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Improving the operational (transformation) management process of postgraduate mentoring

Author: Dr Claudia M. Bordogna[1]

Abstract

Purpose: Universities in the United Kingdom, like their counterparts globally, are confronting difficulties associated with the wellbeing of students. The origins of these challenges are complex, exacerbated by various global events. In response, universities are trying to address these growing concerns and the escalating need for student support. Faculty members are often recruited to assist students in navigating academic and personal challenges. The aim of this study was to investigate how the process of student mentoring, by faculty members, could be made more operationally robust to better support student demand, thus yielding greater value for both students and staff.

Design/methodology: A qualitative approach was adopted with 19 academic faculty working as mentors within a UK business school who participated in 90-minute semi-structured interviews. Interviews were analysed using an operational (transformation) management framework, with findings categorised under three key headings – inputs, transformations and outputs – to discover how the operational process of mentoring students could be enhanced.

Findings: Participants discussed the inputs required to deliver mentoring, the process of transformation and their desired outputs. Findings suggest coordinated and relevant inputs that is, information, environments and technology, coupled with good mentor selection and recruitment improves operational robustness, adding greater value to the student experience by creating more purposeful outputs, thereby benefiting themselves and their students.

Originality: The application of an operational (transformation) process framework to analyse faculty mentoring of students is unique, thereby offering new insights into the construction and management of these types of academic support initiatives.

Key words: Operational management, higher education, transformation, postgraduate students, mentoring.

[1] Claudia.bordogna@ntu.ac.uk Dr. C.M. Bordogna at Centre for People, Work and Organisational Practice, Nottingham Business School, Nottingham Trent University, 50 Shakespeare Street, Nottingham, NGI 4FQ.

Introduction

In recent years, the number of postgraduate students opting to study in taught master's programmes in the United Kingdom (UK) higher education system has been on the increase. The UK Higher Education Statistics Agency (HESA) reported in 2021–2022, the number of new enrolments in postgraduate taught courses rose 9% from the previous year to 526,645 (HESA, n.d.). As student numbers increase, so does the university ecosystem in terms of its diversity, complexity and resourcing (Lochtie *et al.*, 2022). Student growth in the UK, whilst financially beneficial to universities, has implications for university operational management processes since more infrastructure and human resource are required to service student personal and professional needs (Woods, 2023).

Although most universities globally offer some form of student support services (Shaheen *et al.,* 2020), these are often strained by the varied enquires and challenges students face whilst studying for a degree (Gubby and McNab, 2013; Woods, 2023). In response to this, universities often recruit academic faculty members to work as personal tutors, mentors or welfare tutors (Wakelin, 2023). Enrolling faculty members provides students with greater access to support whilst liberating student support services to conduct more complex wellbeing, mental health and welfare work. In addition, the COVID-19 pandemic highlighted the vital role played by academics in supporting student wellbeing. Support was available online (Adnan and Anwar, 2020), with conversations on mental health and feeling isolated commonplace. Therefore, the pandemic only sought to magnify the importance of academic faculty involvement in personal tutoring and academic advising since it became a critical element of student support in many universities and has not reduced following the pandemic (Browne, 2020).

Whilst research has investigated faculty perceptions of mentoring, the impact of mentoring (on retention, progression, employability), personalised support to enhance student satisfaction, and technology-enhanced online support (Etzkorn and Braddock, 2020; Grey and Osborne, 2018; Olivier and Burton, 2020; Wakelin, 2023; Woods, 2023), this study sought to specifically focus on understanding operational management. By applying an operational management framework, the aim was to produce evidenced-based recommendations to elevate current faculty-led student mentoring schemes.

The operational (transformation) management model was used to analyse the experiences of faculty members working as mentors to postgraduate students studying on taught master's courses, herein referred to as PGT, within a UK business school. The model focuses on the transformation of inputs into outputs, emphasising efficiency, effectiveness

and value creation within an organisation's operations, and is central to understanding how businesses convert resources (such as labour and information) into services to meet customer demand (and competitive advantage). In this context, faculty member comments and observations were examined under the three operational headings: inputs, transformation and outputs. From this, it became possible to identify key resource inputs required by faculty to ensure their mentoring creates transformational value, improving outputs for their students and themselves.

This article begins by examining literature focused on the growing need for student support and the consequence of this, which is to recruit more faculty members into student supporting roles. It continues by exploring the requirements and challenges associated with these roles. It then introduces an operational management framework, highlighting the value this type of model can have on our understandings of the intricacies surrounding support roles.

The growing need for student support

In the UK specifically, when tuition fees were introduced in England under the Teaching and Higher Education Act 1998, further increased under the Higher Education Act 2004 (Ryan, 2005) and again in 2010 with the Browne Review, the nature of higher education changed. Changes in funding redefined the traditional power relationship that once existed between students and higher education institutions (HEIs), with students now positioned as customers paying for a service. Further strategies of widening participation in the UK and in North America increased students attending from disadvantaged backgrounds, lower income households and under-represented groups (Connell-Smith and Hubble, 2018; Woods, 2023) such as LGBTQ+, multicultural, first generation and women's accessibility to college education in the United States (American Association of College and Universities [AACandU], n.d.).

The need to support and retain students from a host of diverse backgrounds has meant that universities have needed to adapt their support service offerings (Grant, 2006). Students are no longer considered a homogeneous group of 18-year-olds, transferring straight from high school to university. Moreover, diversity within the generations, for example, gender, sexuality, ideologies, cultural heritage, previous education, ethnicity, age and religion, also adds complexity. It is therefore not possible to assume all students are homogeneous in nature. On the contrary, each student is unique, requiring faculty members to spend time building rapport before offering beneficial guidance and support. Thus, faculty members who

participate in support roles might feel pressured to offer a fully integrated service of teacher, parent and pastor to students depending on their needs (Drake, 2011). This, coupled with the need to keep student satisfaction rates high on student surveys (Freeman, 2016) and institutions open to criticism on social media, is starting to impact staff confidence concerning student support (Hayman *et al.*, 2023; Wakelin, 2023). Hence, changes in generational dynamics and needs, such as mental health, gender identity, sexuality and employment prospects, coupled with global challenges such as inflation, wars in the Middle East and Ukraine, COVID-19 pandemic, AI and climate change have driven institutions to reconfigure their traditional academic advising roles to help students cope more generally with life's challenges.

One critical support system available to students is personal tutoring, a "key mechanism in this complex environment" (Stuart *et al.,* 2019, p. 2). However, increasing student–staff rations due to increasing student numbers, reduced funding, increasing pressure on staff to research and competing demands for resources and increased student expectations are all cited as causing significant strain on academic staff. Faculty members now spend time with students offering career advice, welfare support and existential guidance and facilitating academic engagement (Hayman *et al.,* 2023; Olson and Nayar-Bhalerao, 2020). The academic is now someone deemed "qualified" in getting their students to think about their role in the world, reflectivity, employability and life-long and life-wide learning. We therefore see the amalgamation of more traditional academic responsibilities with a more contemporary role, focused on student existentialism and self-actualisation outside the classroom (Raby, 2020). Research on academic staff tasked with supporting students is abundant, whereby the nuances of the role and how to better navigate university support systems is explored (Woods, 2023). However, whilst it is easy to articulate the role specification on paper, it is harder to deliver in practice (Ridley, 2006). Thus, understanding what the resource needs are of academics offering support to students is critical in ensuring staff members can perform optimally.

Exploring academic support: tutoring and mentoring

For the purposes of this study, whilst the terms personal tutor and mentor can be used interchangeably to describe someone who provides developmental support to a student, this research specifically investigates faculty members operating as mentors. This study is thus concerned with enhancing the liberating and developmental characteristics of mentoring such as encouraging autonomy, accountability, self-awareness and self-efficacy, whereby students

are encouraged to reflect and evaluate their own performance in the pursuit of excellence, as opposed to the more traditional, instructional approach of tutoring.

Depending on the terminology adopted by a HEI, an academic support role may contain elements of mentoring, coaching, instruction or tutoring. In the context of higher education (HE), many studies have examined the role of personal tutoring as opposed to mentoring (Braine and Parnell, 2011; Grey and Osbourne, 2018; Stuart *et al*., 2019; Wakelin, 2023, Woods, 2023). Since most existing literature contains the term "tutoring", as opposed to "mentoring", these sources were also used for analysing support roles. This was deemed acceptable because both tutor and mentor share conceptual space, often dealing with the same student issues, albeit taking a different approach to resolve issues. Tutoring often takes a more directed and instructional approach to help students overcome barriers quickly and efficiently (Stuart *et al*., 2019).

In contrast, a mentor is often an experienced, influential individual in a particular environment, a role model and facilitator of learning (Scandura and Williams, 2004). Por and Barriball (2008) further claim a mentor may be perceived as being a friend, counsellor, critic, career advisor and a monitor of progress. The behaviours and attributes often associated with being a mentor include active listening, open questioning, trust and benevolence (Starr, 2014), more closely aligned with terms which correspond with coaching or facilitation. Although similar to coaching in terms of the exploratory methods used, mentoring is more advisory in nature yet still promotes mentee agency through reflection and self-evaluation (Haider and Dasti, 2021). Furthermore, trust between parties is vital, so students feel able to openly discuss personal and academic issues (Grey and Osborne, 2018). For example, dealing with student career ambitions, financial woes, academic processes and regulations, processing assessment feedback and dealing with personal welfare (Hayman *et al*., 2023). It therefore starts to become clear that supporting students is a complex affair (Olson and Nayar-Bhalerao, 2020). Faculty therefore not only need certain characteristics to be a successful mentor, but also need access to a huge portfolio of skills and knowledge to ensure the student gets the right support, at the right time, in the right manner (Walker, 2022).

Introducing the operational (transformation) management framework

The role of operational management is to manage the transformation of an organisation's inputs into finished goods or services (Slack *et al.,* 2022). Inputs are split into two categories:

1. *Transformed resources* are the input elements which are acted upon and physically changed during the production or service delivery process. Resources that can be transformed are raw materials, information, data, components or people.
2. *Transforming resources* are the inputs in the operational process used to conduct the transformation of transformed resources (Greasley, 2009). In most cases, these consist of technology, equipment and workers who participate in the operations process.

In summary, transforming resources use skills, knowledge and expertise to work on inputs that need transforming, producing a desired output, which is the final product or service. It is important to understand the distinction between the two forms of resources because it helps organisations optimise their processes, identify opportunities for progress and allocate resources more effectively (Slack *et al.,* 2022). Moreover, it supports resource planning, quality assurance, risk management, cost efficiencies and scalability.

FIGURE 1

In the context of this study, the operational management process is used to contemplate the mentoring process – that is, what happens when academic mentors take various inputs and transform them by converting them into beneficial outputs. Figure 1 outlines the conceptual framework used to frame the chosen research method and subsequent data analysis. In this sense, faculty members function as a *transforming resource* by taking inputs and altering them to produce refined, mature students as outputs. Furthermore, these students, once transformed, provide feedback by evaluating their experiences, helping the transformation process, wider environment and system to enrich over time.

Additionally, students play a crucial role in this process as mentoring is aimed at transforming their experiences and outcomes. Therefore, the student mentee is the resource that is transformed during participation in mentoring meetings. However, mentors cannot transform mentees without their agreement because it requires they participate in the process and show willingness to evolve. This is what makes mentoring tricky because unlike tangible resources such as component parts or raw materials, the resource of students may resist transformation, rendering the transformation initiative worthless. However, if willing students are exposed to mentors with expertise and information, their cognition and psychological states positively change as they absorb the support offered to them (Haider and Dasti, 2021). Beneficial outputs of academic mentoring are clearly subjective and extremely nuanced but may refer to things such as improved academic performance, resilience, employability,

enhanced communication, motivation, self-awareness and self-efficacy (Al Makhamreh and Stockley, 2019).

A caveat at this stage. It is acknowledged herein that student participation is critical in the development of relations between mentor and mentee. However, in this study, student voices were substituted for those of faculty members. This decision was taken due to the numerous studies which have investigated students' perceptions of personalised support and how these can be utilised to improve such schemes (Braine and Parnell, 2011; Raby, 2020; Yale, 2019). Since this paper seeks to examine ways to improve operational resourcing and management from the perspective of the academic, it seemed logical to explore their experiences herein.

To explore the operational process of academic mentoring, this paper seeks to answer the following three research questions:

1. What resource *inputs* are required to enable faculty members to optimise a student's *transformation*?
2. How do mentors *feel they transform* their mentees?
3. What do faculty members perceive as being the desired *output(s)* of their mentoring?

Methodology

This investigation used a sole case study and applied an interpretivist paradigm, thereby supporting a qualitative methodology. A UK post-92 university (this refers to institutions that were granted university status through the Further and Higher Education Act of 1992) business school provided the backdrop to the research, whereby student personalisation and experiential learning are regarded by accrediting bodies, such as AACSB and Equis, as evidencing best practice in the sector. Due to this, faculty who operate on practice and scholarship pathways within the university (the other being research) often volunteer (with appropriate workload hours allocated) to support students as mentors or course tutors. In this context, mentoring is the preferred modus operandi for those faculty members supporting PGT students, with tutoring reserved for the undergraduate provision due its more formal focus on academic skills and specific learning objectives (McGill *et al.*, 2020).

The study involved a convenience sample of 19 academic mentors from across the business school, who were willing to participate in the study and were actively working with PGT students (see Table 1). Some participants worked as full-time academics, some part-

time, working in various jobs in industry. All staff participating as mentors had an intrinsic desire to support students holistically. They all recognised how personal support aids student prospects and performance. Although it may seem obvious as to the benefits of engaging in student support, what is less obvious is how transforming (faculty members, environments) and transformed (information and students) resources can be ameliorated to increase the transformational value of the support service, thus improving the benefits felt by staff, students and the institution.

Operationally, all mentors are expected to meet with their mentees one-to-one four times throughout the academic year, with session durations varying from 60 minutes for session one, to 30 minutes for the remaining three sessions. Meeting discussions vary, depending on the need of the student, but mostly concern issues around self-confidence, career ambitions, professional development, wellbeing and goal setting.

TABLE 1

Table 1: Research sample

Participants participated in a 90-minute semi-structured interview, consisting of questions focused on their previous experiences of mentoring, reasons for being a mentor, experiences of mentoring and recommendations for mentoring improvements. Each interview was recorded and transcribed. Interview questions were provided to participants in advance of scheduled meetings. In total, 12 questions were outlined, with hidden-prompt questions ready in case further clarification was required. The questions sought to explore the participants' time in HE, experience of mentoring, thoughts on mentor attributes, role and responsibilities, challenges, processes to support mentoring, benefits and their hopes for the future of mentoring.

University ethical authorisation was granted in March 2020, and British Education Research Association (BERA, 2018) ethical guidelines were applied throughout the study. Since the researcher is also involved in academic mentoring, researcher reflexivity was considered critical to ensure data was analysed as objectively as possible. Field notes were made after each interview, enabling initial thoughts and emotions to be captured (Miles and Huberman, 1994). Furthermore, these notes were constantly reviewed as data analysis occurred.

Template analysis was used to analyse the data. The analysis does not describe a "single, clearly delineated method, but rather refers to a group of techniques for thematically

organizing and analysing contextual data" (King, 2012, p. 256). A list of codes is produced in advance of data analysis, usually defined a priori, and subsequently added to as the researcher reads and interprets the texts. Templates represent the relationship between themes, most commonly involving an order of hierarchy. In the context of this study, "inputs" "transformations" and "outputs" formed higher order themes, with other themes, such as information storage and access, staff training and relevant technology and so on, forming correlated sub-themes. These were then considered in relation to each other to explore ways the operational processes surrounding mentoring could be improved. The findings of the study are therefore categorised under the headings of the operational (transformation) management model.

Findings and discussion

Each participant shared their experiences of working as a mentor, so the existing mentoring system could be analysed from multiple perspectives. Participants discussed a range of scenarios which made it possible to identify some resourcing challenges and the subsequent consequences of these on the ability of mentors to transform students and deliver perceived valuable outputs.

Inputs: transformed resources

All 19 participants expressed what inputs they felt were needed to make mentoring a success. Although individuals used different terms to describe necessary inputs, it was possible to classify their explanations under the following four headings.

Students: transformed resource

Participants commented upon the need to have students who were willing to be involved in mentoring. Promotion and advertising were deemed critical in informing students about mentoring, thus encouraging them to engage with the mentoring scheme. Explicating the features and benefits of mentoring were described as being critical in helping achieve student "buy-in":

> It is about helping them see that mentoring is something they have got to buy-in to … breaking something down into something that is a bit more tangible. It is about explaining mentoring in a way that makes it accessible to them. (Helen)

> Mentoring relationships … are very alien to certain cultures … having somebody talk to them about all the airy-fairy, hocus pocus stuff we talk about, well you will not get

> many people opting in because they do not understand what mentoring is about. (Tina)

The consequence of positive promotion is to entice students into becoming a resource that is *willing* to be challenged, galvanised and redefined in order for something new to be produced. This is critical if transformation of the student is to occur – the input resource needs to be either willing (human) or positioned (material) for it to undergo a transformation.

Information: transformed resource

All participants expressed the critical importance of having access to the latest information regarding student life and academic regulations. In this instance, student life in HE involves balancing academic responsibilities with personal development, social engagement and self-care (Alkhawaldeh, *et al.,* 2023). Therefore, information deemed useful to faculty included things such as course handbooks, module handbooks, course change documents, employability newsletters, visa regulations (government updates), the student code of behaviour, academic irregularity information, student support services and processes, library services, student finance and funding, GDPR information, digital technology use, useful contact lists, sickness absence procedures, placement processes and student union information. This list is by no means exhaustive but gives a sense of the sheer amount of information mentors need to retrieve and recall to aid student decision-making. Live documents held in cloud-based sites such as SharePoint and memberships of MS Teams or Yammer groups were identified as being significant in helping mentors keep abreast of institutional and regulatory environments. This supports observations made by part-time faculty members who explained that information assimilation is "intense", requiring significant "time and effort".

Participants Tim and Elle both discussed the importance of sharing the latest information with students, deeming it integral to student decision-making processes since "incorrect information may have unintended consequences if not disseminated correctly" (Tim). As Elle states:

> Well I am mentoring these people therefore part of that is to help them. I do not have all the answers, but I need to be able to signpost them, but how on Earth do you even find that signposting? I know it is a bit of a minefield. I get some pointers from staff afterwards and then email the students. (Elle)

A key aspect of the transformational process are the inputs required to conduct the transformation of transformed resources (Slack *et al.,* 2022). Consequently, to enable a student to transform positively, a mentor must add value by sharing relevant knowledge and information that mentees can use productively to transform their actions and behaviours, thus yielding them beneficial outputs (i.e., improved academic performance, a successful job interview etc.)

Further discoveries were made in relation to faculty who work part-time. Peter, Tina and Martin all described themselves as non-traditional academics, currently working in HE but also as consultants in industry. All three expressed how they felt unable to meet the academic needs of their mentees because their industry commitments did not afford them the time to become fully acquainted with the university's process and protocols. They believed that to effectively transform their mentees, they needed more training and guidance on academic matters and intuitional protocols. However, their contracts did not provide payment for training time and thus they felt despondent and in a difficult position:

> I never even did a dissertation at university, so this is the bit where I have a little bit of the imposter syndrome when I am mentoring. (Peter)

> I do not get paid to go to training events, but I put the time in, using my own personal time because if I don't then how the hell do I know what to tell the students?! (Martin)

> I am not an academic, it has been almost twenty years since I have been inside a university. In this "academic mental space", you know, you need to feel empowered because it is a bit of a minefield … you need to be able to signpost them otherwise you have that whole massive imposter syndrome going on. (Tina)

Martin suggested a lack of training has had implications for what he was able to offer his students: "I could do a lot more to identify things for them to reflect on or investigate for their own benefit, but I do not really have those skills, I have not been trained in that way."
It is argued that because a transforming resource (faculty member) needs to be able to act upon, or facilitate action upon, students (mentees) to produce desired outputs such as employability, self-efficacy, empowerment and so on, it is vital the transforming resource is primed and prepared. Should this not be the case, doubt is cast upon the value mentors can actually deliver throughout the mentee transformation process. Consequently, management

should consider the different working contracts of faculty when recruiting and selecting mentors. It is not enough to assume that just because someone works part-time, they have comprehensive institutional knowledge enabling them to operate as a mentor. By assuming all types of colleagues fully understand all academic responsibilities and institutional protocols (which update regularly), there is a danger of critical training and guidance being missed. Although classed as hourly paid lecturers, three participants felt they lacked the overarching academic knowledge required to be effective mentors, creating feelings of inadequacy and anxiety when unable to correctly signpost or advise their mentees. This is an issue because mentors can only facilitate transformations that yield beneficial student outputs if they are capable of doing so.

Environment and system: transformed resources

The environment and system are both critical transforming resources because they provide the infrastructure that supports the mentor in transforming the mentee. Participants shared the importance of the "wider institutional environment" such as digital technologies, student support services, estates, international office, the Student Union, library, employability services and academic services. In addition, two participants mentioned how the "wider HE environment" such as the UK "Office for Students" and the "Quality Assurance Agency" also played a role in their mentoring. Further comments made by four participants concerned the role of professional bodies such as the "Chartered Management Institute", "Chartered Marketing Institute" or the "Association of Project Managers" providing them with direction around industry competencies and membership benefits. Wider environmental organisations were therefore viewed as vital by mentors, furnishing them with correct information regarding student choices and employment opportunities. The "local" system mostly referred to the school and its protocols for managing the mentor process, including number of meetings, school contact lists and student and staff complaints procedures.

All these wider and localised environments were deemed critical in providing information, technology and facilities that faculty members could manipulate and exploit to add value to the overall experience of mentees. However, it became apparent interviewees though the school needed to be clearer in terms of the responsibilities of a mentor. Tim declared how a clearer role specification would help academics create boundaries and scrutinise inputs which might benefit student transformations. For example, if a mentor is formally required to assist a student's academic performance (referencing, critical thinking), it makes sense to have access to resources that will develop the mentee in that particular area.

If there is a requirement to provide career guidance, then employability and career resource inputs need to be accessible. In addition to the formal requirements of mentoring, Brian acknowledged how student requests meant mentoring also needed an element of flexibility regarding requirements:

> It does help to know what I am supposed to be doing as a mentor, so I know what type of stuff I need to be looking out for. Sometimes the student mentions a surprise element and I need to do research. But if I know in advance what might be needed, it sure helps. (Brian)

The role of department heads in terms of allocating time and space in workloads was also mentioned. Comments about senior managers failing to allocate them with appropriate workload time was not uncommon. Should a department head fail to understand the role (due to a lack of role clarity) then this can inadvertently affect access to resources (such as time to access information and hold meetings) critical to producing successful transformations.

Technology: transformed resource

The final element mentioned was technology. Fifteen participants mentioned having technology that was fit for purpose so it could productively enhance the development of mentees. For example, Tim, David and Jafari discussed the internal student monitoring system, named the "Student Dashboard", and the requirement to document details of all four mentor meetings. Yet, due to GDPR regulations, they felt uncomfortable documenting anything of meaning and personal in nature in case it would be viewed by other colleagues without student consent. Moreover, if a student were referred to student support services (done by any colleague), the content of those referrals and subsequent meetings were never known by the mentor, rendering future mentor meetings a bit "problematic" because students' either "stopped attending or refused to discuss things that could make meetings more beneficial" (Jafari).

The Dashboard was further critiqued for its lack of insight into the students' academic journey (assessment and feedback, employability engagement) and its inability to properly capture attendance. The use of online booking systems varied, with no consistency across mentors and thus no way to capture data regarding student bookings (when [date/time], cancellations and reasons). It was therefore regarded by mentors as a resource that created more problems than it offered solutions since it failed to help mentors resolve mentee issues which could be impacting their overall performance. In addition, David mentioned how the

overuse of technology to connect with students was affecting his ability to cope: "I counted I think 12 different communication platforms. As an academic I cannot cope in my day with going into 12 different platforms to see who dropped what where … so you can imagine what our students are going through."

Other views expressed concerned about not having permissions to the Student Dashboard or SharePoint sites which contained information to support mentor meetings. In conclusion, at least 15 participants felt technology as a resource could do more to help them understand and communicate better with their mentees, thereby benefiting their development.

Transformation: faculty members as the transforming resource

In studying Figure 1, it becomes apparent that faculty members are the *transforming resource.* However, it is acknowledged herein that to transform a student there needs to be a desire, by the student, to be a resource *willing* to transform. Mentors cannot simply change a student through a series of discussions without the student willingly participating. Part of the transformation process is therefore developing buy-in from the student. To do this, a mentor needs the skills to cultivate conditions which build rapport, trust, confidence and respect.

All participants claimed that to create a transformation in a mentee requires a series of specific skills, knowledge and competence which they believed is not evident in all people. Mandy discussed how most mentors have an intrinsic desire to help others (a sentiment shared by all participants), but this alone is not enough to ensure a mentee productively transforms. All participants described the importance of attributes such as empathy, active listening, communication, compassion and a desire to "really want to help people" as being pivotal in creating meaningful interactions with mentees, liberating them to freely share their thoughts and ambitions. Moreover, it was universally acknowledged that these characteristics, described by Mandy as "mentor software", is not available to all faculty members. All participants explained how their own attitude to mentoring was extremely important, with several describing what they considered to lie at the heart of mentoring:

> I think you need to be able to step into that student's shoes … we need to be very careful we do not assume … the ability to listen and really hear … have empathy and compassion … enter their world. (Sue)

> I do not think anybody can do it. If you have quite elevated levels of emotional intelligence, you are naturally going to be able to mentor better than someone who is not emotionally connected. (Tina)

> It is about the subtleties of social interactions … if you are talking to a student and something is troubling them, if you are not good at picking up those cues, you will miss stuff … you need to open that door to them. (Cathy)

> I really like the one-to-one interaction and the personal relationship building, this is one of my main drivers. Making a difference in someone's life, maybe your advice or opinion can really change their life … be approachable, a good listener and empathetic. (Asad)

Therefore, the transformation of a mentee cannot simply happen by virtue of making someone a mentor who happens to have workload capacity. It is not a function any individual can perform. As a *transforming resource*, it seems vital faculty members have the capabilities, skills and intrinsic desire to facilitate transformation in their mentees. Should these not be present, positive transformations become harder to accomplish. It seems that if recruitment and selection is poorly managed, then the transformation process could, ergo, produce detrimental outputs. Cathy's response provides some insight: "I do not think everybody can be let loose on students because it would have a negative effect on student perceptions of their experience of mentoring."

This sentiment was shared by numerous other participants, including Sue, Verity and Mandy. Shirley further highlighted the importance of having suitable colleagues recruited:

> I think you have got to see value in the role and in the process. If you do not see that then I do not think you can be a mentor. I think you have to be able to like students and I am not sure that is universally true. (Shirley)

A common theme evident throughout all interviews was the 7Cs of shared humanity (Patterson, 2018). Patterson (2018) outlines seven capacities that are innate in humans and enable people to have influence on the lives of others. These are care, courage, curiosity, compassion, connection, creativity and contemplation. All 19 interviews mentioned the importance of two or more of these capacities when being a mentor. In addition, it became apparent in interviews that faculty were using reflective questions with their mentees to get them to consider their own status in relation to the seven capacities. Patterson (2018) argues that these capacities in mentors "enable us to be the difference that makes the difference in the lives of others" (p. 50). From the data captured, it was clear that faculty were using their own innate and intuitive abilities to enhance their mentees' self-awareness and efficacy.

Outputs: beneficial consequences for mentors and mentees

When asked to discuss the consequences of mentoring, participants shared numerous outputs they wanted to see their mentoring yield. For example, student "ownership", "self-development", "empowerment", "adaptability", "professionalism", "resilience" and "enhanced sense of purpose". Debbie shared her desire for her mentees to feel she had "enriched their life through the process" and said that "could mean many things depending on how you define the term". However, she perceived this as seeing a "twinkle in the eye" or a "physical change and mental change" in her mentees. Other mentors shared witnessing a change in attitudes, confident smiles and improved body language. Witnessing the transformation of students in their physical, mental and emotional states was enough to cause mentors to express moments of intense euphoria and absolute joy. Mandy articulated when she knew she had created value in the minds of the students:

> When students book another meeting that tells me there is a difference, there is a value they see because if students see a value to what you offer, there is no need to motivate them, they will come back repeatedly. It is just euphoric. (Mandy)

In addition, it was clear all mentors felt to achieve beneficial outputs for both them and their mentees, the wider environment and local system needed to support them. Issues like poor technology and outdated information or "being missed off distribution lists" (Gary), coupled with "poor workload modelling, not providing adequate time to digest information and respond" (Peter), made it more stressful for mentors and harder to benefit their mentees. Peter continued:

> It is not just about the detail of what you are expected to do. It is about the whole relationship side, rather than the "doing and providing info" side. This needs time and effort if you want it to benefit students and help them grow. (Peter)

Finally, mentors described how access to resources, coupled with having the correct level of skill (such as active listening, empathy and questioning) was critical, but students also needed to "source their own power" (Tim). A willingness by the student to undergo a transformation was deemed critical if any beneficially outcome was to be produced. This was coupled with the ability of the mentor to sense when a student needed to be challenged or comforted. Aisha described a situation whereby she supported her mentee through an extenuating circumstance application. She noted how she "sensed his stress" and knew challenging his application would be inappropriate, causing more distress and thus reducing his academic performance.

She described how she felt her action overall benefited her mentee and that "mentor support can take many guises – functional and emotional".

Conclusion

Although this investigation used a sole case study and therefore cannot be generalised, the findings are noteworthy for any HEI involved in the management of mentoring services within HE settings.

Clearly, operational management processes play a crucial role in organisations, particularly in creating and delivering outputs, which can be products or services. These processes encompass a wide range of activities and functions aimed at optimising operations to achieve specific objectives. In this study, by viewing the process of mentoring through an operational (transformation) management lens (adapted from Greasley, 2009. p. 7 and Brown *et al.*, 2013, p. 6), it becomes possible to categorise the process into three separate but interdependent and interrelated headings. Activities and functions now become salient and identifiable, enabling operational service delivery to be evaluated and improved.

The aim of this paper was to investigate how the process of student mentoring could be made more operationally robust to yield greater value for staff and, consequently, students. Making something operationally robust means ensuring that a system, process or organisation can consistently perform well under a variety of conditions and withstand disruptions without significant degradation in performance. As HEIs encounter growing pressures from competition, student recruitment targets and rising costs, it is essential that operational processes like mentoring remain relevant, stable, adaptable and effective in meeting both staff capabilities and student needs.

Three research questions were developed, positioning mentoring as an operational process, thereby enabling mentoring to be analysed in regard to robustness and value. Interestingly, the answers to these questions resonate with other research investigations on mentoring in HE settings.

1. What resource *inputs* are required to enable faculty members to optimise a student's *transformation*?

Mentors discussed the need to have students willingly participate in mentoring because they were the key input resource, which must be open to adaptation for transformation to occur (the *transformed* resource; Bassett *et al.*, 2014). Access to timely, relevant information was identified as another critical input resource, allowing mentors to correctly direct and signpost

students to areas of interest or need (Olson and Nayer-Bhalerao, 2020). Technology was also cited as a critical input resource, used by mentors to observe and support student performance. However, many felt improvements were needed since it was not always fit for purpose, leaving students unsure of ways to improve or how to use technology to enhance their development (Olivier and Burton, 2020). Finally, the environments – wide and local – were discussed as being vital in supporting and enabling mentors to be effective in their dealings with students. However, poor workload allocations, outdated policies, professional body requirements and lack of physical facilities were some of the factors mentors felt hindered their mentoring service. Consequently, these factors made it challenging for staff to offer a quality service to students, thus potentially weakening and compromising mentoring schemes.

2. How do mentors *feel they transform* their mentees?

Operational robustness is not just determined by a need to access physical resources. On the contrary, it also relies on a mentor's own character to transform students over time, with the majority of participants articulating beliefs in staff needing to have specific attributes and competencies to be a good mentor (Stuart *et.al.,* 2019). Many participants did not feel these were apparent in all faculty members. Moreover, it is not just about having the abilities to transform willing students. Mentor skills and competencies must be applied to resources that *resist* transformation. So, whilst mentors need to be respectful, committed, patient, empathetic, trustworthy and resourceful to transform students who are *willing* to transform, they also need to apply these skills to those who are more reluctant to change.

3. What do faculty members perceive as being the desired *output(s)* of their mentoring?

All mentors shared the desire to see students' transformation manifest in outputs such as improved self-confidence and self-efficacy, and enhanced career ambition, professionalism, empowerment and resilience. Witnessing these changes seemingly gives mentors outputs such as enhanced feelings of increased self-worth, self-development and joy.

I argue that the application of an operational (transformation) management model, in which to reflect and give feedback on mentoring, is significant. This is because operational thinking enables aspects of services to be analysed separately whilst in relation to one another. Operational robustness requires organisations, processes or systems to be resilient to disruption, reliable and adaptable and able to access necessary resources as efficiently as possible. The consequences of analysing a service through an operational management lens

enables strengths and weaknesses to be identified so that efficiencies and improvements can continuously be made. This might include improved service efficiency, cost reductions, improved quality, a more agile service, risk management and scalability. In the context of this study, it is clear that to improve the operational delivery of mentoring, thought around the relevance, flexibility and clarity of inputs, and the selection and recruitment of faculty, need consideration if valuable and sustainable service outputs are to be delivered. Furthermore, managers in HE can ill afford to reject the benefits provided by operational management frameworks, particularly in contemporary HE where cost saving, quality, scalability and efficiency are often strategic priorities. Management concerned with the operational delivery of mentoring or any other service should consider applying an operational (transformation) management lens to explore their practices. Figure 2 summarises the findings of this study.

FIGURE 2

Recommendations for practice

I recommend management in HE settings consider using an operational (transformation) management framework in their student support settings for the following reasons:

1. It allows for the service under review to be examined under separate and distinct headings. This means each aspect of the service can be reviewed in detail in terms of the resource input requirements, method by which transformation will or should occur and desired outputs. In addition, consequences of system level or wider environmental changes can also be identified and the significance of these on the operational process judged, leading to evidence-based reconfigurations.
2. The practice of isolating and evaluating a support service under operational headings makes it possible to consider how each area corresponds and links with the other, allowing the consequences of reducing or increasing resources to be analysed in relation to the whole operation as opposed to a single area of work.
3. If applied to support services offered to students in other international HE contexts (North America, Europe, Africa, Asia etc.), it could contribute to global discussions around the similarities and differences of support practices in various different cultural settings. Additionally, it would enable these practices to be considered in light of their possible integration into existing operational processes at HEIs (particularly at those institutions with significant numbers of international students) to create more relevant, sensitive and valuable support services.

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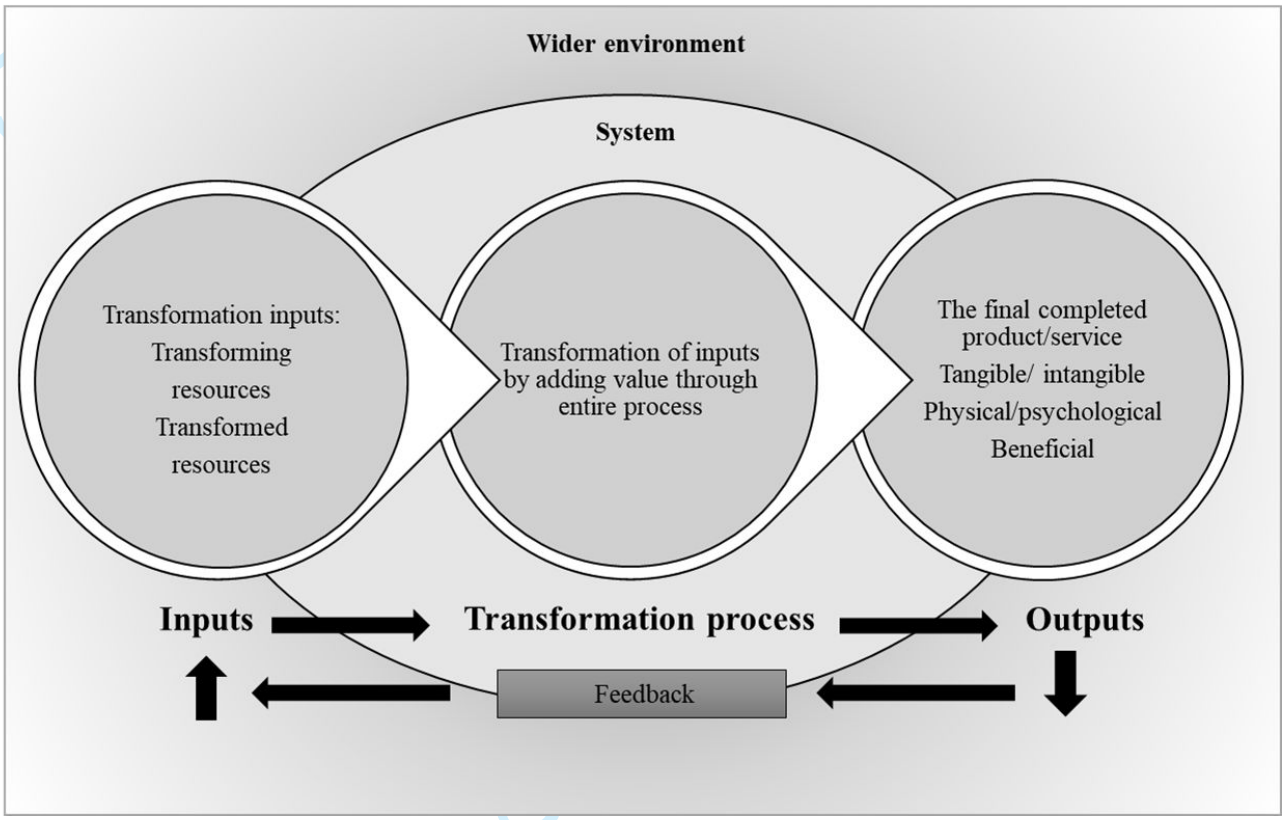

Figure 1: The operational (transformation) management model (adapted from Greasley, 2009, p. 7, and Brown *et al.,* 2103, p. 6)

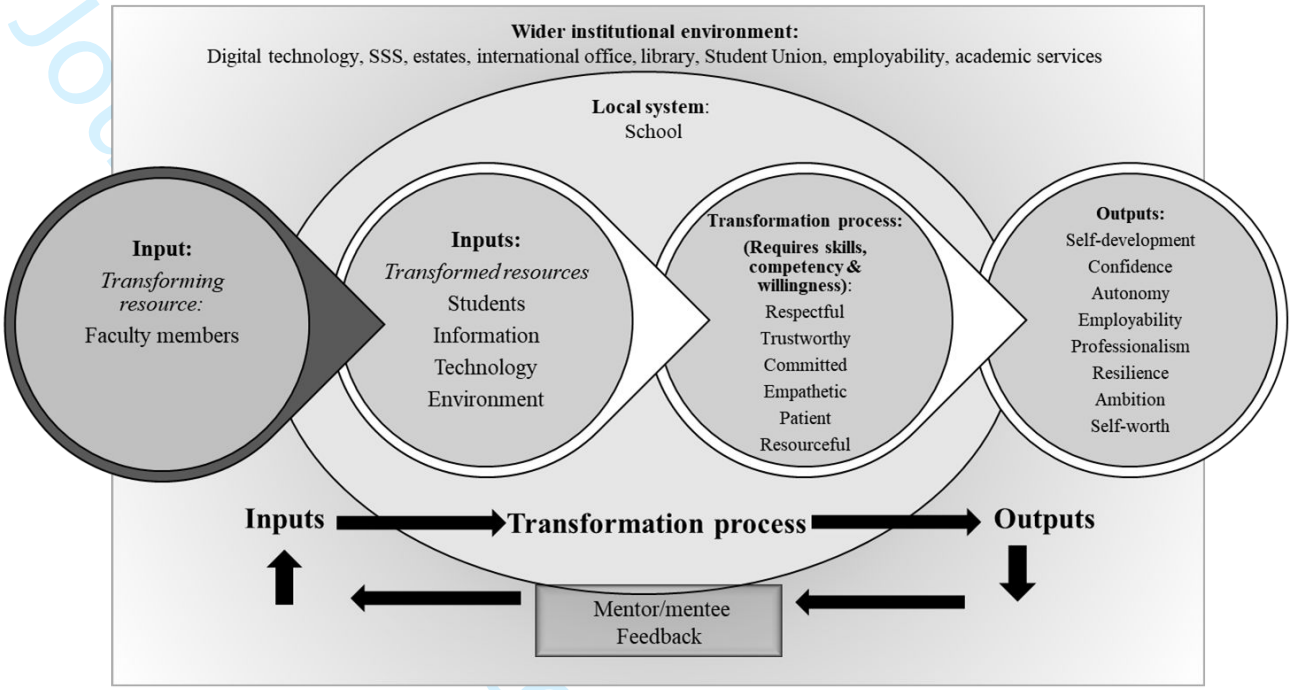

Figure 2: Summary of the operational needs of mentoring services (adapted from Greasley, 2009, p.7 and Brown *et al.,* 2013, p. 6)

Number	Gender	Pseudonym	FT/ PT	Academic discipline
1	F	Helen	FT	Marketing
2	M	Tim	FT	Human Resource Management
3	F	Aisha	FT	Management
4	F	Tina	PT	Management
5	F	Elle	FT	Human Resource Management
6	M	Peter	PT	Management
7	F	Sue	FT	Management
8	F	Debbie	FT	Human Resource Management
9	F	Samantha	FT	Management
10	M	Brian	FT	Marketing
11	F	Mandy	FT	Human Resource Management
12	M	Asad	FT	Management
13	M	David	PT	Human Resource Management
14	F	Shirley	PT	Management
15	F	Cathy	FT	Marketing
16	M	Martin	PT	Management
17	F	Verity	FT	Marketing
18	M	Jafari	FT	Management
19	M	Gary	FT	Management

Table 1: Research sample

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Organisation:	**NOTTINGHAM TRENT UNIVERISTY**
E-mail:	**deborah.allcock@ntu.ac.uk**

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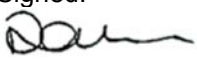

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