Opening the black box of school-wide student wellbeing programmes

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REVIEW

Opening the black box of school-wide student wellbeing programmes: a critical narrative review informed by activity theory

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Abstract

Purpose Medical schools have a duty of care to support student wellbeing but there is little guidance on how to translate this mandate into practice. Often schools focus on implementing and reporting individual-level interventions which typically only address one aspect of wellbeing. Conversely, less attention has been paid to holistic school-wide approaches towards student wellbeing that address multiple wellbeing dimensions. Thus, this review sought to improve our understanding of how support is mediated within such school-wide wellbeing programmes.

Method This critical narrative review was conducted in two stages. First, the authors searched several key databases for papers published up to 25th May 2021, using a systematic search strategy and TREND checklist to guide our data extraction process. We later expanded our search to include literature published from the original date to 20th May 2023. Second, the identified articles were critically analysed using activity theory as a theoretical lens to aid explanation.

Results We found school-wide wellbeing programmes emphasize social connectivity and building a sense of community. Tutors take a key role in the activity of supporting students' wellbeing. We mapped out the activity system components to describe the complexity of this tutor role. This analysis illustrated: tensions and contradictions in the system which may open up opportunities for change; the importance of context for influencing how system components interact; and that students' trust underpins the whole activity system.

Conclusions Our review shines a light into the black-box of holistic school-wide wellbeing programmes. We identified that tutors play a key role in wellbeing systems but confidentiality is a recurring tension which may jeopardise a wellbeing system. The time has come to investigate these systems in more detail, embracing and exploring the role of context at the same time as looking for common threads.

Keywords School-wide · Wellbeing programme · Medical education · Medical students · Critical narrative review · Activity theory

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Introduction

Medical schools have a mandate to support student wellbeing (General Medical Council, 2016; Kemp et al., 2019; Liaison Committee on Medical Education, 2019) and to tackle the high levels of psychological and wellbeing impairment in medical students (Bacchi & Licinio, 2015; Dahlin et al., 2005; Knipe et al., 2018; Pan et al., 2016; Puthran et al., 2016; Rotenstein et al., 2016; Soh et al., 2012). There is, however, little guidance on how schools can best translate and interpret wellbeing mandates into practice. Instead, medical schools must draw on their own culture and ethos and, within the limitations and possibilities of their contexts, decide how best to fulfil their duty of care towards supporting student wellbeing.

As a result, many medical schools design their interventions and approaches with an individual-level focus, such as mindfulness sessions (Phang et al., 2015), lifestyle programmes (Hassed et al., 2009) and nutrition and dietary planning (Coleman et al., 2021). Generally, these approaches aim to give students the skills to self-manage their own wellbeing. However, typically they only address one aspect of wellness, such as burnout (Brubaker et al., 2020), and/or target specific groups rather than all students (Huhn et al., 2016).

An alternative approach, and the one on which we focus in this paper, is that of structured, programmatic and school-wide approaches towards supporting multiple aspects of student wellbeing. The key distinctions between the nature of support provided at an individual level versus school-wide support can be characterised by the latter's aims to promote overall wellbeing by addressing multiple dimensions of wellness such as physical, emotional, social, and even spiritual, and how these dimensions may interact to affect wellbeing. Additionally, school-wide programmes target all students and typically spanning all years of the medical programme (as opposed to being one-time interventions). We use the term "holistic" to describe school-wide programmes that take such a coordinated and integrated approach to support students' overall wellbeing.

What literature there is to support these more holistic, programmatic approaches comes from high school education and tends towards the descriptive, extolling how such "house" or advisory systems personalise education and help students to feel more supported (Burgess et al., 1980) (see Box 1 for a brief introduction to school-wide wellbeing systems), alleviate isolation and marginalization (Brennan, 2012), and improve academic performances (Oxley, 1990), but with little concrete evidence supporting these grand claims. As a result, school-wide programmes to support students remain mostly unexamined and little is known about how they work. This is particularly troubling given the substantial manpower and financial resources required to implement and sustain such programmes (Oelschlager

Box 1 The history of "house" systems

Even though school wide approaches towards wellbeing are a relatively recent development in medical education, their origin goes back to a much longer tradition. As early as the mid nineteen century, English novels such as Tom Brown's *School days* described a system of assigning boarding school pupils into houses with house masters, to foster belonging; provide care, guidance and education; and encourage sporting, social and academic competition amongst students in different houses (Dierenfield, 1975). Depending on the school, these houses could be physical as well as social entities (in other words, for example, students from Freeland House also lived in Freeland House). This system continues to the present day in boarding and day schools in the United Kingdom (UK) and elsewhere and is represented in fiction via Hufflepuff, Ravenclaw, Slytherin and Gryffindor at Hogwarts School. It is also seen in the United States (US) universities, as depicted (less salubriously) in the 1980's "Animal House" movies

et al., 2011), especially in contexts where they operate in parallel with other university-provided support systems (Baik et al., 2019). Understanding the processes of school-wide student wellbeing programmes will help medical schools plan, implement and ultimately evaluate the outcomes of such programmes, and justify the necessary investment.

As a first step to investigate the black box of wellbeing programmes, this paper presents a critical narrative literature review of school-wide student wellbeing programmes (Greenhalgh et al., 2018). We argue from a constructivist perspective (Watling & Lingard, 2012) that student support is a social, political, historical and institutional phenomenon. Working from this position, we used activity theory (AT) (Engeström, 1999; Frambach et al., 2014) as a theoretical lens.

The theoretical roots of AT can be traced to the works of Vygotsky, Leontiev and Luria, and Marx and Engel's notion of dialectic materialism that rejected the cartesian dualism of the individual and the environment as distinct entities (Frambach et al., 2014). AT posits that one's understanding of the world is continuously shaped by the socio-cultural environment and, as such, language and historicity are important to how meaning is constructed in AT (Engeström, 2001). Building on these philosophical and epistemological underpinnings, Engeström formulated what is now known as second-generation cultural-historical activity theory (CHAT), a conceptual framework to describe the complexity, structure and dialectic nature of human activities.

AT offers an ideal framework for scrutinising the design of systems (in this case wellbeing systems) by providing guidance on what elements of context to consider. AT provides an understanding of the patterns of activities, or how people carry out collective activities, within an organisational context (in this case, medical or veterinary medicine schools). AT posits that human learning takes place in the form of activities, and that within these activities it is impossible to disentangle the individual and the environment as the two continuously shape and influence each other.

An "activity system" has six elements, which can be broadly explained as: subject (participants), objects (purposes or goals), tools (mediating artefacts, structures and technologies), rules (processes), community (stakeholders), and division of labour (distribution of roles or tasks). AT is further characterised by its inherent dynamic nature and the interaction between different views and perspectives involved in the activity. This multi-voicedness in turn creates tensions, also known as contradictions, which can be triggers for change and even expansive transformation – collective changes that lead to new ways of doing things (Engeström, 1999), which is aligned to our ultimate objective of supporting medical schools to consider 'who is doing what, why and how' in relation to school-wide wellbeing programmes.

In using AT, our aim was to enhance transferability, so those with an interest in school-wide student wellbeing systems would be able to make connections between the data and their own experiences and contexts. The question that guided our search was: how is student support mediated within school-wide wellbeing programmes in health professions education?

Methods

Methodology

We used a critical narrative approach to create a rich description that could provide conceptual contribution, rather than to answer a specific, single empirical question (Grant &

Booth, 2009). We applied a systematic search strategy for our narrative review (Greenhalgh et al., 2018), and then focused on critically interpreting the identified studies to gather insight into how school-wide programmes are structured and used, for the purpose of advancing understanding and identifying new questions (Boell & Cecez-Kecmanovic, 2014). This qualitative synthesis of the data was appropriate in the context of our research question (Oakley, 2006) and could be considered broadly thematic (Braun & Clarke, 2012) given our aim was to identify the most relevant literature to inform our activity theory analysis.

Literature search

To inform our search, we conducted a hand search of several medical schools' websites to identify key words associated with school-wide wellbeing programmes in March 2021. While there is no universally accepted definition, we characterised whole-school programmes as those that are structured, programmatic, and adopt a school-wide approach towards supporting multiple aspects of student wellbeing. In short, our working definition of 'school-wide" was a programme where support was offered to all students in the system/organisation.

Working with a library information specialist and using these key words we generated an initial list of search terms (English language only), including: "wellbeing programmes", "learning communities", "house systems", "personal tutors", and broader term such as "student support", "support group", "student services", "student welfare", and "organisational structure" (see Supplementary Digital Appendix 1 for a sample of the search strategy that we have used for searching Ovid Medline). Following the advice of the library information specialist, the databases selected as being the most likely to yield references relevant to the research question were: British Education Index, CINAHL, Education Source, ERIC, Ovid Medline and Scopus.

Our inclusion criteria were: published in English language in a peer-reviewed journal; articles that described whole-school wellbeing programmes (i.e. at a structural or systems level); included some form of data (e.g., survey data, or qualitative rich description); and full-text availability. Studies that primarily targeted only a specific student group (rather than the whole student group), pilot studies, studies with non-medical/non-veterinary medicine students, studies that involved residential arrangements or focused on mentorship or administrative aspects of programmes, as well as commentaries and letters, were excluded. We searched from database inception. ET conducted the first search in May 2021, and the follow up search two years later in May 2023.

The first search yielded a total number of 5538 records. Duplicates were removed, leaving 2851 records, the abstracts and titles of which were reviewed by ET. This resulted in 20 papers for full-text review. We also did a hand search of the reference lists of these 20 papers which yielded two additional papers for full-text review. We then used the TREND (Des Jarlais et al., 2004) (Transparent Reporting of Evaluations with Nonrandomized Designs) checklist to guide our data review process. TREND was appropriate for our purpose given the nature of the topic and the studies we had identified. Records were managed in EndNote (Clarivate, Philadelphia, Pennsylvania). ET led on the full-text reviews with JC reviewing seven of the 22 papers independently to provide a second opinion on whether or not they met the inclusion criteria.

All four authors (ET, JF, ED, and JC) met regularly to discuss the data, discuss and resolve any discrepancies in categorisation of papers. At this point we made the decision to remove papers referring to "learning communities". Our rationale was that, although learning

communities are characterised by purposefully created groups and longitudinal faculty-student relationships, their main purposes seemed to be academic and educational, not student support (Osterberg et al., 2016; Shochet et al., 2019). This left a total of 10 papers.

We also carried out a secondary search in May 2023, using the same terms and processes, to identify and include any studies published since the time of our original search. This yielded six additional studies which were reviewed by ET and JC, five of which were then incorporated into the analysis. Table 1 provides an overview of the final data corpus of fifteen papers including author details, year and country of publication, name of the programme, institution, study design, and the focus of the study.

Data analysis

We critically analysed the identified studies using Engestrom's activity theory (Engeström, 2001). This lens allowed us to articulate the complexity and structures of the wellbeing programmes under scrutiny in the identified papers. We started by mapping the studies into the six elements of the Activity System and describing key characteristics of these elements. We then sought to further synthesize the findings by examining the tensions and contradictions within the system, how and when these arise—for example, an academic concern intersects with socio-emotional issues—and thus explore how the mechanisms for support within these systems are improvised, negotiated and prioritised. All authors met regularly to discuss this theoretically informed analysis.

Reflexivity

Reviews are driven by the questions they seek to answer and by reviewers who may interpret the issues from different philosophical perspectives. The authors are either health professions educators with an interest in student support and/or social scientists working in the field of health professions education research. We explicitly acknowledged our subjectivity and used the principles of cooperative enquiry (i.e., discussing findings, and critically reflecting and expanding on them) (Reason, 2002) on an ongoing basis to address this within the group. This was accomplished by maintaining an audit trail of the developing interpretation via virtual meetings and e-mail correspondence.

Ethical approval

This was a review of previously published literature. Ethical approval was not required.

Results

Study characteristics

Studies originated from the US (Agarwal & Lake, 2016; Drolet & Rodgers, 2010; Edmonds et al., 2022; Hauer et al., 2022; Macaulay et al., 2007; Royal et al., 2017; Sastre et al., 2010; Slavin et al., 2014), Canada (Kulman-Lipsey et al., 2019) and UK (Abrams et al., 2020; Cottrell et al., 1994; Haldane & Alexander, 1980; Malik, 2000; Sayer et al., 2002; Taylor, 1997). Most of the papers were published since 2000, many in the last 10 years

Table 1 List of included articles

S/N	Author(s) and year	Country	Institution	Name of its programme	Study Design	Focus of study
1	Abrams et al. (2020)	UK	UK-based Medical School *(The corresponding author is affiliated with the University of Surrey)*	Personal Tutor System	Qualitative study	To explore interactions between GP tutors and students and evaluates how personal tutoring can support the ways in which students respond to the medical school culture and its demands
2	Agarwal and Lake (2016)	USA	Northwestern University's Feinberg School of Medicine	Longitudinal Professional Development and Wellness Medical Student Curriculum	Survey	To present the evaluation of the course, share lessons learnt, and suggestion areas for future improvements
3	Cottrell et al. (1994)	UK	London Hospital Medical College	Personal Tutor System	Survey	To describe a questionnaire survey of the personal tutor system
4	Drolet and Rodgers (2010)	USA	Vanderbilt School of Medicine	Vanderbilt Medical Student (VMS) Wellness Programme	Survey	To describe the development, implementation and model of its Wellness Program
5	Edmonds et al. (2022)	USA	Mayo Clinic Alix School of Medicine-AZ	Wellness Curriculum	Survey	To evaluate 1) medical students' level of engagement with a multifaceted wellness curriculum; 2) factors students perceived as important to wellbeing; 3) associations with longitudinal measures of wellbeing and perceived stress
6	Haldane and Alexander (1980)	UK	Aberdeen University	Regent Scheme	Survey	To assess the regent scheme
7	Hauer et al. (2022)	USA	University of California, San Francisco, School of Medicine	Bridges Curriculum coaching program	Survey plus focus groups	To evaluate the programme with students and coaches' experiences in relation to the programme's aims

Table 1 (continued)

S/N	Author(s) and year	Country	Institution	Name of its programme	Study Design	Focus of study
8	Kulman-Lipsey et al. (2019)	Canada	University of Toronto	Resilience Curriculum	Survey plus focus groups	To explore the attitudes of medical students who experienced the resilience curriculum
9	Macaulay et al. (2007)	USA	Columbia University College of Physicians and Surgeons	Advisory Dean Programme	Survey	To describe the advent and evolution of its Advisory Dean Program and report early student feedback and changes
10	Malik (2000)	UK	University of Dundee	Personal Tutor System	Survey plus interviews	To evaluate the student support scheme and determine the factors which are essential for success
11	Royal et al. (2017)	USA	North Carolina State University	House System	Survey	To describe the development and implementation of its wellness programme that is based on the House System
12	Sastre et al. (2010)	USA	Vanderbilt University School of Medicine	Advisory College Programme	Survey	To describe the development of an Advisory College Program and assess its effectiveness compared to a traditional one-on-one faculty advisor system
13	Sayer et al. (2002)	UK	St Bartholomew's and the Royal London School of Medicine	Pastoral Pool	Survey	To evaluate the need for and expectations of the programme from both students and members, and describe its utilisation

Table 1 (continued)

S/N	Author(s) and year	Country	Institution	Name of its programme	Study Design	Focus of study
14	Slavin et al. (2014)	USA	Saint Louis University School of Medicine	Curricular Change	Survey	To describe its implemented curricular change programme
15	Taylor (1997)	UK	University of Liverpool	Personal Tutor System	Survey	To evaluate the student experiences of the personal tutor system at Liverpool Medical School

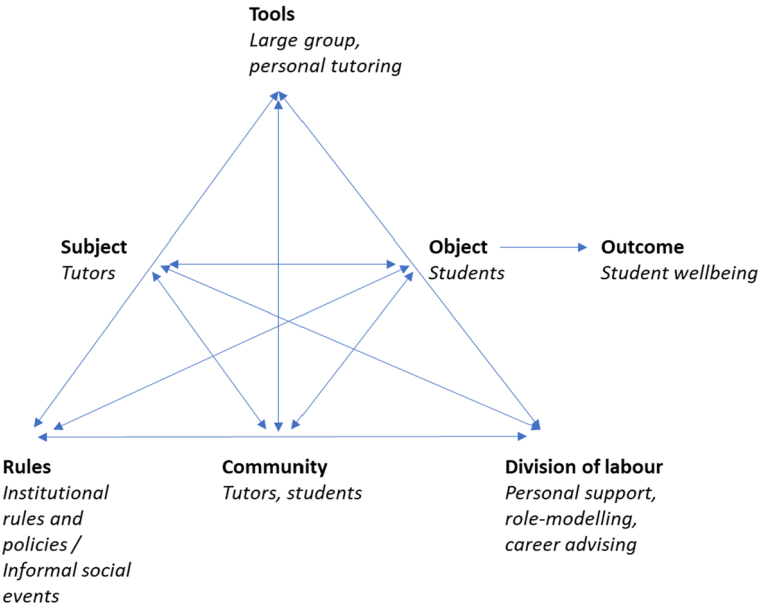

Fig. 1 An activity system of supporting students through school-wide programmes, adapted from Engestrom's second-generation CHAT (Engeström, 2001)

(Abrams et al., 2020; Agarwal & Lake, 2016; Edmonds et al., 2022; Hauer et al., 2022; Kulman-Lipsey et al., 2019; Royal et al., 2017; Slavin et al., 2014). See Table 1 for an overview of the descriptive characteristics of the included studies.

Analysis using activity theory

The unit of analysis in this study is the activity of supporting student wellbeing (Fig. 1). We selected tutors as the subject of this activity because of the key role played by tutors in the school-wide programme of all the identified papers. We use the term 'tutor' to encompass faculty and staff members who were involved in the support of students in the wellbeing programmes (Hughes & Bowers-Brown, 2021). The papers indicated that tutors played a crucial role in fostering a sense of connection among students and often how students feel about the wellbeing programme (Simons et al., 2022). By foregrounding the tutor's role as the subject of analysis, our aim was to illuminate the fundamental significance of tutors within the context of student support systems.

We also defined the object of this activity as supporting students (object) with the aim of improving their wellbeing (outcome). The activity is governed by school policies (rules) and mediated by the events and other activities of how the programmes are organised (tools). Each tutor also works with other tutors and student leaders (community) and depending on their roles they perform different tasks required of them within the house system (division of labour) (See Table 2).

Subject

In all identified studies, tutors were assigned a key role in supporting student wellbeing, yet their formal and informal tasks varied, as described in further detail in the "division of labour" section. Another aspect that differed among the studies was how tutors were selected for their role. How tutors come into being is important as this process may shape what they can do in their role and/or how they influence the system. Four studies (Drolet & Rodgers, 2010; Hauer et al., 2022; Macaulay et al., 2007; Sastre et al., 2010) described the provision of a formal selection process for wellbeing system tutors. In other contexts, tutors were recruited without any formal selection (Cottrell et al., 1994; Haldane & Alexander, 1980; Malik, 2000). Tutors were mostly recruited from internal faculty and staff (Drolet & Rodgers, 2010; Haldane & Alexander, 1980; Hauer et al., 2022; Macaulay et al., 2007; Royal et al., 2017; Sastre et al., 2010; Sayer et al., 2002). There was little consideration of the possible relationship between how a tutor was recruited and how this might affect the activity system. As exceptions to this, one study suggested that the tutor's professional background may be important as "students who had a GP (general practitioners) as their tutor were more likely to rate the scheme highly" (Malik, 2000, p. 640), and another study suggested that "GP tutors provided students with different perspectives on how to manage some of the demands of medical school …" (Abrams et al., 2020, p. 294).

Object—outcome

School-wide wellbeing programmes tended to have multiple goals: fostering greater social connection amongst students, and between student and faculty; supporting professionalism and emotional wellbeing; and career advising. The object and goal of the programmes were inextricably influenced by the local context. To illustrate, the house system described in Royal et al. (2017) paper consisted of five broad outcomes that encompassed "intellectual growth, mental and emotional health, social distance reduction, cultural competence, and physical health" (p75). But its cultural competence outcome was related to the specific socio-cultural context of the veterinary profession which is "one of the least ethnically integrated", and thus "specific measures may be needed to improve inclusivity" (p74). In another study by Macaulay et al. (2007), institutional factors such as the "perceived disconnect between the faculty of the medical center and the students" (p718) became a driving force that shaped the development of their advisory dean programme.

Whilst almost all programmes aimed to promote or address personal wellness, what constituted wellness varied. Wellness typically encompassed stress reduction and providing a point of contact for support for mental, spiritual and/or physical health. It could also involve social development, role modelling, and referral gatekeeping. Career advising and career development also featured as programme aims (Drolet & Rodgers, 2010; Macaulay et al., 2007; Sastre et al., 2010), suggesting that the aims of some school-wide programmes are multiple (e.g., guiding professional development as well as supporting student wellbeing).

Table 2 Key characteristics of Studies mapped to Activity Theory

S/No	Author(s) and year	Subject *(How tutors are selected)*	Object *(Aim(s) of the Programme)*	Tools *(Organisation of the programmes)*	Rules *(Mediating factors)*	Community *(Members of the activity system)*	Division of labour *(Role(s) of tutors in these programmes)*
1	Abrams et al. (2020)	NA	To provide both academic and pastoral support	NA	The conversations between tutors and students included personal and professional stories of growth and failure	This study focused on personal tutors, who are General Practitioners (GP)	Provided role-modelling and supported the students in their professional development
2	Agarwal and Lake (2016)	NA	The main goals were to help students develop a more balanced and realistic understanding of the medical profession, to foster resilience, to promote help-seeking culture, and normalise common struggles and provide a platform for self-reflection	Each medical school class was divided into 4 colleges, and each college was assigned faculty mentor who remained consistent throughout the programme	Blogs were used to encourage reflection, with faculty and peers providing their comments on the entries. This enabled students who are less openly expressive to share their thoughts	Members comprised of tutors and students. Some students expressed their unease in sharing personal matters with their peers	Provided role-modelling on appropriate sharing of challenges and their vulnerabilities as doctor
3	Cottrell et al. (1994)	Recruitment on an ad hoc basis; some volunteered for the role	To oversee the general educational development of students and to help with any personal or academic difficulties	The personal tutor scheme was led by 3 senior clinical tutors. Students could also approach the Dean of Medical Studies for support	Social engagements, including dinners. Tutors indicated that they were not familiar with the school's guidelines regarding the system	The personal tutors were primarily staff from the National Health Service (NHS), and not staff member of the medical school	Held diverse roles, including providing advice on examination and careers

Table 2 (continued)

S/No	Author(s) and year	Subject *(How tutors are selected)*	Object *(Aim(s) of the Programme)*	Tools *(Organisation of the programmes)*	Rules *(Mediating factors)*	Community *(Members of the activity system)*	Division of labour *(Role(s) of tutors in these programmes)*
4	Drolet and Rodgers (2010)	Formal nomination and interview process by student and faculty for its Advisory College (AC) Programme	The VMS Wellness programme comprises of three main components and its overall aims were to address the wellness needs of medical students by focusing on the principles of mentoring and advising, student leadership and personal growth	The AC programme comprised of 4 AC. Each AC was led by 2 faculty AC directors	Social events included welcoming events, and a College Cup competition	Members included faculty and students (leadership, peer-mentoring and etc., especially in the Student Wellness Committee)	Provided various roles, including mentoring, wellness advising and career counselling
5	Edmonds et al. (2022)	NA	The wellness curriculum provided institutional resources, seminars, and a variety of non-mandatory activities	NA	Students valued unscheduled and protected time for activities not related to school or academic activities	Members comprised of students, faculty, and administration (wellness committee)	Organised and initiated wellness activities for the students

Table 2 (continued)

S/No	Author(s) and year	Subject *(How tutors are selected)*	Object *(Aim(s) of the Programme)*	Tools *(Organisation of the programmes)*	Rules *(Mediating factors)*	Community *(Members of the activity system)*	Division of labour *(Role(s) of tutors in these programmes)*
6	Haldane and Alexander (1980)	No formal selection process nor defined criteria to guide selection	The scheme was designed to offer pastoral care and provide students with an individual whom they could seek non-medical support from	During the first year, the Regents organized meetings with their regentees. Subsequently, the responsibility shifted to the students	Regents were expected to collaborate with the school's committees to support students. However, regents lacked familiarity with the roles and functions of these committees, leading to unsatisfactory communication experiences with them	Members comprised of regents and staff from health and welfare services at the university-level	Provided support on practical matters, emotional or psychological concerns, and academic matters
7	Hauer et al. (2022)	Formal process involving open call to faculty, chair's nomination and interviews	The programme aimed to foster personal and professional development, advance physician skills with a growth mindset, and promote student wellbeing and belonging	Each coach was assigned with approximately 12 students, who remained under their care untilgraduation	Students appreciated the non-evaluative and longitudinal relationship with their coaches	Co-learning between coaches was appreciated by the students	Provided diverse roles, including advising, personal wellness and the coaches adapted their roles to meet changing needs

Table 2 (continued)

S/No	Author(s) and year	Subject *(How tutors are selected)*	Object *(Aim(s) of the Programme)*	Tools *(Organisation of the programmes)*	Rules *(Mediating factors)*	Community *(Members of the activity system)*	Division of labour *(Role(s) of tutors in these programmes)*
8	Kulman-Lipsey et al. (2019)	NA	To encourage students to seek help and impart resilience building strategies	NA	Students valued the involvement of workshop facilitators, whose presence fostered participation and created a safe environment for discussions	Members included, students, student affairs staff, residents and physicians, and the university's Health and Wellness Centre	Various roles including facilitating workshops discussion and sharing of personal experiences
9	Macaulay et al. (2007)	Formal selection process involving faculty and student representatives. Selection criteria included faculty appointment, experiences and interests in the role	The main goals were: • Career counselling • Student – faculty connection • Introduction to humanism and professionalism • Stress reduction • Ongoing support and guidance for students	The Advisory Dean (AD) programme comprised of 5 ADs, and each AD oversaw about 30 students per class	Student-faculty lunches and contact time to build connection and discuss professionalism and role-modelling related topics	The initial members of ADs were led by individuals from various medical specialties	Provided various roles, including career counselling, resources to address stress and wellness, and on-going support, guidance and advocacy

Table 2 (continued)

S/No	Author(s) and year	Subject *(How tutors are selected)*	Object *(Aim(s) of the Programme)*	Tools *(Organisation of the programmes)*	Rules *(Mediating factors)*	Community *(Members of the activity system)*	Division of labour *(Role(s) of tutors in these programmes)*
10	Malik (2000)	The tutors had either volunteered for the role or invited to join the scheme	To introduce a more formal programme; to address the needs of the students and new curriculum	The student support scheme was overseed by a coordinator. Each tutor was assigned a group of 8–10 students	Students expressed a desire for more social activities between tutors and students. Students who participated in more social activities tend to have a better impression of the scheme	Tutors included specialists, registrars and GPs. Students perceived tutors who were specialists as less approachable and interested in their affairs	Served as a point of contact between the student and the academic staff; supported students' academic-related issues, and referred them to more appropriate university-level services
11	Royal et al. (2017)	Recruitment based on skills and interests within the institution	The goals were to promote: • Intellectual growth, • Mental and emotional wellness • Social development • Cultural competence • Physical health	The House System Model comprised of 4 Houses, and each house was headed by 2 faculty co-leaders	House Charter was created to guide the structure and implementation of the system. A year-end House Cup was awarded based on inter-house competition	Members included tutors and students who assumed leadership positions and played the role of peer mentors	Enabled greater accessibility to students for support

Table 2 (continued)

S/No	Author(s) and year	Subject *(How tutors are selected)*	Object *(Aim(s) of the Programme)*	Tools *(Organisation of the programmes)*	Rules *(Mediating factors)*	Community *(Members of the activity system)*	Division of labour *(Role(s) of tutors in these programmes)*
12	Sastre et al. (2010)	Nomination process involving students and approval from the College of Medicine Deans	To support a core group of interested faculty engaging their students in structured activities, with 2 primary pillars of promoting personal wellness and assisting in career development	The Advisory College programme comprised of 4 advisory colleges, each co-led by two faculty members called Advisory College Directors	The frequency of meaningful contacts with advisors, and their perceived approachability and accessibility affected the mentoring relationship. There were also college-wide social events and wellness retreat	The members included the Advisory College Directors as well as school leadership, such as regular meetings with the Associate Dean of Student Affairs	Assumed diverse roles, including career counselling and wellness advising
13	Sayer et al. (2002)	Nomination by student body	To provide pastoral care by staff who are interested in student welfare	Students accessed the pastoral pool (PP) by self-referring themselves to a PP member of their choice	Confidentiality was highlighted as a strong barrier to accessing support from the PP scheme	Besides PP, staff from university level also provided support. PP members had an advantage over general university support as they were more familiar with the academic context and its associated stresses	Provided support to a wide range of issues, including coping concerns, personal and financial difficulties

Table 2 (continued)

S/No	Author(s) and year	Subject *(How tutors are selected)*	Object *(Aim(s) of the Programme)*	Tools *(Organisation of the programmes)*	Rules *(Mediating factors)*	Community *(Members of the activity system)*	Division of labour *(Role(s) of tutors in these programmes)*
14	Slavin et al. (2014)	No additional staff required	To promote student wellness through curricular changes	NA	Social events were offered to all students throughout the year	Members included faculty, students, alumni, as well as the Office of Curricular Affairs, and the Office of Student Affairs	Diverse roles including mentoring and engaging students in various aspects of curricular changes
15	Taylor (1997)	NA	NA	NA	Students regarded confidentiality as their top concern in the personal tutor system	The tutors comprised of different genders and professional training. Students regarded the gender and whether their tutor was a doctor to be of lesser significance in their evaluation of the personal tutor system	Approachability, availability, trustworthiness and accessibility are regarded as important for the personal tutor's role

Tools

We characterised the organisation of school-wide wellbeing programmes as the tools, or artefacts that mediates how tutors carried out their duties. The literature revealed two main ways of organising the work processes: (1) large groups, the student population is divided into large groups, also known as houses or colleges, and each student is assigned to one of these large group (Agarwal & Lake, 2016; Drolet & Rodgers, 2010; Macaulay et al., 2007; Royal et al., 2017; Sastre et al., 2010), or (2) personal tutor systems, known by names such as the Personal Tutor System (Abrams et al., 2020; Cottrell et al., 1994; Malik, 2000; Taylor, 1997) Pastoral Pool (Sayer et al., 2002),Regent Scheme (Haldane & Alexander, 1980), and Coaching Programme (Hauer et al., 2022). How these modes of organisation came about seemed to be shaped by history (success or failure). For instance, one study described how an analysis of the strengths and weaknesses of their original system was used to inform the development of a new wellbeing programme (Sayer et al., 2002). Another study reported implementing curricular changes in response to student evaluation data that identified the volume of learning materials and grading systems as their primary source of stress (Slavin et al., 2014).

Rules, community, and division of labour

Institutional rules and policies mediated the connections between students and faculty. This was reinforced by tutor training which, where it happened (or was reported), generally involved familiarising tutors with school and university policies, resources and priorities (Drolet & Rodgers, 2010; Haldane & Alexander, 1980; Macaulay et al., 2007). One study explicitly described how its curricular change programme was carried out in partnership with its university Health and Wellness Centre (Kulman-Lipsey et al., 2019). This illustrates that the activity system of a school-wide student wellbeing programme is nested and connected in the larger university system (Sayer et al., 2002). This also raises questions on how the wellbeing system and its tutors interface with, and navigate, the larger university. However, we did not find any data on this level of interaction within the studies identified and reviewed.

The other mediator was social and competitive events that seemed to serve to regulate the relationships in the activity system. For example, the goals of social events were typically to create a sense of belonging and safe space; and/or to facilitate discussion of sensitive topics (Malik, 2000; Royal et al., 2017; Sayer et al., 2002). However, these rules are complex and may also lead to contradicting, negative, unexpected outcomes: social events could be anxiety-provoking for some students and were not always liked by students (Royal et al., 2017). Some students also valued protected time for activities that were not related to school or academic activities (Edmonds et al., 2022). There were some less than positive outcomes for competitive events, such as year-end ceremonies with trophies and awards (Drolet & Rodgers, 2010) and interhouse competitions (Royal et al., 2017; Sastre et al., 2010):

> "competition between houses might inadvertently pit students against one another. Further, if students take the competitions too seriously it may result in poor academic performance and/or a fragmented student body" (Royal et al., 2017, p. 80).

Tutors and students are members of the community within the activity system. Tutors perform the supporting activity and students are actively involved in the system, with key roles in providing leadership, peer advising, counselling and support (Drolet & Rodgers, 2010). In saying this however, it is important to note that the student contribution to the AT should not be regarded as homogeneous. For example, one study highlighted the variation among students on their willingness to share personal matters with their peers (Agarwal & Lake, 2016). Administrative staff and offices were also important members of the activity system, in the planning and organising of programme activities (Edmonds et al., 2022; Slavin et al., 2014).

As for the division of labour, tutors took on a wide variety of roles such as providing personal support, counselling and career advising (Cottrell et al., 1994; Macaulay et al., 2007; Sastre et al., 2010). Some took on the roles of mentoring and organising wellness activities (Edmonds et al., 2022; Slavin et al., 2014). The tutors also functioned as role models, contributing to student professional identity formation. For example, Abrams et al. (2020) recorded the interactions between tutors and students and suggested that:

> "having students interact with a tutor who has encountered similar challenges and overcome them could help students feel less isolated and for struggle to become normalised as a point of professional development. This sharing of relevant experiences may act, as demonstrated in our study, as a way to cultivate a trust-based rapport and an environment where vulnerability is encouraged." (p294)

Tensions within the activity system

Having mapped the studies into the six elements of an activity system, we now turn our attention on synthesizing the findings more holistically to examine potential tensions and contradictions in the system (Engeström, 1999). We found that tutors experienced tensions between the demands of their supportive role and the lack of protected time (Malik, 2000) and/or training for the role (Cottrell et al., 1994), as well as a lack of clarity as to their role in the system. The following extract illustrates all of these tensions. Cottrell et al. (1994) state: "it was worrying for the College that so many tutors ***were not aware of the college guidelines on the personal tutor system*** and that so many felt unsupported by the College. Many of the tutors were NHS (National Health Service) employees and not Medical School staff. Thus, ***the voluntary nature of the scheme***, and ***a desire to present the personal tutor as 'independent' of the College*** and someone to whom students could go to with problems had ***perhaps led to a reluctance to insist on regular contact between the tutors and the College***." [emphasis added] (p549).

Despite tutors voicing good intents to support students, relational issues (e.g., trust) meant students were not always willing to accept or seek help and advice from their tutors (Cottrell et al., 1994). Students needed to feel safe to ask for help (Drolet & Rodgers, 2010), and presumably expect help if they seek it out. As Malik (2000) observed in his study, "meeting on a regular basis was linked to the establishment of a good relationship and the students' perception of how approachable their tutor was". (p637). Similarly, another study reported that students valued tutors who played a non-evaluative role with regard to their academic progression (Hauer et al., 2022). However, this may not be forthcoming where tutors are not aware of the rules and/or where the system is not set up in such a way to foster trust. We found that tutors and students constantly need to engage in improvisation and negotiation to address these and other challenges (Lingard et al., 2012).

Related to this, we observed a tension between student concerns about confidentiality issues (Sayer et al., 2002; Taylor, 1997) and their willingness to ask for help from their tutors. In resolving this tension, the tutors sought to negotiate with students by reassuring and emphasizing confidentiality between them (Sayer et al., 2002), such as by ensuring confidential record keeping (Drolet & Rodgers, 2010). This issue of confidentiality was an ongoing issue, summed up by Sayer et al. (2002):

> "Students strongly cited fears over confidentiality as a barrier to approaching their pastoral support system … There is tension between the need to assure students of the confidential nature of the interactions in order to ensure uptake, and the belief that the sharing of information with others involved in student guidance and progress will allow for the provision of cohesive support and prevent staff members trying to cope in isolation." (p657).

Discussion

Our focus in this narrative review was to identify and critically analyse the literature on school-wide wellbeing programmes. Our first message is that there was remarkably little literature on this important topic. In an era where there is much concern about supporting student wellbeing, medical schools have little guidance from published literature on how best to plan, implement and, ultimately, evaluate resource-intensive wellbeing programmes. However, a theoretically-framed scrutiny of this limited literature allowed us to identify the salient characteristics and mediating factors that influenced the activity of supporting students. We found that tutors working within school-wide student wellbeing programmes must know and navigate institutional rules, engage socially with students to build trust, and contend with confidentiality issues.

We identified confidentiality as a recurring tension that threatens to destabilise the wellbeing activity system. Students are wary on how much to trust a school-wide wellbeing programme, what is confidential, what is not, and what would be potentially detrimental to divulge to tutors. Tutors also struggle to know how to manage these tensions. Tutors and the wellbeing programme itself must inspire trust and instil confidence for the activity system to "work". Clear policy and guidance on how the school and tutors manage confidential issues might be helpful in reducing students' scepticism and foster trust, but acknowledging the existence of this tension is not enough. Both tutors and students need to be aware of these rules and have confidence in them.

Medical schools must take proactive actions to manage the forces pulling at the knot which are often mediated by intangible attributes such as trust as well as tangible official policy and guidelines. This may be achieved via regular evaluation and open dialogue with the student population to assess the effectiveness of the support system and the tutors within the system. Tutors must also feel empowered by the school to exercise agency and make informed decisions on supporting their charges. Taken together, we suggest that it is possible to enhance the overall effectiveness of wellbeing programs by facilitating the development of these implicit attributes which are aligned with the explicit school and university's policies and guidelines.

In this light, our findings offer starting points for further considering the positioning of school-wide wellbeing programmes within the institutional and student community. Instead of having students visit a wellbeing office or confidential advisor at the university-level,

school-wide programmes shift student support to be distributed, decentralised to houses or personal tutorship. These distributed communities are both "real" and "imagined" at the same time (Anderson, 2006). The students may never know everyone. Yet some will feel more attached and have a greater sense of belonging than others, and hence have a sense of an "imagined community". The interplay between these distributed communities and key attributes related to trust and confidentiality are an area for further exploration. In addition, our findings suggest that school-wide wellbeing programmes often seemed to be a "bolt on" to core business. Tutors didn't have enough time or training, did not feel supported in the role, and how they were selected did not always inspire confidence. How much is too much or too little in terms of recruitment processes, training and staff support is currently unknown and an area for future study.

Overall, given that the research of school-wide programmes is relatively a new area of research, we propose several suggestions to take this research to the next level and stimulate discussion amongst health profession education scholars. Firstly, our understanding of school-wide programmes can be further advanced by undertaking more studies using a greater diversity of research methods than in the research to date. Given that how students feel about the support system can be a very personal thing, our knowledge on this area could benefit greatly from qualitative research methods (Tavakol & Sandars, 2014); observing wellbeing activities (Atkinson & Pugsley, 2005), understanding students' and tutors' lived experiences (Groenewald, 2004) and generating theories (Kennedy & Lingard, 2006) to advance our understanding. Second, if further survey studies are desired, for example, as a means of gathering information from a large number of students/tutors, the use of standardised instruments would allow comparisons across contexts (e.g., Rosenbaum et al., 2007; Tackett et al., 2018)). Third, the success or otherwise (we do not know) of school-wide wellbeing programmes is unknown. Moreover, the relationship between school-wide wellbeing programmes in medical schools and the university-wide student support systems is unclear. Given the huge resource in terms of staff time, outcome-focused studies are long overdue in this area.

The use of activity theory illuminated the contextual nature of school-wide programmes. As per Fenwick, "context may be critical, but to understand context simply as an abstract container is to miss the turmoil of relationships among these myriad non-human as well as human elements that shape, moment to moment, particular dynamics of context" (Fenwick, 2014, p. 46). In other words, thick description is needed to gain insight into "what actually happens on the ground—what people are doing" (Kearney et al., 2019, p. 19), how school wide wellbeing programmes are nested in wider university systems, and how such programmes develop and evolve. Given the critical role played by the tutors in school-wide programmes, a critical area for further studies would be to deepen our standing of the tutor's role vis-à-vis the school and university systems. Understanding how institutional rules and policies, and tutor and student experiences, are explicated in the activity system of wellbeing programmes is also critical, in order to inform the development of school-wide programmes (Campbell & Gregor, 2002). There is much complexity to be unravelled.

Limitations

One limitation of this review is the relatively small number of studies identified by our search. This may be associated with our inclusion and exclusion criteria, including our focus on English language publications only, which may have resulted in an exclusive representation of studies from the USA and UK. At the same time, our small selection does

indicate that this topic is woefully under-researched. Many medical schools are likely to have school-wide programmes but they are not publishing work on either the process or outcomes of their school-wide programmes. Local evaluations may be informing local practices but without public sharing, such scholarly work cannot be critiqued or evaluated, nor can the quality of such school-wide student wellbeing systems be enhanced (Cleland et al., 2021; Kreber, 2003).

Our decision to use activity theory was both a strength and limitation. As a framework, this theory is useful in magnifying the human agency of the stakeholders, accommodate the complexities, and exploring the mediating aspects of these programmes in our review. Nevertheless, we acknowledge the inherent limitations of activity theory, particularly on its lack of clear rules on its methodology (Johnston & Dornan, 2015), and that it is but just one way to examine holistic, school-wide wellbeing programmes—another theory might have foregrounded or emphasized other aspects of the data (Bordage, 2009).

Conclusion

School-wide wellbeing programmes provide a holistic, programmatic approach that aims to support multiple aspects of student wellbeing, including social connections and building a sense of community. Tutors play a key role in wellbeing systems. The time has come to investigate these systems in more detail, embracing and exploring the role of context at the same time as looking for common threads.

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