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**Commentary on Promoting the Mental Health and Wellbeing
Benefits of Using Student Response Systems (SRS) in
Higher Education: More Than Just a Learning Device**

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Commentary on Promoting the Mental Health and Wellbeing Benefits of Using Student Response Systems (SRS) in Higher Education: More Than Just a Learning Device

Abstract

Purpose: This commentary discusses the broader potential of Student Response Systems (SRS) regarding their positive impact on student mental health and wellbeing. Relevant literature is drawn on to illustrate the wider social and intrapersonal benefits of SRS beyond its use as an educational tool.

Design/Methodology/Approach: Tenets of social information processing theory (SIPT) are used in conjunction with the literature from health, sociological, and psychological disciplines to explicate the mental health benefits of SRS.

Findings/Practical Implications: SRS can make a positive contribution students' mental health and wellbeing, thus assisting the broader pastoral support and employability frameworks of higher education institutions

Originality/Value: An original perspective on the use of SRS in promoting the mental health and wellbeing of university students

Keywords: Higher Education, Mental Health, Wellbeing, Student Response Systems, SRS

Paper-type: Commentary/General Review

Introduction

Student Response Systems (SRS) have been a relatively commonplace feature in Higher Education (HE) for some years. Early systems that used 'clickers' (Katz et al., 2017) have given way to more sophisticated software enabling large cohorts of students to interact during teaching sessions in real-time. Software such as *MentiMeter* and *Vevox* enable students to respond anonymously via internet-connected devices using a range of formats such as multiple-choice questions, word-cloud creation, or open-text (e.g., Valley & Gibson, 2018; Moorhouse & Kohnke, 2020; Nina et al., 2022). Research into SRS has documented the positive effects of using them in teaching settings, evidencing how they can reduce mind-wandering (Iwamoto & Hargis, 2018), and promote engagement and learning (Blood & Neel, 2008). Whilst a significant body of research has understandably focused on the educational benefits of SRS, the broader benefits to mental health and wellbeing are largely overlooked. The following article discusses how SRS can be leveraged to promote inclusion, belonging, and confidence among students in HE, and the subsequent benefits to wellbeing beyond their use as an educational tool.

The Global Pandemic and Post-Covid-19 Mental Health Crisis: The Sea Change in Technology's Role in HE

The global pandemic pushed technology centre stage when enforced lockdowns moved education into online spaces (Robson et al., 2022). Despite a range of personal, technological, and logistical challenges, educational institutions enabled students to continue with their studies. This event facilitated engagement with technology on an unparalleled scale and arguably permanently changed the role of technology across all levels of education globally (McGovern & Shepherd, 2022). Beyond learning, online teaching sessions enabled students to maintain contact with their peers - a vital facet to the learning experience - during such a difficult time. During lockdowns, students were isolated in various types of accommodation in differing circumstances. Online communications became a lifeline to many and this re-enforced the social role technology plays in keeping us connected (Jurakovic et al., 2022). However, the global return to on-campus learning was (and continues to be) met with a degree of reticence and uncertainty. Many students are reluctant to return to face-to-face learning environments to avoid socialising (Kairinos, 2022). Many students had become adjusted to the rhythms and benefits of online learning (Slack & Priestley, 2022), causing an awkward readjustment when lockdowns were lifted. Consequently, post-pandemic, many institutions have experienced issues surrounding student attendance and engagement (Williams, 2022) resulting in fractured and uncertain cohorts. The need to

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3 unite student cohorts has therefore never been greater as educators strive to develop and implement
4 innovative methods of engaging large groups of students.
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7 **SRS Can Be Used Innovatively to Promote Mental Health and Wellbeing**

9 Establishing equity and promoting inclusion in HE requires institutions to develop and implement flexible
10 policies that can move in tandem with changing landscape of student cohorts of today. Students reside
11 at the heart of HE endeavours, which makes students the ideal centre from which the ripple effects of
12 positive change can originate. The benefits of the widening participation agenda mean that student
13 cohorts are now more diverse than ever before with people from different cultures and backgrounds of
14 different ethnicities, identities, and socio-economic statuses (see Younger et al., 2019 for a review).
15 Students can therefore reap the benefits of learning among a diverse community of learners, which is
16 an invaluable experience alongside their course-related knowledge and learning. As a result, students
17 complete their studies with a deeper appreciation of diverse cultures, backgrounds, ethnicities,
18 identities, and religions, which is vital as they move into their chosen fields of work or future study.
19 However, to achieve this, students must be given the opportunity to connect with their peers. Many
20 students find it difficult to establish friendships at university (Beard et al., 2007), report feelings of
21 imposter syndrome (Murray et al., 2022), and/or are generally reluctant to speak out or ask questions
22 (Hoekstra & Mollborn, 2012). Universities have long been a space to promote openness and curiosity,
23 and in more decades a place to challenge stereotypes and promote equity. SRS can therefore be used
24 as the social 'glue' to bring cohorts closer together through openness, honesty, and a desire to
25 understand ourselves and each other. SRS provide students with an anonymous voice, which can
26 alleviate fears of speaking out particularly in large cohorts (Paul, 2019). This combination of features
27 can serve to quickly convert large audiences of seemingly unconnected individuals into a unified cohort
28 (Middleditch & Moindrot, 2015). The positive impact that this has on learners can be easily overlooked
29 when SRS are used in a course-related educational capacity. This is understandable given that this is
30 their primary function in HE. However, for learning to be optimised, students first must feel that they
31 belong. Optimal conditions for learning require an individual to feel confident in their abilities and a
32 sense of belonging to their cohort (Pedler, et al., 2022). The benefits of SRS are key here and are
33 reflected in two of the key tenets of social information processing theory (SIPT) within the context of
34 computer mediated communication (CMC) (Walther, 2008). Briefly, CMC comprises three modes of
35 communication: impersonal, interpersonal, and hyperpersonal. The hyperpersonal phase is not relevant
36 to SRS given that such platforms (or educational settings) are not conducive to such forms of CMC.
37 However, the following section will evidence how both impersonal and interpersonal modes of CMC
38 using SRS can promote improved wellbeing among students. Specifically, how impersonal CMC map
39 to educational uses of SRS and interpersonal CMC map to social uses, but also how utilising both forms
40 of CMC promote broader underpinning socioemotional wellbeing.
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43 In digital environments text-based message content replaces non-verbal cues, collectively referred to
44 in the literature as "cues-filtered-out" theories (Walther, 1993). Prior to Walther's work, the lack of non-
45 verbal cues was collectively held as a drawback to developing relationships in digital environments,
46 which has since been challenged. Impersonal modes of CMC highlight how the absence of a
47 socioemotional facet to communications can focus attention on depersonalised, task-oriented thinking.
48 This can foster knowledge-seeking behaviours due to lean information/message content, thus the
49 educational benefits here are more overt within the context of SRS. However, such forms of CMC also
50 democratise cohorts due to the removal of any social status and power (Walther, 2008). This equitable
51 environment coupled with anonymity and the openness that universities regularly promote, therefore
52 provides students with a safe digital space to share questions, thoughts, and opinions. It permits
53 students to learn from others, and their own responses, on a range of topics beyond that of their
54 programme of learning. The participatory element of the process promotes togetherness across the
55 cohort and often healthy competition in response to quizzes, which students find enjoyable (Heaslip et
56 al., 2014). From an educational perspective, the confirmatory nature of feedback provided in response
57 to questions serves to grow knowledge, develop empathy, resilience, and confidence given that
58 feedback is useful in relation to their learning goals. Learning in this instance can be directly tracked
59 against learning goals (see Lipnevich & Panadero, 2021 for an extensive review of learning models).
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3 Self-confidence (Lone, 2021) and self-esteem (Rosli et al., 2012) both correlate with academic
4 performance and it is important that stakeholders in HE do not overlook the development of these crucial
5 characteristics alongside learning and achievement. Taken together, the educational benefits of
6 impersonal CMC using SRS help to re-enforce the foundations positive mental health and wellbeing by
7 irradiating feelings of imposter syndrome and unifying cohorts. Furthermore, SRS usage can be
8 expanded to draw on interpersonal modes of CMC, which can further contribute to students' positive
9 mental health and wellbeing.

10
11 SRS can be a great way for students to promote social interaction at a level that they are comfortable
12 with (Licorish, et al., 2018) which can enable students to confidently solidify their identity within their
13 group. As cohorts of students move through their studies, the use of SRS can evolve in tandem and
14 used in ways that reflect interpersonal forms of CMC. Interpersonal communications can be between
15 one or many other individuals with an increase in social information by comparison to impersonal CMC
16 (Walther, 1993). Text-based information exchanges using SRS are still lean though cohorts can develop
17 firmer impressions of one another via continued information exchange/sharing. Interpersonal CMC
18 involves the sharing of more social information. Key here is the time available to students to craft their
19 responses to SRS cues whilst still enjoying the benefit of anonymity. Unlike face-to-face
20 communications, CMC allows for extended response times. There are also longer periods of time
21 between information sharing by comparison to face-to-face interactions. This can allow students to take
22 a considered approach to their interactions and take part in SRS exchanges at a rate that suits them.
23 A sense of belonging is important for sustained engagement with any programme of studies, which was
24 reflected in the findings of Licorish et al. (2018). It is therefore important that students are afforded the
25 opportunity to develop their identity within their cohorts. The promotion of self-authenticity is of particular
26 importance among student cohorts in today's uncertain economic climate (James et al., 2021) and is
27 something which has been further impacted by the global pandemic (Liu et al. 2021). Tensions between
28 a desire to be authentic and the desire for social approval (James et al., 2021) mean that educators
29 need to the tools available to them, such as SRS, to nurture these fundamental characteristics in
30 preparation for life beyond university. Indeed, pathways into employability have become a key metric
31 attached to university programmes of study (Cheng et al., 2021); institutions recognise the importance
32 of developing strong interpersonal and intrapersonal skills for career readiness. A student's sense of
33 belonging to their cohorts is key here, which too is integral to wellbeing (Evans & Bath, 2020), thus
34 serving as an essential foundation for both learning and career readiness. Again, despite the scope for
35 SRS to be used innovatively here in social interpersonal contexts, an absence of literature in this area
36 suggests that these opportunities may be being missed or simply not acknowledged or promoted. HE
37 institutions recognise the importance of students' mental health, which is reflected in the increasing role
38 that pastoral support plays across universities, particularly post-pandemic (Spears & Green, 2022).
39 SRS can be utilised innovatively in both educational/impersonal and social/interpersonal formats
40 collectively to make a positive contribution to student mental health, career readiness, and the wider
41 employability and pastoral support frameworks of HE.
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45 **Challenges Moving Forward**

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47 Digital poverty in HE is a well-documented issue. The technological response to the global pandemic
48 parsimoniously addressed this issue via the provision of hardware and software to enable continued
49 engagement with studies (Butcher & Curry, 2022). In many ways the pandemic compelled greater
50 engagement with technology across the sector, and as a result many staff and students are better
51 trained and equipped regarding the use of interactive and social technologies post-pandemic. Whilst
52 this went some way towards addressing issues of digital competency and poverty (Crick, 2021), there
53 remains much work to be done in this area. For SRS to be effective it is vital that all students can engage
54 when opportunities are presented. An inability to engage in SRS exchanges risks students feeling
55 ostracised from their cohorts leading to potential negative effects. Much like many facets of daily life, it
56 is likely that technology will play an increasingly prominent role in HE. Institutions therefore need to
57 ensure that sufficient policies are created and maintained to ensure equitable access to technology for
58 their students, sufficient training for staff, and clear guidelines for use (Almpanis, 2015). Educators –
59 and SRS users more broadly – must also take steps to ensure that necessary accessibility checks are
60

conducted before using them in teaching sessions to ensure that students with disabilities are able to engage effectively in sessions. Students reside at the heart of all HE institutions, but it is the responsibility of stakeholders to help bond cohorts and ensure that they move through their programme of studies in a united manner.

Summary

This commentary highlights how SRS can be used innovatively to contribute positively to the mental health and wellbeing of students if used both as an educational and social tool. It is likely that educators currently using SRS are already providing these benefits to students. However, whether that is formally recognised a different matter. Tenets of SIPT highlight how SRS have great educational *and* social potential across HE and it is vital that educators possess a nuanced understanding of the intricacies of digital communications to harness and optimise their potential. As employability and pastoral care forms an increasingly integral part of the student experience, the need to nurture students, educationally, individually, and holistically is now a fundamental part of the ethos of HE institutions. Student wellbeing is central to these endeavours to which the innovative use of SRS in a more conscientious and considered manner can make a positive contribution to student mental health, career readiness, and the wider employability and pastoral support frameworks of HE.

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