (WERS). The framework of the WERS has been designed to form a part of the support that the student is receiving and should not be used in isolation but run parallel with any clinical therapy solutions that are offered to them.

Following the practitioner's referral to the WERS, the Project Officer (PO) was notified and initiated contact within 48 hours of receiving a referral at which time an initial exercise consultation was scheduled.

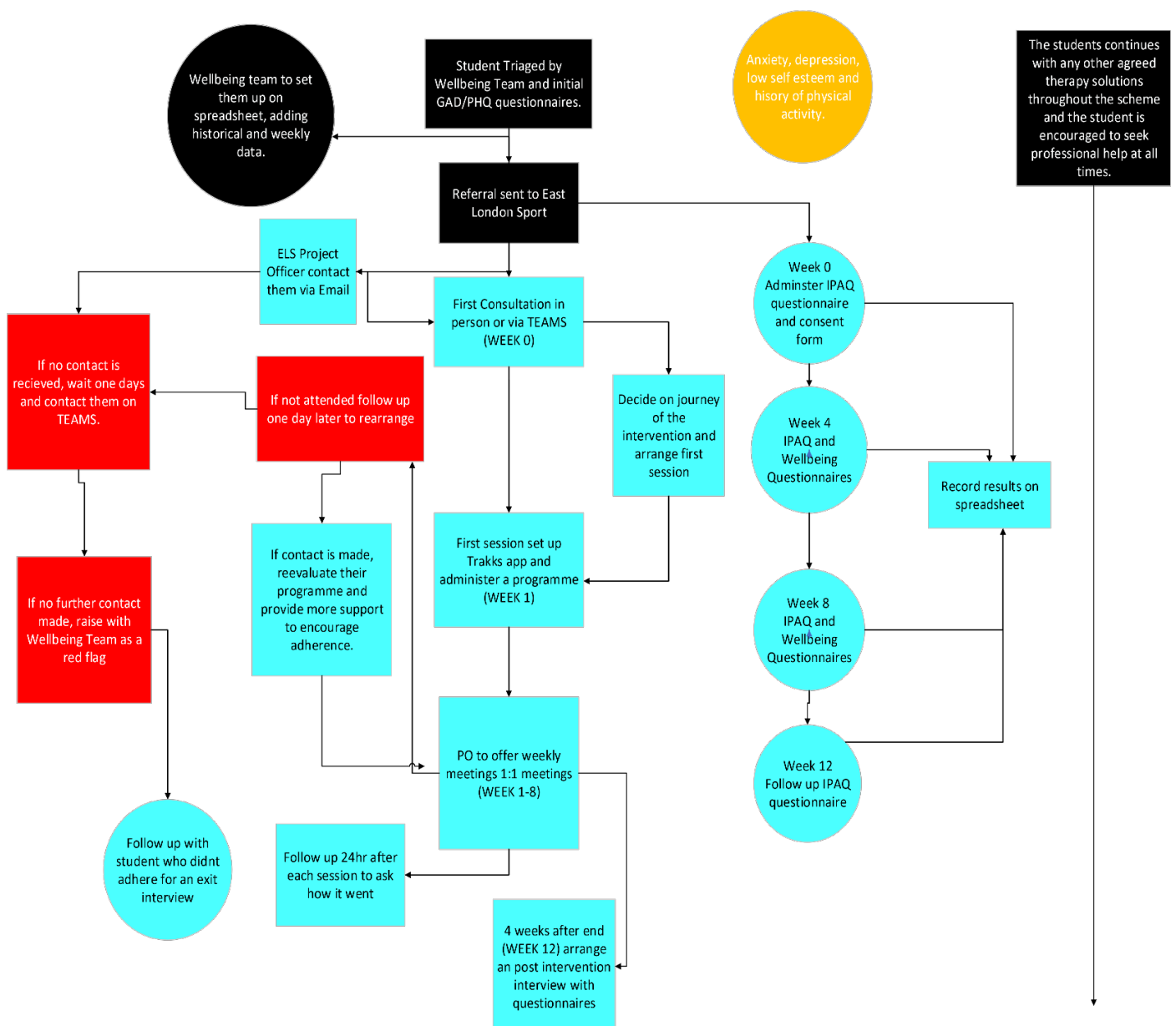
From this stage the PO remained with the participant throughout the scheme becoming a point of contact and became responsible for collecting all necessary data and providing follow up assistance to the participant. During the initial meeting with the PO, the participant was asked how they want their sessions and programme to be structured including regularity of exercise sessions and programme content of each visit to the gym. As such the exercise intervention was bespoke to each participant and was co-created. All sessions were conducted in a 1:1 setting with the PO with the programme designed using the Trakks app; a mobile app connected to the gym's equipment. The sessions were stored on the student's phone and which enabled the student to refer to these programmes when training independently. Activities completed by the students included the use of treadmill, cross trainers, strength work or functional equipment and the intensity or duration was monitored by the PO to ensure the participant was working at their optimal level. There was

flexibility in the design of the programmes to focus on areas the participant is interested in and those areas where they would like to know more training in general terms. The PO varied the sessions in consultation with the student depending on how the student was feeling on the day. In the situation where a student was unwell and not able to attend campus the session was held over TEAMS and became more of a general check in and discussion making sure that the student was still connected with the programme.

The PO then guided the participant through an 8-week intervention period using the different facilities that East London Sport had to offer. Depending on the capacity of the PO and the anxiety levels of the participant, the PO may have decided to employ a qualified Fitness Instructor (FI) to lead the participant through the intervention. This gave the participant the opportunity to develop relationships with more than one member of staff although suitability for this was gauged by the PO during the first consultation. In line with the research and combined with autonomy component of SDT, failure, or in this case non-adherence, was normalised and opportunity to recalibrate plans was offered at any point in the intervention.

At the second intervention session the participant was shown how to use all of the chosen gym equipment and more thought was given to programming the activities. From there the PO/ FI organised weekly meetings either online or in the gym to give support, motivation and encouragement to the participant to participate in physical activity whenever they could. The PO sent messages and emails before to confirm time of session and then after the session to congratulate the participant as well as booking them in for the next week. On some occasions and for students with heightened anxiety the PO participated in a class, of the students choosing, with them to help ease their worries. The PO/ FI's aimed to use a scaffolding approach to empower the student with the competence and confidence to use the equipment or classes safely and then gradually reduce their support over the 8 weeks intervention, to aid positive behaviour change post intervention. This whole process was devised, monitored, and managed by the lead researcher as part of the research project.

**Figure 1. Flow chart displaying the fully integrated exercise referral scheme**



## **4.0 Measures**

### ***4.1 Quantitative***

At the start of every session the participant completed the International Physical Activity Questionnaire (IPAQ) to ascertain physical activity levels for the week before and at weeks 4, 8 and 12 they undertook the GAD-7 and PHQ-9. If, at any point during the intervention the student started to not engage with the PO, or the PO noticed some serious deterioration in the wellbeing scores the PO would initiate communication back to the Wellbeing Practitioner as a note of concern for their welfare.

At the end of the 8-week intervention, the participant was invited to complete a semi structure interview which was conducted by the Lead Researcher. This exit interview was recorded/ transcribed over TEAMS and explored topics such as experiences of engaging in the programme and ideas for enhancing the offer..

A post intervention follow up was communicated at week 12 if any changes in behaviour recorded during the intervention have continued after the support has been taken away.

Quantitative measures were taken that clustered under three headings:

#### ***4.1.1 Measure academic engagement and attainment***

The support officer reported via CIVITAS the student's online module interactions attendance on campus and overall engagement in studies from the point the student entered the programme and also back dated this to gain some baseline entries.

#### ***4.1.2 Time spent with the practitioner***

The support officer tracked via a customer relationship support (CRM) database the number of appointments made with the practitioner that occurred concurrently with engagement in the programme. This data was intended to see if there was any meaningful change to the amount of time spent with the wellbeing team or to see if there is improvement in attendance to appointments during and after the intervention.

#### ***4.1.3 Wellbeing scores and physical activity measurements***

The participants completed three questionnaires at week 0, and these results will form the wellbeing baseline scores. The Project Officer then administered the questionnaires at week 4, 8 and 12 during the intervention. The results will be looking for any change in this final score with a drop constituting a positive effect on their wellbeing (Staples et al., 2019). The measures were the same as those administered by the practitioners in the wellbeing clinic at the time of triage on to the programme. These questionnaires are also widely used in other clinical and research settings and are useful measures of treatment progress and outcomes in clinical and sub clinical care (Williams, 2014).

##### *Generalised Anxiety Disorder 7 (GAD-7)*

This form is a seven-item, self-reporting anxiety questionnaire designed to assess the patient's health status and is often used in a clinical setting to determine levels of anxiety (Staples et al., 2019), (Williams, 2014).

The research completed by (Williams, 2014) assessed the GAD-7 against other forms that assess mental health and suggested that the GAD-7 was more sensitive in detecting change in status and is very suitable to be used in research settings.

##### *Patient Health Questionnaire (PHQ-9)*

The nine-item mood form was developed to screen patients in primary care to diagnose and monitor depression severity, although it due to being criteria based it is also useful for diagnosing other mental health illness (Wittkamp et al., 2007). This study by (Wittkamp et al., 2007) concluded that the PHQ-9 is a valid instrument to detect depressive disorders and is an important tool that contributes to the diagnosing mental health illnesses in specified primary care scenarios.

##### *International Physical Activity Questionnaire – Short Form (IPAQ)*

The IPAQ has become the most widely used physical activity questionnaire, with two versions available, the 31-item long form (IPAQ-LF) and the 9-item short form (IPAQ-SF), the short form has been recommended as most cost-effective method to assess physical activity (Lee et al.,

2011). The short form records the activity of four intensity levels: 1) vigorous-intensity activity such as aerobics, 2) moderate-intensity activity such as leisure cycling, 3) walking, and 4) sitting (Hagströmer et al., 2005). The conclusion from Lee et al, (2011) suggested that the reliability of the IPAQ improves in a repeated measures study, for this study, the project officer will conduct the IPAQ with the student during the first consultation and then at the start of each weekly session. As well as measuring their physical activity, which will be an important outcome, the results will be an effective way of measuring adherence to the scheme.

#### ***4.2 Qualitative***

A semi structured interview was completed with all nine participants which comprised of 10-12 questions. The interviews lasted between 25 and 55 minutes and on average 36m and 14s took place with eight of the participants. The questions asked the participants to reflect on the referral process, their thoughts, and feelings in the lead up to starting and during the intervention and how they feel now it has been completed. The interviews took place online using TEAMS with transcription being checked and adjusted after listening back to each interview after data collection was complete. To ensure the interviews produced authentic and trustworthy data the transcripts were edited by an independent person and discussed with the participant to ensure the account reflected the participants intended meaning. As Ghafouri & Ofoghi, (2016) concluded in their research, there is little agreement among researchers how to guarantee total trustworthiness and quality of data in qualitative research, but the use of trustworthy practices should be used where possible to give validity to the results. Appendix A shows the first 10 pages of the transcript taken with student 34, the total length of the interview is 24 pages with a word count of 6,108.

### **5.0 Data Analysis**

#### ***5.1 Quantitative Analysis***

The use of significance testing was not implemented based on the limited sample size and the decision to consider meaningful individual change over statistical significance. It is recognised that with further iterations of the scheme, which will improve the sample size, the GAD-7, PHQ-9 and IPAQ data could be subjected to a series of analyses pre, post and at two week intervals. For

purposes of interpretation the data is presented as mean, standard deviation, magnitude of change and this is done per participant.

## **5.2 Qualitative Analysis**

The transcription will be subjected to a thematic narrative analysis following (Smith & Sparks, 2016) guidelines which involved: 1) transcription immediately after each interview, 2) immersion through reading of the interview transcripts coupled with the formation of notes, 3) identifying themes and relationships that run through the accounts, and 4) describing and interpreting the themes alongside insights from other research. Rigor was enhanced through the implementation of some recommendations made from the research by McGannon et al., (2019), by employing the PO to help adjust the transcribe and change the language around to reflect what was said on the video. Once transcribed and analysed the lead researcher and PO explored the data together with the intention of identifying gaps in understanding and addressing misinterpretation. The second researcher served as a critical friend challenging the lead researcher’s interpretation of the participant’s experience and probing for alternative explanations. The intention was not to arrive at consensus but promote a deeper level of self-reflection on the part of the interviewer. This enhanced consideration of one’s own positionality promotes separation of the interviewer from the data whilst acknowledging that total abstraction is never truly possible (Harrison & Buscombe, 2022). Results based on the emergent themes the students account of the programmes have been grouped under 3 themes.

## **6.0 Results**

Across the period 1<sup>st</sup> October 2022 – 31<sup>st</sup> August 2023, in conjunction with data provided by the UEL Wellbeing Team and the start of session IPAQ data, table 1 shows the full picture of the layers involved in the scheme. Table 2 details the adherence levels as the students progressed through the intervention.

***Table 1: Participant numbers at each stage of the intervention***

	<b>No. of students</b>
<b>Contacted UEL Wellbeing</b>	1300
<b>At least one session with practitioner</b>	817
<b>Triaged to Scheme</b>	37



<b>No engagement with SportsDock</b>	18
<b>At least one session at SportsDock</b>	19
<b>Completed the intervention</b>	9

Table 1 shows a large drop from the time the student engaged with the practitioner to entry to the exercise programme. This reduction is an artefact of the triaging processing and ensuring only suitable candidates get referred into the programme. The triage was based on suitability with strict criteria which also limited the number to an amount that could be resourced within the programme.

**Table 2: Adherence to the exercise referral programme**

<b>Weeks</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>No. of referrals</b>	19	16	15	13	10	9	9	9
<b>Adherence percentage</b>	NA	84.21%	78.95%	68.42%	52.63%	47.37%	47.37%	47.37%

As would be expected Table 2 shows a reduction in adherence to the programme over time. This snapshot indicates a steady reduction rather than there being a definitive point of concern ending in less than 50% of the entrants completing the full eight week programme. This adherence rate is in line, and slightly above what has been seen in similar studies of this nature.

**Table 3: Number of weeks to complete intervention**

	<b>Initial Appointment</b>	<b>1st week</b>	<b>No. of weeks initial – 1<sup>st</sup> week</b>	<b>4th week</b>	<b>No. of weeks appointment – 4th week</b>	<b>Final</b>	<b>No. of weeks full intervention</b>
<b>1</b>	07/10/2022	26/10/2022	3	01/12/2022	5	06/01/2023	10
<b>2</b>	05/10/2022	29/11/2022	8	03/03/2023	13	01/04/2023	17
<b>3</b>	25/10/2022	04/11/2022	1	02/12/2022	4	03/01/2023	8
<b>9</b>	17/11/2022	13/12/2022	4	03/02/2023	7	03/03/2023	11
<b>17</b>	07/02/2023	15/02/2023	1	04/05/2023	11	01/06/2023	15
<b>18</b>	11/01/2023	05/04/2023	12	05/05/2023	4	09/06/2023	9
<b>19</b>	09/02/2023	07/02/2023	0	10/04/2023	9	04/05/2023	12
<b>34</b>	16/06/2023	04/07/2023	3	18/08/2023	6	21/09/2023	11
<b>37</b>	17/04/2023	10/07/2023	12	21/09/2023	10	26/10/2023	15
<b>Average</b>			5		8		12

The data in table 3 shows the actual length of time it took for the 9 students to complete the 8 week intervention from when they were referred by the practitioner through to completing the questionnaires in final week. This data highlights the sporadic engagement with the programme and thus the need for flexibility in delivery. Of note is the long duration to complete for some

participants (number 2 for example) but also that the design of the intervention was robust enough to ensure that individuals stayed on the course. This data validates the steps taken within the intervention to support participant engagement but also indicates that work is required to consider how the programme can encourage more consistent engagement.

**Table 4: Ethnicity and intervention completion rates**

	<b>Total referred</b>	<b>Completed</b>	<b>Completion rate</b>
<b>White</b>	11	4	36%
<b>Asian</b>	6	1	17%
<b>Black</b>	11	1	9%
<b>Mixed</b>	3	1	33%
<b>Other</b>	5	2	40%
<b>Arab</b>	1		0%
	37	9	

The data gathered in table 4 is from all 37 participants that were referred to the scheme, from that, nine completed and 28 did not complete or engage at all. The lowest completion rate can be attributed to those participants from an Asian and Black background as only two of those completed the scheme. In contrast there were eleven White students referred to the scheme with four of those fully completing the intervention.

Other demographic data point towards the fact that the male participants were less likely to complete or engage in the scheme. Out of the nine participants only two were male and seven were female.

It also showed that the average age for completing the scheme was 26.58 compared to 30.58 for those that did not engage, however there were deemed to be outliers involved in this data set which would have skewed the results.

### **6.1 Quantitative data capture**

The data collected from the nine participants that fully completed the scheme and the support officer can be separated into these four sections. Wellbeing GAD and PHQ scores; IPAQ results; the 2023/24 graduate status and appointment history with their practitioner. It is recognised

that this sample is small, and any results pulled from this data give an indication of the effect this scheme has had on the participants. Further work will be needed to prove causality can be assigned purely to the programme and no other external factors.

### **6.1.1 Academic achievement**

The status of the participants at the start of the 23/24 academic year was extracted from the student support data and it highlighted that eight out of nine were successful during 2022/23 and have either graduated or progressed to the next stage of their studies. This can be compared to a wider university benchmark completion rate of 77.3%, which indicates a positive trend for those that completed the referral scheme.

### **6.1.2 Appointment History**

The frequency of appointments with the practitioner over the period of eight weeks pre intervention, the eight weeks during and eight weeks post intervention was captured using the data from the support officer. The results show that out of the nine participants there has been an average drop of 0.4 session during the 8 week period post intervention and six out of the nine reflecting a reduced number of appointments. This was compared against the average appointment rate for a sample group of matched students who were with a wellbeing practitioner during the 2<sup>nd</sup> semester but didn't have the physical activity intervention. They have been matched as closely as possible based on age, gender and category of presenting wellbeing concern. This data showed there was no reduction in their appointment history over the course of the 2<sup>nd</sup> semester and so would suggest that the participants who completed the wellbeing referral scheme had a reduction in the number of appointments compared with those students who did not.

### **6.1.3 Wellbeing Scores**

**Table 5: Generalised Anxiety Disorder - 7**

<b>Student Code</b>	<b>Baseline</b>	<b>First return</b>	<b>2nd return</b>	<b>Difference</b>
<b>1</b>	4	3	3	-1
<b>2</b>	19	15	14	-5
<b>3</b>	8	11	8	0
<b>9</b>	14	9	9	-5
<b>17</b>	19	8	0	-19
<b>18</b>	6	6	4	-2
<b>19</b>	3	5	5	2

<b>34</b>	11	6	2	-9
<b>37</b>	7	2	2	-5
				-4.89

**Table 6: Patient Health Questionnaire-9**

<b>Student Code</b>	<b>Baseline</b>	<b>First return</b>	<b>2nd return</b>	<b>Difference</b>
<b>1</b>	6	3	3	-3
<b>2</b>	15	14	14	-1
<b>3</b>	14	15	11	-3
<b>9</b>	21	11	8	-13
<b>17</b>	27	3	0	-27
<b>18</b>	5	4	2	-3
<b>19</b>	5	5	4	-1
<b>34</b>	14	13	5	-9
<b>37</b>	5	5	2	-3
				-7.00

Tables 5 and 6 show the scores for the GAD questionnaire and the PHQ questionnaires results, as per the method, these were taken at the beginning, middle and end of their intervention. It has been calculated to see how much difference there is from the initial baseline figure when administered by the Wellbeing Team in initial consultation, compared with their final week of the scheme. The results show in the last week of the intervention, all participants undertaking the PHQ-9 recorded better wellbeing with one presenting a slight deterioration in wellbeing using the GAD- 7. Overall, on average there was an improvement in wellbeing when comparing the results from both questionnaires.

#### **6.1.4 IPAQ scores**

**Table 7: International Physical Activity Questionnaire**

<b>1st Week</b>	<b>4th Week</b>	<b>8th Week</b>
<b>1</b>	meets recommendations	

<b>2</b>	meets recommendations	meets recommendations	meets recommendations
<b>3</b>	meets recommendations		
<b>9</b>	meets recommendations	meets recommendations	meets recommendations
<b>17</b>	meets recommendations	meets recommendations	meets recommendations
<b>18</b>	does not meet recommendations	meets recommendations	meets recommendations
<b>19</b>	meets recommendations	meets recommendations	does not meet recommendations
<b>34</b>	meets recommendations	meets recommendations	meets recommendations
<b>37</b>	meets recommendations	meets recommendations	meets recommendations

The results from the weekly questionnaires were inputted into a calculation process that has been researched and developed by Craig et al., (2003) which determines an overall level of physical activity. The final output indicates whether the participant is meeting the recommendations for the required amount of physical activity of 30 mins of moderate activity 5 days a week advised by the Department of Health (*UK Chief Medical Officers' Physical Activity Guidelines, 2019*). As per the triaging system for the practitioners, eight out of the nine were already being physically active, only one participant drops below these recommendations by the end of the intervention and one progressed to meeting the guidelines from falling short at the start of the eight-week period.

## **6.2 Qualitative data capture**

There were eight interviews conducted in total over the course of the data capture period. After analysing the transcripts using a deductive methodology three themes emerged: Personal experiences and unique referral experiences; 'The small things matter' and the role of social support. The themes were comprehended for their uniqueness and viewed through the lens of self-determination theory.

### **6.2.1 Theme 1. Personal and Unique Referral Experiences**

All the participants spoke about why they hadn't attended the gym in the past or why they had recently stopped. Five of the participants stated different body dysmorphia issues such as being overweight or being too skinny. For example, Student 17 said

*"I was nervous about being like, the skinniest guy in there and things like that and people watching me though once I started going just I realised no one really cares."*

Whilst four students stated that they thought everybody would be looking at them because they didn't know how to use the equipment or not working to a programme. These feelings were captured by Student 35 who commented;

*"I hadn't done any physical activity on like a consistent basis or anything high intensity, so I was really nervous [...] I was not very confident and didn't have much knowledge which gave me high anxiety about it."*

Student 34 also had similar feelings,

*"I was nervous because I feel like the whole reason why I've like not really gone to the gym is cause I'm like scared of the judgement or I'm scared of people seeing that I'm doing something wrong. I don't know, I just like I was really nervous about like not looking right I guess. But when I got there I was fine."*

Student 19 had a hugely negative experience in a previous gym where she said, *"I was told off for doing the exercise incorrectly, and so I never went back"*. Student 18 explained that she used to attend the in a group format with her friends in her home country and didn't have the confidence to use the gym on her own since arriving in a new country. This sentiment was illustrated when Student 18 commented *"Everything was still pretty new for me and just moved to another country [...] coming from where I used to do physical activity with a group of friends all together"*

Student 9 said how she enjoyed being active with her friends and has now started walking regularly with a group at university, which she hadn't thought of doing before the intervention. *"I walk like all the way down to like I think it's like past the Excel with my friends. in the past year (since the intervention) I have done that a lot."*

Seven of the participants agreed with student 9's comments and stated that they would simply not have led an active lifestyle whilst they were at university if it hadn't been for this intervention and have carried it on after finishing the intervention. Student 17 summarised this by stating *"It certainly like it definitely took me a lot more, lots of motivation to start up (physical activity) again. Now I started that just don't want to stop. Now, I go out all the time and do things."*

### **6.2.2 Theme 2. The Small Things Matter**

Evident in all interviews was how important some of the smaller elements of visiting the gym were to the students. Student 18 said that after a few weeks into the intervention, on one occasion after summoning the confidence to attend an indoor cycling class by herself she was shown by another staff member how to adjust her seat and then given some simple guidance for the class. *"I*

*was shown but in a more fun way so that I actually enjoyed the workout and learnt how to do it properly, it made me come back to more classes”.*

A similar experience was noted by student 34 who whilst in a session had an FI come and help with a certain exercise.

*“An FI came and helped with form, but then also she kind of is like if she sees me giving up, she’s like, come on one more and stuff like that. And I’m like, OK, I can do this, which is really nice to think.”*

An important point made by three of the participants was the fact that the PO was very flexible with the timings of the sessions and was happy to adjust or rebook sessions if the participant needed it, which a crucial part of the WERS framework as Duda et al., (2014) stated it is important to normalise failure and recalibrate plans. Student 1 felt this stating that,

*“Sometimes I said to Pedro, I have exams this week. So, he say OK, that’s fine. I’ve been in this situation. No worries. Take your time. When they’re gone, you can come. It’s fine.”*

This view was corroborated by Student 35,

*“I was struggling with my consistency and my mental health and then also had a lot of things going on at the same time, so some sessions never happened. But just knowing that there was someone there who was really happy to help was comforting.”*

However, Student 9 would have preferred more flexibility when booking sessions with the FI and pointed out that the appointments were essential for her motivation but was not given the autonomy to schedule her own sessions due to the restricted availability of the FI rota.

There were some other more negative experiences reported by the participants which can be linked to not getting some of the small things correct. For example, Student 19 commented that her initial experience with one of the FI’s was quite negative as she didn’t receive any guidance or follow up, which made her question the point of the intervention. Once Student 19 raised this with the Project Officer, she was transferred to another FI who improved her experience significantly by speaking with her and asking questions about her life, which she greatly appreciated.

Similarly, Student 17 quickly perceived that the PO had forgotten about him because he didn’t receive a reply immediately,

*“Pedro got back to me quite quickly, but I think something went on and he was distracted for about a week, and he got back to me as soon as he realised that he forgot about me.”*

Student 19 reiterated the importance of the communication and the relationship building process as they struggled to speak to the practitioner when visiting the wellbeing team,

*“I did have a meeting with like the actual wellbeing team, but it wasn't a great experience to be fair and was a bit funny. The man forgot that he had a meeting with me, so it was just kind of weird.”*

These responses highlight the importance of building rapport and using precise and timely communication when working with individuals on this type of referral programme.

### **6.2.3 Theme 3. Social Support**

There were references from all eight interviewees explaining that the support they received from referral team staff made their experience less stressful and encouraged them to return each week. They all stated that making the appointments gave them the motivation to turn up and do the session. Having something firm in their diary and therefore a sense of commitment to the fitness instructor was a motivating factor.

In Student 17's interview he stated that he was suffering from loneliness and isolation in his room, the appointments gave him a reason to get up and get out of his room. It also provided him with a certain amount of escapism from the current aspects of his lifestyle that were negative. It encouraged him to return to the swimming pool where he had been swimming at a high level before the pandemic hit.

*“I did go swimming last night, and that's the first time I've been for like, 3 or 4 years, so I did enjoy that. [...] Yes, certainly it (the intervention) certainly helped me, and I'd like to encourage other friends that I know are suffering with mental health problems to start using the gym like it helped me.”*

Student 1 pointed to the fact that her life is very busy with other responsibilities, and she ended up never making any time for herself, the sessions motivated her to drop everything as she didn't want to let anyone down.

*“Come on, I have to go, I have to do this. It make me feel well. [...] It's good that it's a commitment. I have to go. And after that (the session) I think it was so nice. I have to come here more often.”*

Student 1 preferred the fact that all the sessions were laid out for her by the instructor, and she didn't have to think about following a programme. Student 19 agreed and felt that although that didn't give her the confidence to do her own plan to start with, she gradually learnt what to do over time. Contradicting that, Student 18 recognised that when she was encouraged to set the programme up herself her confidence quickly grew, which in turn has now made her comfortable coming into the gym on her own. This was evident when Student 18 stated,



*“I think it (this approach) helped me all the like as she showed me all the workouts that I could do based on exactly what I had told her and then helped me make my own. Now when I go, I feel more confident (in preparing my own workout).”*

Student 9 stated she was amazed by the energy, enthusiasm that the staff member had, and it gave her the motivation to come to the sessions as she always felt positive and bright after those meetings. They also went on to explain,

*“Raffy would message me afterwards to book in for the next one, but also, she'd like, say well done, you did really well this week or whatever, which was quite nice. Honestly, it just felt quite nice to get that message as sometimes I didn't think I had done particularly well.”*

Student 17 said that he received incredible support from his project officer where she would message him on the same day after the session to check how he found it and book him in for next week, which he found impressive. He also went on to give more examples about how other staff made him feel at ease and how he felt no one was judgemental whenever he came to the gym, *“Another fitness instructor always says hello or asking how I am doing? [.....] every time I leave, they would always say goodbye on reception”.*

Student 19's experience was extremely positive and suggests it was entirely down to the bond she formed with her instructor and if that bond wasn't there, she would have been less inclined to pursue the full 8-week schedule. Student 19 also went on to say it was the care she received from all of the staff at SportsDock that motivated her to continue. She stated that this was evident in small ways by all staff at multiple points during and after the intervention.

*“They'll see me round and they'll be like, hi, do you wanna come to a class? This is like every time, so it's not just like one moment. It makes me feel like welcome. It makes me feel like people want to talk to me and want to help me out. It makes me feel good.”*

Overall, all the students were unanimous in their support for the scheme and how it has helped them deal with the stresses of life, the transcripts clearly showed that an integral part to the success of the scheme was the connection built between participant and members of staff. Student 18, Student 17 and Student 9 all suggested that the scheme should be expanded to encourage more students to get involved and they have volunteered to become mentors during their subsequent years attending university.

## **7.0 Discussion**

The aims of this research study were to design deliver and evaluate the efficacy of a pilot exercise referral scheme and in the process provide recommendations for improvement. The data

shows that overall, the intervention had a positive effect on physical activity levels, graduate outcomes, and the overall wellbeing of these participants. These headline results are considered against a backdrop of low participant numbers which is common in these types of mental health referral interventions. It is believed that this discussion and recommendations will help to evolve the referral scheme over the next few years to produce different iterations, with the aim of increasing the sample size to deliver further positive outcomes for more students. This discussion will follow the layout of the results section and will draw on self-determination theory (SDT) to aid understanding of the outcomes.

As the literature suggested, the mental health of university students has been a focus of increasing concern in the UK, with evidence suggesting that numbers of students are experiencing poor mental health while attending university are steadily rising (Hughes & Spanner, 2019). This is reflected at UEL in the fact that according to Table 1, 1317 students had some form of contact with Wellbeing Team from September 1<sup>st</sup> 2022 – August 31<sup>st</sup> 2023 and 817 had at least one appointment with a practitioner. Burns et al (2020) raised the point that this is putting universities under constant resource pressure of balancing the need to be a profitable institution against servicing the needs of a changing student population. One way to help release this pressure and as Callendar et al., (2021) mentioned, is for universities to develop a multi-departmental mental health intervention and recognise that all aspects of university life should support and promote mental health and wellbeing. The framework of the Wellbeing Exercise Referral Scheme is an example of a multi departmental solution that uses existing resources to produce successful outcomes to assist the wellbeing team deal with an ever-increasing mental health issue.

### ***7.1 Quantitative***

Table 1 and table 2 shows the distinct picture of the referral scheme and the many layers that are involved. Out of 817 students that had at least one appointment, 37 were deemed suitable to be triaged to the Wellbeing Exercise Referral Scheme. This shows an effective triage system was in place and with the limited capacity for the Project Officer, there was a request to be strict with the referral to avoid being inundated in order to deliver the service that the participant needed. As more is learnt from the project, it is now acknowledged that a designated Project Officer has more capacity, and it is anticipated that following this review, next year the scheme will be in a position to encourage more referrals onto the scheme.

Table 2 details the adherence rates for the 19 participants that fully engaged in the intervention with nine fully completing the 8 week scheme, 18 did not engage with the scheme at all. There were various attempts to get interviews from students who did not engage in the

programme despite being referred but there was no response. Williams et al., (2007) stated in an analysis of six exercise referral schemes that the adherence to the schemes was poor, with between 12% and 42% completing a 10–12-week programme. They also found that around 33% of patients referred, did not engage in the schemes at all, this compares to 47% of students failing to engage with this scheme. The analysis in Williams et al., (2007) article took place on schemes in leisure centres and their participants were middle aged with physical health issues rather than mental health issues, which is different to the participants in this study. Crone et al., (2009) suggests that referrals based on mental health diagnosis would naturally have less uptake and lower adherence than those with a physical health condition which was also corroborated by Tobi et al., (2017). Comparing these results to this research, the engagement rate at the start was worse, but once they attended the first session, the adherence rate was higher. It is believed that this perceived success of the programme could be attributed to a contribution of the three components of the SDT. By giving the participants autonomy and competence to create their own session schedule and programmes as part of the scaffolding approach, gave them the confidence to be able to participate in physical activity post intervention. However, it is believed that the flexibility and care that the Project officers and other staff gave to the participant, which strongly relates to the relatedness aspect of the SDT, was the most important reason for the success for these participants. This is exemplified by the view of Student 35 who stated,

*“I was struggling with my consistency and my mental health and then also had a lot of things going on at the same time, so some sessions never happened. But just knowing that there was someone there who was really happy to help was comforting.”*

This view was shared by student 19 who said

*“They’ll see me round and they’ll be like, hi, do you wanna come to a class? This is like every time, so it’s not just like one moment. It makes me feel like welcome. It makes me feel like people want to talk to me and want to help me out. It makes me feel good.”*

This is a conclusion shared by many pieces of research including Birtwistle et al., (2018); Rouse et al., (2011) and Duda et al., (2014) who specifically requested in their study that the staff members focused on participants feelings and provided support during and after their sessions due to its importance.

The data in table 4 exposes the fact that those from Asian and Black background were not as interested in taking part in the intervention as white students and it is imperative there is further work to understand why these students did not engage. The triaging to the scheme was subject to the practitioners sub clinical diagnosis and there was no prioritising of the ethnicity of those referred to provide any direct evidence, but these results confirm the view of Tuckett, (2012), Hossain, (2013)

and Periera, (2018) that there are problems with students from global ethnic majority fully accessing help for their mental health issues. Table 3 would suggest that the participants of various ethnicity were happy to refer themselves to the wellbeing team but less likely to engage any further with this intervention. As Tuckett, (2012) suggests the stigma of having a mental health issue may have been a barrier to engaging with a service outside of the wellbeing team.

Some other elements of the demographic data indicated that males were less likely to engage with the team and this compounds the view that Turner et al., (2007) surmised in his study at Coventry University. It also raises the significant point following research conducted by Meechan et al., (2021) that overall black males are frequently constructed as 'high risk' for mental health difficulties due to notions of masculinity, culture, weakness and control. Included in the expansion of the scheme, suggestions should be made by those students from the global ethnic majority to provide culturally informed interventions that cater for the diverse population that UEL serves, especially around catering for young black males. However, as Duffy et al., (2019) states applying this strategic and labour-intensive approach presents a dilemma for mental health services when it comes to allocation of wellbeing resources, as it puts unprecedented pressures on staffing. For future expansion it is recommended further budgetary resources are provided at a local level to recruit qualified staff from all demographics to provide a high-quality and varied programme that all students can relate to.

Table 5 and 6 show the results that have been taken from the wellbeing scores that were filled out at week 1, 4 and 8. The results were extremely positive and showed that almost all participants recorded a decrease in scores, meaning their wellbeing had improved, with two participants showing significant improvement. This study albeit with limited numbers, would appear to confirm the view of many that exercise has been proven to be an example of an effective coping strategy to improve poor mental health (Rasciute & Downward, 2010), (A. Taylor et al., 2021), (Wilson et al., 2008).

Table 7 analyses the IPAQ scores that were completed at the start of each session that the participant had with the fitness instructor whether it was in person or on TEAMS. Although the IPAQ scores did not change much over the course, it was deemed a crucial part of this study as the data captured reflected accurate adherence figures. As there was little change in whether the participant was meeting recommendations for physical activity, this would suggest the triage method of referring those students who have had previous experience of being physically active is being adhered to by the practitioner. However, this IPAQ data contradicts some of the qualitative responses where most participants said they were struggling to be active at university. This contradiction confirms the view of Lee et al., (2011) who, although recommended the IPAQ as the

best way of measuring physical activity, still questioned its validity *“because it is self-reported, it tends to overestimate the amount of physical activity reported compared to an objective device”*.

An analysis of the graduate status moving to 2023/24 suggested some positive data surrounding academic achievement and shows that 83% of students on the intervention either graduated or progressed to the next year, this is against a backdrop of 77.3% completion rate for the whole University of East London student population. (*University of East London, 2023*). This result indicates those on the scheme were more likely to be successful in relation to the rest of the students in UEL. This is particularly positive as according to Barrable et al., (2018), there is a high toll for those students who suffer from mental health issues which often relates to lower graduation and higher dropout rates.

Lastly, the appointment history with the practitioners would indicate that for this sample that have completed the intervention, there has been a positive effect on the frequency of appointments they have made with the wellbeing team. The overall design of the framework is to have the WERS as an extra coping strategy that would run alongside any established therapy sessions that the practitioner deems necessary. This result suggests that the participants did not need as much help from the wellbeing team if they fully engaged in the WERS compared with those that were not referred to the scheme. It is recognised that the matched participants were tracked over the 2<sup>nd</sup> semester and the 12 participants that completed the scheme had a variety of start and end dates. It could be argued that this is a limitation of this study and over the course of the 2<sup>nd</sup> semester there are more triggers and need for support such as exam stress and coursework deadlines. However, it is believed that this should balance out over the course of the 24-week period for all participants in this study, as Priestley et al., (2022) suggests *“different student cohorts and groups, ‘all going through different things’ with ‘different sets of needs and requirements [and] different kinds of stress and expectations”*. Further work would be needed to explore if a reduction in appointments with the wellbeing team are projected when using a larger sample size, if this was the case it should have significant implications for applications for resources or funding as the impact on finances can be quantified.

## **7.2 Qualitative**

Overall, there was unequivocal evidence in all the transcripts that the scheme was overwhelmingly positive experience for the participants. It is recognised that there is a limitation in this analysis as all eight interviewees had fully completed the programme, which would suggest they

would have spoken positively about the scheme no matter what. However, the themes that were extracted gave unique opinions on what exactly made the intervention successful for them.

All the participants struggled with the perception of themselves before entering the scheme, which when added to some of their previous experiences discouraged them from being regularly active whilst at university. One of the triage criteria for the wellbeing practitioner was that the referral had been active previously, this would suggest that university life has had a detrimental effect on their physical activity lifestyle. The study completed by Duffy et al., (2019) said that university students have to deal with different factors like separation from family and having to develop new social circles and in these participants, factors such as this could also have had an effect on motivation to pursue a physical active lifestyle. It can be discussed that as part of the relatedness component of the STD the participant could relate to a healthier and fitter version of themselves to motivate them to resuming this lifestyle. They could also easily relate to the fitness instructors and other members of the gym and were already aware of the benefits of being physically active, which was reflected in other studies such Williams et al., (2007) and (Birtwistle et al., 2018), who both state that staff play a key role in building and providing support networks to encourage physical activity.

Another factor was the fact that the participants did not know how to use the equipment or didn't have a programme to work to made them feel anxious about using the gym. This was integral for their motivation to attend, and forms the competence element of the SDT, as one participant said they were helped by another Fitness Instructor to adjust their seat in a class and that made a huge difference to their enjoyment. They all reported that having a personal instructor show them how to use the equipment and provide a programme for them made them feel more at ease.

A major theme that ran through all the interviews was the importance of the rapport that they built up with the personal instructor and how the staff made the participant feel like they really cared about them by asking them about their day and following up with them after the session. One participant saying they would not have completed the scheme if it wasn't for the friendly and supportive staff. This is a view shared by studies completed by Williams et al., (2007) and Birtwistle et al., (2018) who say the success of a referral scheme is purely based on the competence of the instructors delivering the intervention. Therefore, the importance of the demeanour of all staff members cannot be underestimated, which represents significant aspect of the relatedness component of SDT. It was also noted that a few participants reflected how important the ability to reschedule and arrive late was integral for them feeling like they were well supported, and this forms an important part of the framework. However, this flexible approach and normalising of failure is very labour intensive and requires the PO to have capacity to deal with last minute reschedules or lateness with the assumption that the participant will not always attend eight weeks

consecutively. Table 3 of the results section shows that on average it took 12 weeks for a participant to finish the intervention which shows that the scheme was extremely flexible and allowed for cancellations, one participant in particular took 13 weeks to get to their 4<sup>th</sup> week of the intervention. There could be a number of factors that lead to this average being higher than 8 weeks such as gaps for Christmas and Easter holidays or exam periods and further work could be done to see how this number can be reduced, but this does re-iterate the time consuming and labour intensive nature of delivering a programme such as this.

A key factor for participants successful intervention was that having the structured sessions organised for them motivated to attend and forced them to devote sometime for themselves. Autonomy is a critical component of SDT behavioural change and Ryan & Deci, (2000) state that people need to feel in control of their own behaviours and goals to increase motivation. However, when discussing this with the participants there was a difference in the participants opinions of offering autonomy in preparing their own programme. Student 18 preferred making her own programme whereas Student 19 preferred it being all laid out, so they didn't have to think when they came to the session. Another student preferred having it all ready for them for the first few weeks and then gradually give them the competence to design their own programme towards the end of the intervention. As part of the scaffolding approach to change their own behaviour, supported by research completed by Duda et al., (2014) it is discussed that balancing all three elements of SDT would work to encourage participants to start developing their own programme at some stage during the intervention. The speed of which this is introduced should be discussed with the participant at each stage, but it is crucial for their intrinsic motivation and to aid behavioural change that they are shown how to do it (competence), how successful it has been for someone else (relatedness) and then given the chance to prepare some themselves (autonomy).

## **8.0 Recommendations**

The next stage of the development of the scheme and one of the main aims of this research is to use recommendations from this year's study to increase the number of students adhering to the programme to see if these quantitative and qualitative benefits can be projected onto a larger number of students. The whole analysis for this paper has given the opportunity to reflect and evaluate the framework to understand substantial recommendations, with the aim of improving the scheme to aid its expansion. This project is a live ongoing scheme which has been subject to normal business operating constraints. Any implementation of these recommendations needs to be mindful

of the staff resource restrictions that are present, with a view that investment may be needed to deliver its expansion.

### ***8.1 Develop culturally diverse interventions with appropriate staffing***

It is clear from the demographics that those students from Black or Asian backgrounds were less likely to engage in the intervention. It was also recognised that more female students were referred to the scheme than male, this supports the literature review which stated that white females were more likely seek help. The results show that out of the that ten students that started but did not finish, four were Black, if it can be understood the reasons of this nonadherence, there could be adaptations made to the framework to accommodate this. Further research needs be done on the different ways of attracting more Black and Asian students, especially males to the scheme and wellbeing overall. The research completed by El Masri et al., (2022) gave some examples of cultural adaptations that could be used to improve engagement and from the studies they analysed, 5 out of 6 random controlled trials that used bicultural/ bilingual staff, showed an increase in adherence. It is deduced from this that it is important to have diverse set of staff members to deliver the interventions and this corroborates some of the results found in this research thesis regarding the importance of relatedness and building rapport. Another suggestion that El Masri et al., (2022) made was to conduct focus groups to seek the input of the target population or community. There is opportunity to conduct a focus group and interviews with the students who did not complete the Wellbeing Exercise Referral Scheme in 22/23 and this is already underway for the academic year 23/24, these qualitative results will not be available for this study but could be actioned for the next year of the programme. Callender et al., (2021) suggested that there should be a multi departmental solution for universities to tackle mental health and the next iterations of the scheme could incorporate different academic schools to run culturally diverse interventions using the same framework. Work is under way, following a recent meeting with the Vice Chancellor of University of East London to initiate a roundtable discussion with senior members of staff to develop this further.

### ***8.2 Initial communication***

As has been discussed it was not always easy to engage with the student in the first instance and 47% of those that were referred did not engage at all. The initial communication sent to the participant is crucial, as it is the first exposure they will have of the scheme and as Birtwistle et al., (2019) considers, people are more likely to adopt behaviours from those they trust and feel



connected to. Variations on the initial communication could be analysed to see if there is better uptake depending on the content of the messages, Williamson et al., (2020) conducted some valuable research on physical activity messaging which can be used to improve the communication to future participants. It was concluded that messages should be framed positively and highlight short-term outcomes specifically relating to social and mental health and content should be tailored or targeted to the recipient wherever possible (Williamson et al., 2020). It is also believed that further steps should be put in place if there continues to be no response to the initial communication. (Birtwistle et al., 2018) suggested that instigating an initial step to behaviour change may serve a functional purpose, such as meeting somewhere neutral for a cup of coffee or have more video communications with the view to visiting the gym after first or second meeting.

### ***8.3 One Project Officer per intervention***

Two experiences from the transcripts suggested that having a full-time member of staff taking the student through the intervention would improve their experience as it would increase the flexibility when scheduling sessions in line with autonomy part of the SDT. The research taken from Vinson & Parker, (2012) would suggest this is necessary, as failure to provide consistent and quality support is a barrier to adherence. However, they also say that the key to a successful referral scheme is that all staff on site maintain a professional approach extending courtesy, empathy and general helpfulness even if they are not directly involved in the scheme, as it contributes to the overall experience. This is a view that was highlighted by many of the interviews and can be summarised by the statement from Student 18 who said, *“I was shown (how to adjust my seat at the start of a class) but in a more fun way (by the class instructor) so that I actually enjoyed the workout and learnt how to do it properly, it made me come back to more classes”*. A recommendation of the programme would be to have one full time member of staff designated to take the student through the sessions to give consistency and reliability but introduce them to other staff members at times such as class instructors to further build the relatedness aspect of SDT.

### ***8.4 Female to female instructors***

The qualitative interviews showed that three of the female participants preferred the fact that a woman took their sessions. It is recommended that, if possible, female students are given the option of working with a female instructor to improve relatedness and overall make them feel more

comfortable. Further research would be needed to see if there are any links to improved adherence if there is male student–male instructor or male student–female instructor relationship, as this is not evident from the results.

### ***8.5 University of East London staff***

A natural step for the expansion of the scheme would be to replicate the framework for staff and use Occupational Health to triage the referrals into the scheme. Van Amelsvoort et al., (2006) deduced that workers who reported being physically active more than once a week reported significantly less sickness absence. This addition to the service would potentially end up reducing absenteeism for the university and the data capture could explore this possibility. This has already been proposed to the occupational health team for the academic year 23/24 and data capture is due to start following a final meeting with the University of East London’s Director of HR.

### ***8.6 Group based exercise and team sports***

Pluhar et al., (2019) summarised that organised sports participation is better than exercise alone, as it is associated with a decreased risk of anxiety, depression, feelings of hopelessness and suicidal ideation. The framework could be adjusted to allow for the introduction of a taster session for an East London Sports club session of their choice or invite them to participate in group based exercise sessions giving them the opportunity to develop relationships with other students who may have similar interests. Careful consideration would have to go into how this introduced as this could have a negative effect on wellbeing for some if it is not a positive experience.

## **9.0 Conclusion**

It can be concluded that both the qualitative and quantitative results indicate positive improvements in all three of the areas that the research study wanted to analyse. This is in line with the view of Barkus et al., (2022) that sub clinical interventions have been proven to reduce the negative consequences of delayed access to treatments and improves the longer-term outcomes for the patient that engages with them. The quantitative data showed a positive decrease in wellbeing scores on both GAD and PHQ, academic achievement was higher than the university average and there were less appointments made by the participants during and after the intervention than a matched sample group. The qualitative analysis gave many positive opinions of the scheme and

showed how the elements of the SDT worked together to improve motivation and adherence. This suggests that framework could be used as an effective tool to help universities deal with the pressures on resources that Burns et al., (2020) has highlighted as a growing problem.

Added to that, the recommendations give the opportunity to perfect the referral framework over the coming years to make an improvement on the number of referrals and impact the adherence rate. This will result in more students receiving the same benefits that have been realised by the nine that have completed it this year. This report has concluded that the referral scheme has the potential to be expanded further if given the required resources and funding over the next 2-5 years. Callender et al., (2021) suggested that a multi departmental intervention is most successful and although this scheme does currently rely on different departments, this framework could be mirrored in other areas of the university such as music, arts, dance or gardening to create culturally informed interventions which appeal to a wider group of students. To do this successfully, it would be important to replicate the triage method that is in place for this pilot project and find suitable job roles that could, on a sub clinical nature refer students from different streams. If completed successfully with continued data capture, this would be an extraordinarily unique project and could be a framework for other institutions to adopt around the world to combat the growing issue of mental health amid a distinct lack of resources.

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## 11.0 Appendices

*Appendix A – Interview Transcript with edits  
Pages 1-10 of the transcript, total length 24 pages.*

0:0:0.0 --> 0:0:14.260

David Cowell

So now we are recording and transcribing and so just to confirm that you're happy for us to continue. Happy for happy you. You give your consent to the video and the and the transcribe.

0:0:14.930 --> 0:0:15.390

Student 34

Yes.

0:0:15.890 --> 0:0:21.120

David Cowell

Perfect. Now I will ask you a series of questions. Then the series of questions sounds like a sort of.

0:0:21.750 --> 0:0:36.610

David Cowell

And the chase or something, but it's not, it's it. Hopefully there will be the designed to give you a little bit of sort of structure to interview to make sure we kind of cover most bases. So I will start without further unless you have any other questions.

0:0:37.240 --> 0:0:37.860

Student 34

Ohh no.

0:0:38.510 --> 0:0:46.860

David Cowell. So I wanna know from the start how did the topic of the referral scheme come about during your conversations with your practitioner?

0:0:48.270 --> 0:0:57.90

Student 34

Ohh so I heard about it from one of the members of the wellbeing team and she recommended that I do it and so.

0:0:59.400 --> 0:0:59.560

David Cowell

It.

0:0:58.290 --> 0:1:1.90

Student 34

Yeah, how I got into contact.

0:1:1.420 --> 0:1:19.330

David Cowell

Was there because we've been highlighting our kind of triage system. So the practitioner, the you speak to and would maybe ask a little bit of question a few questions around it or was it just was it the first thing that came to you?

0:1:20.740 --> 0:1:21.90

Student 34

Ohh.

0:1:33.110 --> 0:1:33.490

David Cowell

Hmm.

0:1:40.430 --> 0:1:40.800

David Cowell

Yeah.

0:1:21.170 --> 0:1:41.720

Student 34

Umm, I think what really happened was that I was talking to one of the wellbeing team members about like my mental health and how I felt like it was getting worse and she told me about this scheme about how ohh this is, you know, for the for mental health of students, so it could benefit me.

0:1:42.440 --> 0:1:45.410

Student 34

And then she got me in touch with Aneeka. And then.

0:1:46.400 --> 0:1:47.190

David Cowell

And it went from there.

0:1:46.430 --> 0:1:48.330

Student 34

Yeah. Talk from there.

0:1:58.190 --> 0:1:58.630

Student 34

I.

0:1:48.270 --> 0:1:59.460

David Cowell

Was there any kind of talk about previous sporting or previous kind of activity? Have you ever done to the gym before or have you ever been involved in anything?

0:2:0.220 --> 0:2:3.530

Student 34

Yeah, I've never. I've never really done the gym before.

0:2:9.560 --> 0:2:10.10

David Cowell

0:2:12.20 --> 0:2:12.770

David Cowell

Right. OK.

0:2:3.700 --> 0:2:17.300

Student 34

And I think the only time I went to the gym once was like a few, like years ago. I think I was like 13/14. I didn't do much cause I was like ohh, I don't know how to do anything else. So I'm just gonna.

0:2:18.260 --> 0:2:19.20

Student 34

Yeah.

0:2:19.770 --> 0:2:20.470

David Cowell

Brilliant.

0:2:19.760 --> 0:2:26.960

Student 34

But I think yeah, having a I think having someone there to like, teach you and help you through is really helpful for me.

0:2:28.820 --> 0:2:32.430

David Cowell

Well, that's then. That's what we'll probably go on to that at some point.

0:2:32.570 --> 0:2:42.340

David Cowell

Um, um, that'd be that. I think that's quite an interesting kind of sort of view about it is. So when you so you were then.

0:2:43.800 --> 0:2:49.470

David Cowell

You would you was then sent to Aneeka. Did we follow up quickly? Was there a delay or anything or like that or?

0:2:50.210 --> 0:2:55.400

Student 34

There was a quick follow up. We had a meeting and we had our first session.

0:2:56.70 --> 0:2:58.380

David Cowell

So did Aneeka take the first session with you?

0:3:0.370 --> 0:3:0.910

David Cowell

And then.

0:2:58.980 --> 0:3:1.210

Student 34

Yes, yes, she did. But then she got injured.

0:3:1.720 --> 0:3:4.630

David Cowell

And she got injured, right? Yes. Cause she fell down the stairs.

0:3:6.330 --> 0:3:18.950

David Cowell

Classic. And then that's good. Well, she's healed now she will be watching.. I better not say too much about our being clumsy. No,. And so, yes, so that's good.

0:3:20.330 --> 0:3:22.680

David Cowell

And then you would then assigned with Raffi.

0:3:23.210 --> 0:3:23.660

Student 34

Yes.

0:3:25.170 --> 0:3:27.370

David Cowell

And so when after you were.

0:3:28.230 --> 0:3:40.220

David Cowell

Kind of. You spoke with the wellbeing team and Pedro had contacted you for the first time. What? What were your feelings about starting the project? Were there any aspects that excited you or were you apprehensive about anything?

0:3:58.740 --> 0:3:59.420

David Cowell

Yeah.

0:3:41.50 --> 0:4:1.20

Student 34

I was nervous because I feel like the whole reason why I've like not really gone to the gym is cause I'm like scared of the judgement or I'm scared of people seeing that I'm doing something wrong or that I'm not. I don't know. I just like I was really nervous about like not looking right I guess. But when I got there I was fine.

0:4:1.700 --> 0:4:4.320

David Cowell

Is that it? We build these things up on my mind though we think.

0:4:4.840 --> 0:4:5.360

Student 34

Hmm.

0:4:6.50 --> 0:4:12.650

David Cowell

And that I think this would this, was there anything that excited? Was there anything that was exciting you?

0:4:13.870 --> 0:4:14.170

Student 34

Hmm.

0:4:15.170 --> 0:4:18.90

Student 34

I think I was honestly, I think it was mainly nervous but.

0:4:18.10 --> 0:4:18.320

David Cowell

Yeah.

0:4:19.410 --> 0:4:24.800

Student 34

Yeah, I guess just starting the new journey, seen it where it went, that was probably what was exciting I guess.

0:4:25.180 --> 0:4:27.920

David Cowell

Did you do you live on campus? What do you live?

0:4:28.560 --> 0:4:32.260

Student 34

I don't live on campus, but I'm gonna live on campus soon.

0:4:32.820 --> 0:4:33.440

David Cowell

Right okay.

0:4:34.250 --> 0:4:36.620

David Cowell

So you what year were you in at the moment then?

0:4:37.310 --> 0:4:38.710

Student 34

I'm moving into my third year.

0:4:39.680 --> 0:4:42.290

David Cowell

Yeah, OK. And what you're studying?

0:4:42.810 --> 0:4:43.300

Student 34

Dance.

0:4:43.860 --> 0:4:48.640

David Cowell

Ohh lovely. And how's it been? How's the UEL kind of been overall?

0:4:49.80 --> 0:4:54.330

Student 34

This is really good. I really enjoy my course. I feel like I I'm learning and I'm growing, which is really good.

0:4:55.70 --> 0:4:58.710

David Cowell

What dance do you kind of specialise in??

0:4:59.530 --> 0:5:2.580

Student 34

I'm so I specialise mostly in hip hop and locking.

0:5:3.120 --> 0:5:3.510

David Cowell

Alright.

0:5:3.220 --> 0:5:6.70

Student 34

But yeah, I like other styles as well.

0:5:9.840 --> 0:5:10.280

Student 34

Hmm.

0:5:11.30 --> 0:5:11.570

Student 34

Ohh.

0:5:6.570 --> 0:5:14.850

David Cowell

Good. This is my daughter's. Just recently got into St Dance so screen. Quite interesting to watch.

Anyway, sorry we digress.

0:5:15.490 --> 0:5:20.940

David Cowell

Um, so how did you find the whole referral process from start to finish?

0:5:22.100 --> 0:5:22.610

Student 34

Um.

0:5:22.210 --> 0:5:24.30

David Cowell

Did it was it efficient? Was it?

0:5:24.780 --> 0:5:25.850

David Cowell

Did it's kind of.

0:5:27.230 --> 0:5:41.380

David Cowell

That I suppose that's we've all kind of asked that kind of pro um, um, what did they did the project

officer or Aneeka do anything in the early stages that helped you feel ease any of the fears that you may have had around the project?

0:6:2.140 --> 0:6:2.610

David Cowell

Good.

0:5:42.910 --> 0:6:4.860

Student 34

I think she just seemed very when we had our first meeting, she seemed very approachable and very like very fun and very nice. And I think that is more tensions of it cause I was like, OK, I'm with someone who loves what she's doing and she's like, very friendly. So she's gonna help me through it. That's fine. That's good. So, yeah, that's what was helpful for me.

0:6:5.400 --> 0:6:27.370

David Cowell

And did she set out everything? Cause I don't know if you come across the self-determination theory at all, but the whole framework is around kind of changing behaviours and some of it was like the is autonomy, competence and relatedness is the three aspects. So did you feel like you could relate to Aneeka?

0:6:28.600 --> 0:6:37.720

Student 34

Hmm, yeah, I think so. In some ways. Yeah. Cause we ended up talking a bit about like our interests as well which was quite nice.

0:6:38.880 --> 0:6:39.60

Student 34

But.

0:6:38.200 --> 0:6:42.290

David Cowell

That said, both building a bit of rapport you probably did that with you.

0:6:42.750 --> 0:6:43.160

Student 34

Yeah.

0:6:43.340 --> 0:6:43.890

David Cowell

Which is good.

0:6:44.990 --> 0:6:51.520

David Cowell

So what has stopped you from exercising whilst you've been at uni so far?

0:6:52.200 --> 0:6:59.970

Student 34

I think the main thing was because I lived really. I lived far from the Union so travelling up there and back just wasn't possible at the time.

0:7:0.980 --> 0:7:12.450

David Cowell

Did you do you? Were you though? Do you do any exercise other than kind of? Obviously the gym was probably a bit of a no go, but did you do any other exercise, something the dancing was quite a bit of exercise, isn't it?

0:7:21.950 --> 0:7:22.340

David Cowell

Hmm.

0:7:13.10 --> 0:7:24.970

Student 34

Yeah. So along with dance, I did do, some. So I did, like homework out, stuff like that. But I never felt like I could stick with it. So I thought I felt like with gym, it kind of motivating me.

0:7:26.210 --> 0:7:27.100

Student 34

Which is good.

0:7:28.620 --> 0:7:28.960

Student 34

Hmm.

0:7:26.390 --> 0:7:32.440

David Cowell

Does the to come to brilliant? Yeah, that's suppose that's good.

0:7:33.0 --> 0:7:33.570

David Cowell

And.

0:7:37.30 --> 0:7:44.880

David Cowell

What do what? What kind of when you are active, so you do your dance. What? What kind of what has really helped you to become active?

0:7:48.320 --> 0:7:54.230

David Cowell

What is it more about the environment? Or is it more about the kind of activity?

0:7:55.370 --> 0:8:2.380

Student 34

I think both cause I feel like if I'm in a good environment, I think that definitely helps cause you feel motivated enough to be there.

0:8:2.620 --> 0:8:2.980

David Cowell

Yeah.

0:8:3.80 --> 0:8:3.900

Student 34

Good then.

0:8:7.430 --> 0:8:7.900

David Cowell

Hmm.

0:8:9.370 --> 0:8:9.970

David Cowell

Yeah, that's true.

0:8:4.700 --> 0:8:11.90

Student 34

Yeah, I think if you like the activity you're doing, if you're looking forward to something, then you just do it, yeah.

0:8:11.100 --> 0:8:12.150

David Cowell

That is really interesting.

0:8:13.410 --> 0:8:24.150

David Cowell

Ohh, when you how was your relationship with other sports talk staff? Did you? You obviously have you come across any other staff. Was there any other bits and pieces that they've that they've done to help you?



0:8:24.930 --> 0:8:27.480

Student 34

I'm so I've said hi to a few of them.

0:8:28.580 --> 0:8:35.790

Student 34

But I think mainly Aneeka and Rafa are the ones that I've talked to the most considering. Yeah, considering.

0:8:36.460 --> 0:8:45.710

David Cowell

And what is Raffi? Ohh, so we spoken quite a bit about an eco as what, what part of that, how, how has Rafi helped?

0:8:47.30 --> 0:8:51.500

Student 34

Um, I think she's helped motivate me a lot, I think cause.

0:8:53.320 --> 0:8:58.110

Student 34

Whenever we're doing an exercise and stuff like that, I think.

0:8:58.870 --> 0:9:13.300

Student 34

She's good at helping with the form, but then also she kind of is like if she sees me giving up, she's like, come on one more and stuff like that. And I'm like, OK, I can do this, which is really nice to think she's very good at motivating me, which I like.

0:9:13.550 --> 0:9:17.150

David Cowell

Ohh, good. Yeah, there's a big part of that is

0:9:17.650 --> 0:9:24.140

David Cowell

Um, the motivation side of it. Have you have you been given programmes to do?

0:9:25.860 --> 0:9:35.110

David Cowell

Have you been cause part of the autonomy side of the side of it is trying to get you to maybe do a little bit more. So you're kind of aware of what it's like. So if you to do it in the future?

0:9:36.220 --> 0:9:46.530

Student 34

Yes. So she sets up the programmes and then she sends them to me after the sessions. So then I've got stuff, you know, stuff to look back at and doing the future after the sessions.

0:9:47.720 --> 0:9:47.970

Student 34

Yeah.

0:9:47.180 --> 0:9:54.810

David Cowell

And the programmes at the time, how has she kind of consulted you with the programme? Has every kind of developed together or would she have it laid out for you?

0:9:59.940 --> 0:10:0.270

David Cowell

Right.

0:10:0.740 --> 0:10:1.140

Student 34

Yeah.

0:10:1.710 --> 0:10:7.40

David Cowell

And how did it has that been beneficial for you or would you prefer to do some?

0:10:7.820 --> 0:10:11.280

David Cowell

Of the programme, making yourself how would you.

0:10:10.810 --> 0:10:15.300

Student 34

I actually find it really beneficial that like she said, some of the programmes and then.

0:10:18.160 --> 0:10:18.600

David Cowell

But.

0:10:16.60 --> 0:10:19.650

Student 34

You do it together. I. Yeah, I find that really beneficial.

0:10:20.380 --> 0:10:47.720

David Cowell

Good, good, on me that's. I mean that's great. It's good that she's supporting you and that's that's how it is really. When did she take you through how to use the equipment did it like the this is part of the competence kind of kind of making sure cause one of your comments at the start was he didn't know how to do anything when you didn't know whether you're doing it right or stuff like that how is Rafi and ECA helped you build that competent side of it.

*Appendix B – Confirmation of Ethics Approval*

Dear David,

**Application ID: ETH2122-0201**

**Project title: Doctoral Research Project**

Lead researcher: Mr David Cowell

Your application to Ethics and Integrity Sub-Committee (EISC) was considered on the 26th September 2022.

The decision is: **Approved**

The Committee's response is based on the protocol described in the application form and supporting documentation.

Your project has received ethical approval for 4 years from the approval date.

If you have any questions regarding this application please contact your supervisor or the administrator for the Ethics and Integrity Sub-Committee.

Approval has been given for the submitted application only and the research must be conducted accordingly.

Should you wish to make any changes in connection with this research/consultancy project you must complete 'An application for approval of an amendment to an existing application'.

The approval of the proposed research/consultancy project applies to the following site.

Project site: **University SportsDock Gym**

Principal Investigator / Local Collaborator: Mr David Cowell

Approval is given on the understanding that the [UEL Code of Practice for Research](#) and the [Code of Practice for Research Ethics](#) is adhered to. □□

Any adverse events or reactions that occur in connection with this research/consultancy project should be reported using the University's form for [Reporting an Adverse/Serious Adverse Event/Reaction](#).

The University will periodically audit a random sample of approved applications for ethical approval, to ensure that the projects are conducted in compliance with the consent given by the Ethics and Integrity Sub-Committee and to the highest standards of rigour and integrity.

Please note, it is your responsibility to retain this letter for your records.

With the Committee's best wishes for the success of the project.

Yours sincerely,

Fernanda Pereira Da Silva

Administrative Officer for Research Governance

**Sheet – 1:1 Interviews and questionnaires**  
PLEASE READ THE FOLLOWING CAREFULLY

**University of East London**

SportsDock, Docklands Campus  
4-6 University Way  
London  
E16 2RD

**Research Integrity**

The University adheres to its responsibility to promote and support the highest standard of rigour and integrity in all aspects of research, observing the appropriate ethical, legal and professional frameworks.

The University is committed to preserving your dignity, rights, safety and wellbeing and as such it is a mandatory requirement of the University that formal ethical approval, from the appropriate Research Ethics Committee, is granted before research with human participants, human data human material, personal and/or sensitive data, or non-human animal commences.

The purpose of this Participant Information Sheet is to provide you with the information that you need to consider in deciding whether to participate in this research project.

**The Principal Investigator/Director of Studies**

Dr Richard Buscombe  
[r.buscombe@uel.ac.uk](mailto:r.buscombe@uel.ac.uk)

**Student researcher**

David Cowell  
[d.cowell@uel.ac.uk](mailto:d.cowell@uel.ac.uk)

**Study title: Evaluating the impact of an integrated wellbeing exercise referral scheme on physical and psychological health of University students in a London higher education institution.**

**1. What is the purpose of the research?**

In September 2021, following the Covid 19 Pandemic, the sports department at University of East London introduced a wellbeing exercise referral scheme as a coping strategy for students who were suffering from mental health issues. The aim of this scheme was to encourage and motivate students to become more physically active and promote how exercise can be used to help overcome their problems to prosper during their time at the University. The purpose of this research is to discover the impact that this referral scheme is having on UEL student lives and to see what recommendations can be put into place to further enhance the running of the programme.

**2. What will you be asked to do?**

Before you decide whether you wish to participate, you should understand why the research is being conducted, what you will need to take part and what the results will mean to you. Please take the time to carefully read the following information.

Based on your consultation that took place with a practitioner within the UEL Wellbeing Team you have been invited to participate in an 8 week intervention. Over the course of this 8-week period you will be asked by the Project Officer to fill out a GAD/PHQ wellbeing survey and an International

Physical Activity Questionnaire (IPAQ). You will be assisted by the Project Officer to fill these questions out and they will be conducted 3 times.

1. During the first consultation
2. After 4 weeks of the intervention
3. 2 weeks after the intervention has finished.

You will also be invited to participate in post intervention exit interview to comment on how you felt after completing the scheme. If, for any reason you do not complete the 8 weeks, we will be in contact to conduct this exit interview to gain valuable insight of your experience.

At all times during the 8-week period the Wellbeing Team and your Practitioner will be available to provide you with professional support.

All data and analysis will be fully anonymised at source and stored in a password protected folder.

### **2.1 Nature of questions**

The IPAQ questionnaire will ask you about your current physical activity levels so we can track any changes over the course of the sessions and will take 2-3 minutes to complete.

The GAD/PHQ questionnaire will focus more into your mental wellbeing at the time and some of the questions will be of a more sensitive nature, this should take about 2-3 minutes to complete. The first occasion you complete this questionnaire you will be supported by your Wellbeing Practitioner and the Project Officer will help you complete it twice subsequently during the intervention.

The Interviews at the start and the end will be conducted with the Project Officer, this will delve further into your lifestyle and current habits.

If at any stage during the 8-week period you feel uncomfortable, it will be encouraged to stop or freeze the scheme so we can re-evaluate what course of action you would prefer.

### **3. What are the anticipated benefits of participating in the research?**

After completing the data capture, I will be able to analyse any changes in wellbeing scores and academic achievement to see if the referral scheme has an impact in the lives of the students. These results can be used to drive funding opportunities to increase the scope of the project. The qualitative data can be used to provide recommendations on how to improve any aspect of the scheme and how it is delivered.

### **4. Are there any risks associated with participating in the research?**

You will be asked to attend the gym and use the equipment/ classes or use other methods to become physically active, which may seem challenging at times. The Project Officer is there to help you feel more comfortable and increase your confidence by showing you how to use physical activity to improve your lifestyle.

Some of the questions asked will delve into you exercise history and may be uncomfortable to answer. As described, all answers will be entirely confidential, and you will have the support from your Wellbeing Practitioner at all times throughout.

### **5. Do you have to take part?**

Participation in any aspect of this scheme is completely voluntary. You are under no obligation to take part.

### **6. Who can you contact if you have any questions about the project?**

Any questions may be emailed to David Cowell via the email address below: [d.cowell@uel.ac.uk](mailto:d.cowell@uel.ac.uk)

### **7. What happens if you change your mind and want to withdraw?**

Your participation in this study is voluntary, and you are free to withdraw at any time during the research. Should you choose to withdraw from the programme you may do so without disadvantage to yourself and without an obligation to give a reason. Please note that your data can be withdrawn up to the point of data analysis – after this point it may not be possible if your data is anonymised.

**8. What will happen to the information collected as part of the study?**

All answers to questions will be uploaded to a password protected computer file and any data will be stored securely for 10 years. You will be assigned a number which will be used to represent your data anonymously during the study. The file linking the participant's name to their identification number will be stored in a separate, password protected file to the participant data. Interviews will be recorded and stored anonymised and stored in a sperate password protected folder.

**9. Will the results of the study be available in the public arena?**

The research will be submitted for publication in a relevant academic journal, available for viewing within the public arena.

**10. Who can you contact if you have a complaint or concerns about the project?**

Catherine Hitchens, Ethics, Integrity and Compliance Manager  
Office for Postgraduates, Research and Engagement  
University of East London, Docklands Campus, London, E16 2RD  
Telephone: 020 8223 6683. Email: [researchethics@uel.ac.uk](mailto:researchethics@uel.ac.uk).  
For general enquiries about the research project, please contact the Principal Investigator on the contact details at the top of this sheet.

**This project has been approved in accordance with the University of East London Research Ethics Policy.**

## UNIVERSITY OF EAST LONDON

### Consent to Participate in a Programme Involving the Use of Human Participants.

Title: Evaluating the impact of an integrated mental health exercise referral scheme on physical and psychological health of University students in a London higher education institution.

Researchers

David Cowell – [d.cowell@uel.ac.uk](mailto:d.cowell@uel.ac.uk)

Richard Buscombe - [r.m.buscombe@uel.ac.uk](mailto:r.m.buscombe@uel.ac.uk)


Please tick as appropriate:

	YES	NO
I have read the information leaflet relating to the above research project in which I have been asked to participate and have been given a copy to keep. The nature and purposes of the research project have been explained to me, and I have had the opportunity to discuss the details and ask questions about this information. I understand what is being proposed and the procedures in which I will be involved have been explained to me.	✓	
All interviews will be recorded using TEAMS, please confirm you are happy for this to proceed.	✓	
I understand that my involvement in the research project, and particular data from this research, will remain strictly confidential as far as possible. Only the researchers involved in the research project will have access to the data.	✓	
I understand that maintaining strict confidentiality is subject to the following limitation: Where possible, participants' confidentiality will be maintained unless a disclosure is made that indicates that the participant or someone else is at serious risk of harm. Such disclosures may be reported to the relevant authority.	✓	
Anonymised quotes may be used in publications.	✓	
The participant's name will not be used in any publications of research	✓	
The research is to be published in: Dissertation/ Thesis, Peer reviewed Journal, Internal report, Written feedback to participants, UEL Research Repository.	✓	
I understand that the data collected for the research project will be anonymised/pseudonymised before it is published.	✓	
I understand that the University's lawful basis for processing my personal data collected, used and retained for research purposes is the 'public task' condition and	✓	

the University does not rely on consent to process my personal data.		
I understand that the published results of the research project will be accessible in the public domain and may be deposited in an open access data repository.	✓	
I understand that the published results of the research project will be accessible in the public domain and may be re-used, republished or reanalysed by others in future research.	✓	
I give my permission for the research team to use the data that I have provided in future research projects which may be made publicly available.	✓	
I give my permission for the research team to retain my personal contact details and contact me regarding participation in future research projects.	✓	
It has been explained to me what will happen once the research project has been completed.	✓	
I understand that my participation in this study is entirely voluntary, and I am free to withdraw at any time during the research without disadvantage to myself and without being obliged to give any reason. I understand that my data can be withdrawn up to the point of data analysis, and that after this point it may not be possible if the data is anonymised.	✓	
I hereby freely and fully consent to participate in the study which has been fully explained to me and for the information obtained to be used in relevant research publications.	✓	



Appendix D – UEL Risk Assessment Form

 <b>UEL Risk Assessment Form</b>			
<b>Name of Assessor:</b>	David Cowell	<b>Date of Assessment</b>	15.02.22
<b>Activity or Event title:</b>	Research Study into impact of a wellbeing exercise referral scheme.	<b>Date, time and location of activity:</b>	
<b>Signed off by Manager (Print Name)</b>	<i>W. Morgan</i>		
<b>Please describe the activity in as much detail as possible (include nature of activity, estimated number of participants, etc) If the activity to be assessed is part of a fieldtrip or event please add an overview of this below:</b>			
This is a research study to investigate the impact a exercise referral scheme has on students who are suffering mental health issues whilst attending University. They will be inducted and taken through a 6 week programme in a gym based setting to introduce to them the benefits of physical activity and how it can improve their lives.			
<b>Overview of FIELD TRIP or EVENT:</b>			

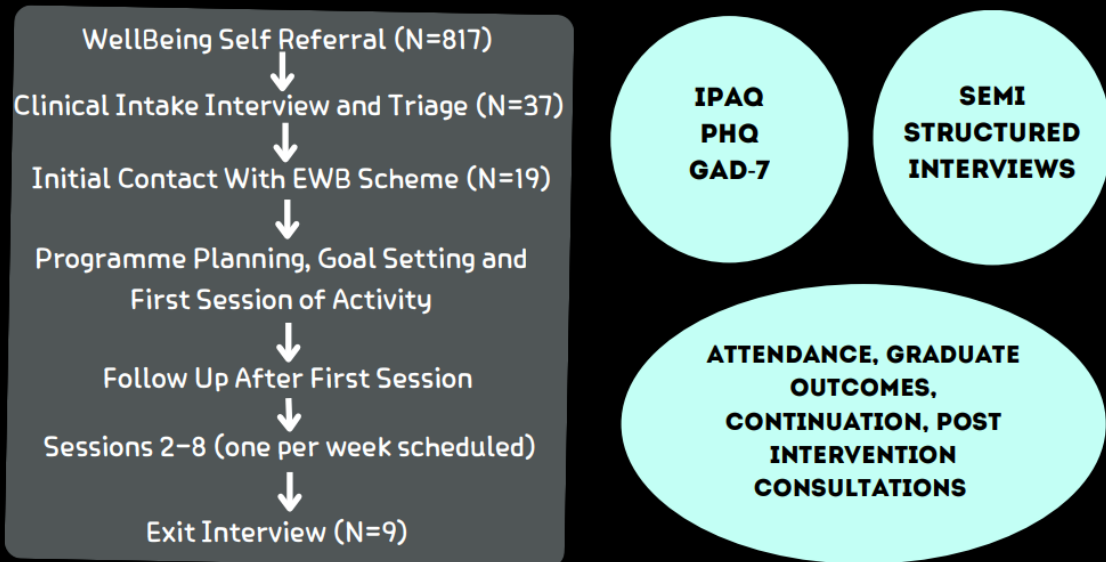
Guide to risk ratings:

a) Risk	b) Hazard Severity	c) Risk Rating (a x b = c)
1 = Low (Unlikely)	1 = Slight (Minor / less than 3 days off work)	1-2 = Minor (No further action required)
2 = Moderate (Quite likely)	2 = Serious (Over 3 days off work)	3-4 = Medium (May require further control measures)
3 = High (Very likely or certain)	3 = Major (Over 7 days off work, specified injury or death)	6-9 = High (Further control measures essential)

Which Activities Carry Risk?								
Activity / Task Involved	Describe the potential hazard?	Who is at risk?	Likelihood of risk	Severity of risk	Current Risk Rating (Likelihood x Severity)	Additional precautions taken to reduce the risk? Residual risk rating	State what further action is needed to reduce risk (if any) and state final risk level	Review Date
Initial Contact	Could open up issues with self esteem and mental health.	Student	2	1	2	Use careful language to reassure and support. 1		
Using Gym	Beginner in the gym which could result in injury	Student	2	1	2	Fitness Instructor to devise programme and assist to help student feel more comfortable. 1		
Drop out of scheme	Student may drop out of scheme, amid resurfacing of issues	Student	2	2	4	Keep in contact with designated practitioner 2		
Disclosure of information	May disclose information to staff who are not trained	Staff	2	1	2	Train and re-iterate to non-qualified staff to upscale any information to Project lead. 1		
Incident in the gym	If student requires first aid whilst they are in the gym.	Student	1	1	1	All Fitness instructors and Duty Managers are First Aid trained		

A comprehensive guide to risk assessments and health and safety in general can be found in UEL's Health & Safety handbook at <http://www.uel.ac.uk/hrservices/hs/handbook/> and a comprehensive guide to risk assessment is available on the Health & Safety Executive's web site at <http://www.hse.gov.uk/risk/casestudies/index.htm>. An example risk assessment is also included below.

## PILOT STUDY: DELIVERY AND EVALUATION OF AN INTEGRATED EIGHT WEEK EXERCISE INTERVENTION IN A UK HEI



### Results

- All showed a reduction in PHQ wellbeing scores (table)
- 8 out of 9 had positive graduate outcomes
- 6 out of 9 show reductions in wellbeing appointments
- 8 out of 9 deemed 'active' after completion

Student Code	BaseLine PHQ	First PHQ	2nd PHQ	Difference
1	6	3	3	-3
2	15	14	14	-1
3	14	15	11	-3
9	21	11	8	-13
17	27	3	0	-27
18	5	4	2	-3
19	5	5	4	-1
34	14	13	5	-9
37	5	5	2	-3



"Raffy would message me afterwards to book in for the next one, but also, she'd like, say well done, you did really well this week or whatever, which was quite nice.

"Sometimes I said to Pedro, I have exams this week. So he say OK, that's fine. I've been in this situation. No worries. Take your time. When they're gone, you can come. It's fine."

"Yes, certainly it (the intervention) certainly helped me, and I'd like to encourage other friends that I know are suffering with mental health problems to start using the gym like it helped me"



### Reflections



- Where possible, match the instructors and participants demographics to help develop relatedness.
- Reaffirms the belief that the flexibility and 'care' side of the intervention is critical for its success.
- Develop a variety of culturally led interventions to appeal to students from different ethnic backgrounds.

