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The Mindful Interactions (MI) tool: promoting student mental health in tertiary education

Elspeth Stephenson

University of Tasmania, Australia, elspeth.stephenson@utas.edu.au

Helen Yost

University of Tasmania, Australia, drhelenyost1@outlook.com

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Abstract

This conceptual paper introduces the Mindful Interactions (MI) tool designed to enable university teaching academics to promote student mental health and in so doing, impact positively on academic outcomes. The MI tool is comprised of three elements: *understandings* to provide theoretical guidance which inform pedagogy, *practices* to provide strategies for translating theory into practice, and *guiding principles* which provide a catalyst for critical reflexion, challenge existing beliefs, and create a shared vision from which to work. Relationships are at its core, acknowledging that university students report teacher-student relationships as key to their mental health. Issues related to university student mental health, of which psychological distress is an important component, have been well documented and exacerbated since the onset of COVID-19, increasing demands on universities to meet student mental health needs. It is contended in this paper that understanding the causes of psychological distress, particularly in relation to Adverse Childhood Experiences, offers an alternative lens through which to view student mental health. This lens suggests additional ways of thinking about how university teaching academics and universities might proactively respond to student mental health needs. Cultural Historical Activity Theory informed the theoretical framework for the study, whilst two 'approaches' (the 'Three Pillars of Trauma-informed Care' and 'Trust Based Relational Intervention') along with associated trauma literature underpinned the development of the MI tool.

Practitioner Notes

1. Engage in mindful interactions to build positive relationships.
2. Create a sense of safety for all students to promote mental health and support successful academic outcomes.
3. Learn about students' individual needs by actively listening and being open to their perspectives.
4. Create a shared vision to guide work undertaken within the university community.
5. Exercise critical reflection to support professional growth and changes to practice.

Keywords

Adverse Childhood Experiences, trauma, psychological distress, mental health models, higher education.

Introduction

“The COVID-19 pandemic has had a monumental effect on the mental health and wellbeing of populations worldwide” (Rotella, 2020, p. 1217). The onset of COVID-19 has seen the incidence of mental health problems escalate significantly, with an increase in severe psychological distress (an important component of mental ill health) in the 18-34 age range being described as substantial (Biddle et al., 2020).

Whilst the pandemic has shone a light on the impact of mental ill health, this existed long before the COVID-19 outbreak. In fact, numbers of those experiencing mental ill health have been increasing over time. In 2014-2015, 2.1 million Australians aged 18+ experienced high or very high levels of psychological distress. This figure increased by 12% in the following two years with 2.4 million Australians reporting mental health issues in 2017-2018 (Australian Institute of Health & Welfare, 2020). In the university sector, findings suggest that students reported higher numbers of psychological distress and mental illness than the general population during this same period (Bore et al., 2016; Larcombe et al., 2016; Stallman, 2010). Adding the impact of COVID-19 to these findings, particularly noting that most university students sit within the affected 18-34 age range (Australian Bureau of Statistics, 2009), current students are at greater risk than ever before of experiencing mental health issues (Davidson, 2020; Stephens, 2020). These findings are reflected around the world. Solmi et al. (2021) identified university students globally as being in a high-risk age group for mental illness and therefore particularly vulnerable to mental health issues during the pandemic. A systematic review carried out by Liyanage et al. (2022, p. 1) reported anxiety prevalence in university students in “Asia as 33%... Europe as 51%, and ...USA as 56%”. It was noted that these figures may not be an accurate reflection of the issue particularly during the later stages of the pandemic due to scarcity of literature. These findings highlight a concern for higher education communities internationally.

The objective of the research reported in this paper was to respond to the concerns highlighted above. The research outcome was the Mindful Interactions (MI) tool which is a practical resource to support teaching academics. This tool fills a gap in the existing literature by offering an innovative lens through which to consider the current mental health crisis in higher education.

The MI tool was designed to support university teaching academics, through the process of critical reflexion (Door, 2014), to minimise tertiary student psychological distress, promote their mental health and in so doing, impact positively on academic outcomes. Here critical reflexion is defined as “extended reflection... that includes the embodied self and its response to the other selves with whom that self-interacts, and that it incorporates thoughtful action in the moment” (Door, 2014, p. 91).

The MI tool was developed from relevant theory, literature, and the knowledge and lived experience of the authors. It used two trauma informed approaches as its base— the Three Pillars of Trauma-Informed

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Care (Bath, 2008) and Trust Based Relational Intervention (TBRI®) (Purvis et al., 2013). It is comprised of three elements: *understandings* to provide theoretical guidance which inform pedagogy, *practices* to provide strategies for translating theory into practice, and *guiding principles* which provide a catalyst for critical reflexion, challenge existing beliefs, and create a shared vision from which to work.

In this paper the authors who are teaching academics and qualified TBRI® practitioners, explore the mental health context with a discussion of possible co-morbidities of psychological distress, which informed the rationale for the development of the MI tool. We explain how Cultural Historical Activity Theory (CHAT) (Engeström, 2000) was used to analyse “complex and evolving professional practices” (Foot, 2014, p. 1) within the university system (identified as an activity system in CHAT) and how the MI tool, designed to use as a ‘cultural tool’ within an activity system, was developed. Activity systems in the context of CHAT are defined as “networks of sociocultural elements, with complex mediational structures, that shape the collective actions of individuals who are motivated to achieve a goal” (Trust, 2017, p. 100). Finally, this paper explains how the MI tool can be implemented in the higher education context.

Student mental health in higher education

The notion that universities have a responsibility to student wellbeing is widely recognised, with services and supports commonplace at universities worldwide. Alongside supports such as counselling, academic and advisory services, interventions for student mental health continue to be developed. There has been a tendency to centralise student mental health support services in Australian universities, shifting decision-making away from teaching academics. Yet tertiary teachers have an important role to play in supporting student mental health, particularly since mental health has an impact on academic outcomes (Crosby, 2015; Doughty, 2019). Baik et al. (2019) found that both university teaching practice and teacher attitudes were key to reducing psychological distress and promoting effective mental health. Tertiary students reported that interactions with teaching academics were as important to their mental health as individual psychosocial interventions and professional support from specialised staff. Students valued the quality of interactions, along with informality and spontaneity (Trolan et al., 2020). Teacher-student relationships were reported as “critical to the success of any mental health intervention” (Baik et al., 2019, p. 683). Both Baik et al. (2019) and Trolan et al. (2020) identified that university teaching academics needed professional development if they were to modify their teaching practice and complement central student support services. This is a point well raised, particularly in post COVID-19 predominantly online environments which make effective teacher-student relationships challenging.

Relationships are not the only casualty resulting from COVID-19. The rapid adaptation (Crawford, 2021) to online learning caused by the pandemic has been identified as a “negative experience across the board” (Rudolph et al., 2021, p. 8). Whilst teaching academics grappled with technological and online pedagogical issues, Rudolph et al. (2021) noted that email response times increased, and timely teacher-student interactions decreased. As lockdowns were mandated, feelings of isolation escalated, and students became more disengaged with their studies as social media and other forms of distractions filled the “social void” (Rudolph et al., 2021, p. 10). In addition, where online tutorials were available, effective communication was

challenged as cameras were switched off and non-verbal communication was removed (Rudolph et al., 2021). These experiences are detrimental to engagement, recognised as “the holy grail of learning” (Sinatra et al., 2015, p. 1) and to the teacher-student relationship, both of which can add to student psychological distress and impact positive academic outcomes.

It is not surprising that the onset of COVID-19 added to the explanations for student psychological distress which already listed coping with academic load, financial stress, and low academic performance (Stallman, 2010) as primary causes. Nor is it surprising that there has been a substantial increase in the reported number of students experiencing stress and mental health issues since the onset of the pandemic (Rudolph et al., 2021). Kinash (2021) noted that “the pandemic has had a dramatic impact on the student experience...with high-risk impacts on personal wellbeing” (p. 1). Kinash (2021) reiterates through the voice of a student, however, that “friendly, accommodating, knowledgeable, and understanding” university staff promote a caring and wonderful community (p. 3). Again, the teacher-student relationship is brought to the fore. As universities entered the ‘improvement stage’ (Crawford, 2021) and began to respond to the challenges of the pandemic, a general improvement in student self-reports of wellbeing was noted (Rudolph et al., 2021). Rudolph et al. (2021) caution however, that universities “need to continue to do more to tackle mental health issues in all its stakeholders” (p. 12).

Pre pandemic, Bore et al. (2016) reported that personality traits such as being less involved, less self-controlled and having less emotional resilience increased a student’s susceptibility to psychological distress. This is an interesting finding, but the cause of this susceptibility was not explained. These traits are noteworthy since they are also recognised as potential outcomes of early adversity. Early adversity compromises brain functions due to adaptations occurring within the developing brain (Teicher et al., 2003; van der Kolk, 2005). These adaptations result in less involvement with others, difficulties with executive functioning, challenges with self-regulation, and coping with life’s stressors (Bath, 2015; Porges, 2017; van der Kolk, 2005). Early adversity is an area that requires further consideration to support student mental health within the higher education sector, since it has the potential to inform the development of tools designed to minimise the impact of psychological distress.

Felitti et al. (1998) in their “Adverse Childhood Experience” (ACE) study identified a strong correlation between the number of ACEs and mental and physical health in later life. This finding continues to be replicated with the strength of an ACE score being a consistent predictor of later psychosocial dysfunction (Campbell et al., 2016; Ports et al., 2016). Howard (2018) noted that the incidence of childhood adversity was underestimated, with 64% of ACE participants reporting at least one early adverse experience. Souers and Hall (2016) reported that ACEs are not discriminatory, affecting individuals regardless of level of education, socioeconomic status, gender, religion, race or culture. Butler et al. (2018) found that more than three quarters of their social work student cohort (n=195) had experienced one or more ACE before the age of 18, whilst almost one third reported four or more. These findings were synonymous with similar literature (Adams & Riggs, 2008; Gilin & Kauffman, 2015) which reflects the pervasive nature of early adverse experiences.

ACEs are associated with the concept of trauma, since “trauma is what happens inside of you, as a result of what happened to you” (Maté, 2021, :35). This suggests that being trauma aware in teaching and learning is an important consideration in the pursuit of student mental health. Recent

findings recommended that trauma informed pedagogies should be employed by all university teachers (Doughty, 2019; Stephens, 2020) as this would have a positive impact on academic outcomes (Crosby, 2015) and acknowledge issues related to early trauma when students enter the tertiary context (Carello & Butler, 2014).

In addition to the concept of ACEs, the notion of John Henryism and its impact on student long term health and wellbeing has been raised (Torsney et al., 2022). John Henryism is defined as a behavioural disposition that shows determination to cope in the face of significant environmental stress (James, 1994). Individual achievement is reached through constant self-control, motivation, and engagement. The John Henryism active coping strategy, whilst showing superficial resilience and providing initial success, comes at a cost. The cumulative burden of chronic stress increases the potential for long term negative health outcomes. John Henryism is of concern in current pandemic times, where having to manage the transfer of study to the home environment, particularly for marginalised minority groups, may put students at increased risk of John Henryism and therefore long term mental ill health. Torsney et al. (2022) found this to be the case, identifying that John Henryism was a protective factor that mediated the relationship between marginalised groups and engagement in their studies. Whilst the reasons for added stress in these students may have different origins from ACEs, the potential outcomes are similar and warrant further consideration. As Torsney et al. (2022) note, universities cannot assume that students from marginalised minority groups who are achieving academically do not need additional psychological support. In addition, Kinash (2021) reminds us that “one size does not fit all, and university education must be delivered in ways which meet the needs and expectations of diverse student cohorts and personalised in bespoke and supported ways for individual students” (p. 1). Whilst universities can make assumptions about the needs of various cohorts, they can only respond to individuals if their needs are disclosed. In the case of students with histories of adversity, this sharing will only occur in the context of trusting relationships. Being mindful in interactions will support the development of such relationships and may enable teaching academics to deliver the type of bespoke education to which Kinash (2021) refers. The MI tool has been designed to support teaching academics with this in mind.

The authors of this paper do not intend to imply that the cause of all psychological distress in tertiary students stems from such adversity. The literature suggests, however, that early adverse experiences may be a significant factor in student psychological distress and, in addition, the construct of the John Henryism active coping strategy should not be ignored. It is argued that consideration of these perspectives can support the development of inclusive strategies to promote tertiary student mental health.

Theoretical Framework

Cultural Historical Activity Theory (CHAT) (Engeström, 2000) provides a structure to analyse and explain all aspects of human activity and relationships within a community. As such CHAT facilitates reflection on previous and current practices whilst supporting the conception of new ideas to improve future practices (Foot, 2014). The focus for investigation within CHAT is the activity system which can be conceptualised as communities that are defined by their cultural tools, roles and rules. The CHAT activity system is briefly explained below and then reiterated within the context of this study.

A CHAT activity system has six core components:

1. a *subject*—the person or people engaged in the work;
2. an *object*—the product of the activity system and/or desired outcome;
3. the *tools*—characteristics of an activity system used to pursue the outcome;
4. *community*—those who interact within the activity system and share with the subject an interest in the same object;
5. *rules* or “socio-cultural conventions”—procedures that support participation within the community;
6. and *division of labour*—how community members choose and use tools and engage in action (Trust, 2017, p. 100).

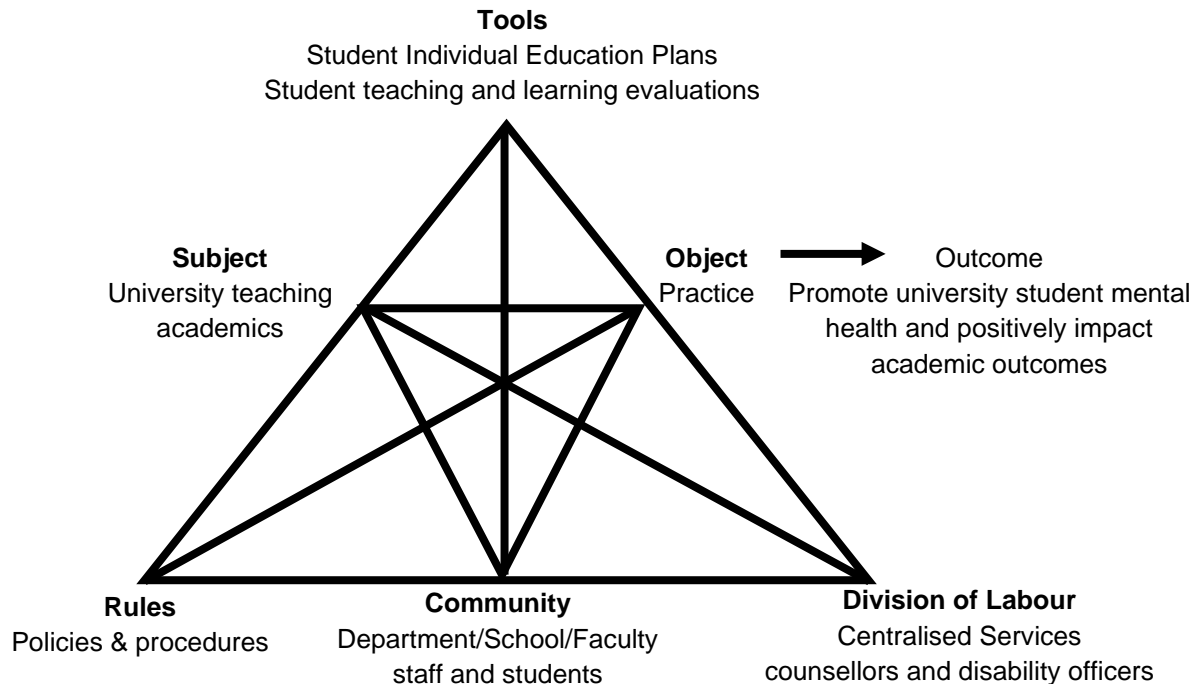
Both *rules* and *division of labour* facilitate the relationship between the *subject* and the *community* (Foot, 2014). Specific activities are analysed with emphasis placed on goal-oriented actions. These actions are assisted by *tools* used by community members to pursue the *object* of their activity. The *tool* is used to mediate the relationship between the subject and the object (Foot, 2014).

In this study the CHAT activity system is a university (Figure 1). The subject is the university teaching academic whilst the object is their teaching practice, with the outcome being to promote university student mental health and impact positively on academic outcomes. The tools include student Individual Education Plans and teaching and learning evaluations, whilst the community consists of staff and students within the Department/School/Faculty. Rules are policies and procedures that guide and constrain practice and division of labour refers to the use of university centralised services which include counsellors and disability officers. The specific activity is interaction between community members. The actions are the ways in which these community interactions are conducted.

Existing cultural tools intended to facilitate communication within the community no longer appear adequate (as previously discussed), particularly as student mental ill health has continued to escalate in a COVID-19 world. Kinash (2021) advises that if current processes are not working, then “we need to try another way” (p. 5). The MI tool has been developed as an additional cultural tool to create a contradiction that will challenge university teaching academics (subject) to change their practice (object) to achieve the outcome (to promote university student mental health and impact positively on academic outcomes). Contradictions can be explained as “illuminative hinges” that can “open new vistas of understanding” (Foot, 2014, p. 17). Activity systems are said to develop as subjects “engage in object-oriented contradiction-provoked actions” (Foot, 2014, p. 18).

Figure 1

Elements of a university system as conceptualised through Cultural Historical Activity Theory (CHAT)



Note. The framework represents the interactions between a university system. Adapted from Engeström (2000, p. 965).

Designing the Mindful Interactions (MI) Tool

The MI tool was conceptualised in response to the scarce but significant literature on trauma aware pedagogies in higher education. Here, the need to be trauma informed in practice and for professional development that could support university teaching academics to modify their teaching practice was identified (Baik et al., 2019; Doughty, 2019; Stephens, 2020; Trolan et al., 2020). The development of the MI tool was informed by relevant literature and evidence-based approaches in the field of trauma and trauma informed practice, and the lived experience and knowledge of the authors. The structure of the MI tool was influenced by and responded to trauma related literature which identifies three essential elements for any trauma informed approach (i) understanding the impact of early trauma (ii) how to respond to trauma in practice (iii) guiding principles that can be integrated into the culture of any trauma informed organisation (Bath, 2008; Substance Abuse and Mental Health Services Administration (SAMHSA), 2014). Thus, the MI tool has three distinct elements, *Understandings*, *Practices*, and *Guiding Principles*. These elements are introduced and discussed in more detail below.

The element *Understandings* is central to the MI tool as it recognises that understanding the impact of early adversity is necessary for a community to be trauma aware (SAMHSA, 2014) and promote mental health. Bath's Three Pillars of Trauma-Informed Care (2008) provided the basis for this understanding since it identified essential factors that were "fundamental and universal" across all trauma literature and enacted in trauma informed environments (Bath, 2008, p. 18). These pillars are building connections through healing relationships (connections), the development of safety (felt safety), and growth of self-regulation and coping skills (self-regulation/coping). Whilst depicted as three distinct pillars, Bath notes they are closely inter-related. Felt safety can only be achieved in the presence of positive connections, which in turn support coping and self-regulation (Bath, 2015). Bath's theoretical approach is intended for those without a clinical background and is centred around creating healing environments that respond to the 'symptoms' of early adversity. Since these are synonymous with those experiencing psychological distress more generally, it could be argued that such an environment would be supportive of promoting mental health for all tertiary students.

The element *Practices* was created to support the implementation of *understandings*. This element of the MI tool uses TBRI® as its base and draws on the knowledge and lived field experience of the authors. TBRI® (Purvis et al., 2007, 2013) was chosen to inform *practices* because it provides strategies that support but are not exclusive to those who have experienced early trauma; thus, it is relevant for the promotion of mental health more broadly. TBRI® is an evidence-based, therapeutic approach to healing vulnerable children and youth (Purvis et al., 2013). TBRI® offers an alternative lens for educators to view the impact of adversity and consider how such insight might be reflected in practice. It was identified by Avery et al. (2020) as one of only four school-wide trauma informed approaches globally that met at least two of the three essential elements of trauma informed systems, and all six key principles of trauma informed care (SAMHSA, 2014). TBRI® consists of three principles, Connecting, Empowering and Correcting, with each principle having strategies that support implementation. A significant aspect of TBRI® involves supporting adults to work mindfully and proactively to teach social and emotional skills during everyday interactions. Whilst TBRI® initially provided a validated therapeutic approach that enabled theory to be applied to the healing of children and youth (Purvis et al., 2013), it is now applied more broadly with adults in many environments including the criminal justice system. These experiences demonstrate how the TBRI® approach can be successfully implemented in adult environments. It is noted that practice cannot be prescribed since each individual and their interactions are unique, and practice develops from critical reflexion (Door, 2014). *Practices* within the MI tool, therefore, provide examples from which the university teaching academic can advance their skills and 'hone their craft'. Bath's Three Pillars and TBRI® required some adaptation since the focus of both approaches is primarily healing, whilst the tertiary context is centred around learning, albeit within an environment that seeks to promote student mental health.

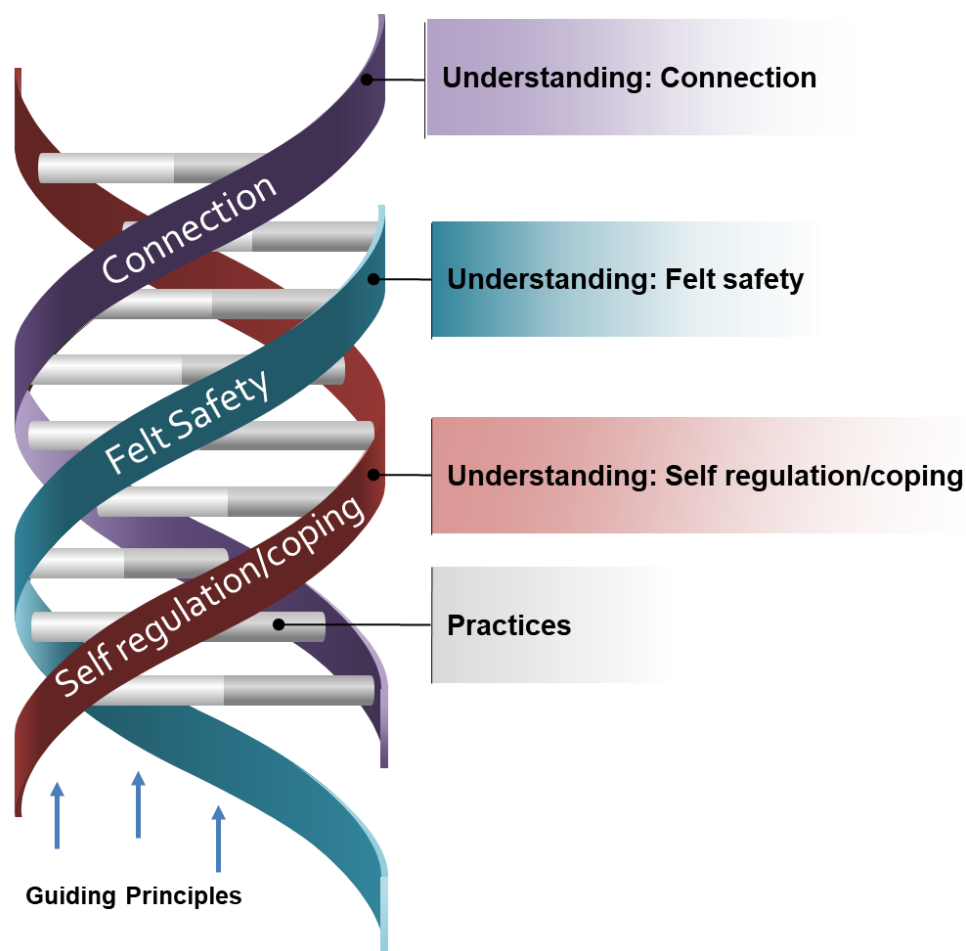
The element *Guiding principles* underpins *understandings* and *practices*. This element was informed by SAMHSA (2014) and interpreted for use in higher education. SAMHSA (2014) was selected to inform this aspect of the MI tool since its work in guiding organisations to be trauma informed is globally recognised. The *guiding principles* were designed to promote team discussion, stimulate critical reflexion, challenge personal and professional beliefs and in so doing

create a shared vision to guide an organisation and drive practice. The *guiding principles* are intended to surface and challenge existing professional beliefs by providing a catalyst for critical reflexion that allows for professional self-critique within the higher education context (Door, 2014). This process of awareness raising is necessary since beliefs are said to drive practice and being cognisant of beliefs allows for reflection in action (Schon, 2016). Door (2014) acknowledges that in addition to critical reflexion, awareness of how practice is demonstrated in the moment within the teaching context is necessary to evoke change. In addition, teacher attitudes and practices were identified as key to reducing psychological distress (Baik et al., 2019).

The MI tool (Figure 2) repositions Bath's Three Pillars as three entwined strands which represent *understandings*. *Practices* are centrally located and depicted as a ladder that scaffolds the tool. This depiction illustrates the intentional reciprocal reinforcement between *understandings* and *practices*, both of which are underpinned by *guiding principles*.

Figure 2

MI tool Depicting the Relationships Between Understandings, Practices and Guiding Principles



Note. Understandings are represented as three entwined strands with scaffolding practices which have been underpinned by guiding principles. Adapted from Bath (2008, p. 18).

Understandings

Connection

At the core of Connection are positive and trusting relationships. Being relational is an essential pre-requisite for trauma informed practice. Emotionally satisfying relationships with close friends and family, and community-based relationships are the basis of all human interaction and are necessary for healthy human development (Bath, 2015; Harlow, 1958; van der Kolk, 2014). Healthy relationships are the 'active ingredient' in healthy human development and positive change (Li & Julian, 2012) since they offer a sense of belonging that also promotes respect. Building connection through relationships fosters resilience, whilst supporting change, a necessity within any community.

The key components of healthy relationships include compassion and empathy (Purvis et al., 2013), whilst the skill of active listening demonstrates interest and is the essence of authentic relationships. Healthy relationships have the power to heal ruptured relationships which are, for many, the origins of trauma (Badenoch, 2018; Siegel & Bryson, 2011).

Self-awareness is key to building effective connections. Individuals who are self-aware are conscious of their emotional state and how this influences their behaviours with others. It is only in healthy relationships that felt safety can occur (Bath, 2015; Purvis et al., 2013).

Felt safety

Feeling safe is an essential state for engaging in healthy social interactions and learning yet feeling unsafe is the defining characteristic of anyone who has experienced early adversity. Reassurance of safety does not guarantee an individual's felt safety (Purvis et al., 2013). Attributes of safe environments include consistency, reliability, predictability, availability, honesty, and transparency (Bath, 2008). A sense of felt safety enables calmness and a feeling of security which activates internal social engagement systems. These systems allow the interpretation of social cues and interaction with others and permit the progress of normal development (Porges, 2017). When individuals succumb to a physiological state where there is no calmness and felt safety is absent, they are unable to function and the threshold to behave in socially appropriate ways and/or learn is low (Parris et al., 2015; Porges, 2017). The ability to discriminate between safe and dangerous environments or read cues is lost when in such a reactive state. Here individuals either overreact to perceived threats or dissociate and lose the ability to respond (Porges, 2017).

Felt safety is related to interpersonal connection. This connection enables trust which opens opportunities for felt safety to emerge (Badenoch, 2018; van der Kolk, 2005). Trust can be built by the giving of voice through listening and responding to the needs of others. Giving back voice is a powerful gift that sets the path towards healing (Purvis et al., 2013) because the loss of voice is a defining characteristic of anyone who has experienced early adversity.

Positive interpersonal connections are reliant on the awareness of prosody. Voice tone, intonation and non-verbal communication send subliminal messages regarding safety. Social safety, found in both peer and adult relationships; emotional safety, found through acceptance, empathy, and compassion; and cultural safety found through non-judgment can all be nurtured through positive interpersonal connections (Bath, 2015). The ability to be calm and regulate emotional intensity is

developed in trusting relationships which enable individuals to cope with life's challenges over time.

Self-regulation/coping

Self-regulation/coping is a fundamental protective factor for healthy development (Alvord & Grados, 2005) and is necessary to function effectively within a community. For those who have experienced early adversity, typical brain development is compromised, reducing the capacity for regulation, and magnified in times of stress (Porges, 2017). In a physiological state, hypervigilance becomes the way of being, restricting executive functions (reasoning, organising, and analysing) and deactivating social engagement systems. Coping with everyday life becomes difficult (Porges, 2017). The orbitofrontal cortex, the part of the brain influential in the regulation of emotion, however, retains the “plastic capacities of early development” even in adulthood (Schore, 2003a, p. 265). By using a combination of structure (providing firm guidance when needed) and nurture (gentle and protective care), regulation can be scaffolded, and neurological growth supported (Purvis et al., 2007).

“Self-regulation is not a destination, it is a journey” that ebbs and flows (D. Dana, personal communication, July 14, 2020). Whilst self-regulation is a common aspiration, coping may be more achievable when co-regulation is acknowledged. When co-regulating, emotional control is ‘loaned’ which helps to restore emotional balance (Schore, 2003b). Co-regulation supports and reinforces connection and relationships rather than aspiring to ‘go it alone’. Here the concept of ‘passive pathways’ (Badenoch, 2018) is acknowledged. When in a safe state, the social engagement system is enabled because of the interactions with the social engagement system of another. This process occurs through co-regulation and happens because, as humans we are “neurobiologically designed to respond to another’s offers of connection” (Badenoch, 2018, p. 185). By meeting the needs of another through connection, supportive trusting relationships can be created, and coping achieved.

Practices

Practices enacted in trauma informed communities reflect understanding of the impact of adversity. How individuals respond to the needs and behaviours of others can either increase or reduce psychological distress, impact successful academic outcomes (Kinash, 2021), and ultimately determines whether re-traumatisation is likely to occur (SAMHSA, 2014).

A quote from Professor Brigid Haywood, UNE Vice Chancellor (Kinash, 2021), raises questions around “how we put the student first and how we take the lens of the student and their needs as a means of designing, renewing, refreshing and innovating the support we provide...” (p. 4). Practices used in the university context can give access to the student lens so that needs can be identified. This process can be enhanced through mindful interactions. These involve not only in person interactions but also interaction in online tutorials, on discussion boards and in emails.

Table 1 (below) offers ideas to support mindful interactions in practice. The examples are categorised under the three areas of *understandings* identified above.

Table 1*Examples of Practices to Support Mindful Interactions in Higher Education*

| Connection | Felt safety | Self-regulation/coping |
|---|--|---|
| <p>Be mindful and intentional in practice:</p> <ul style="list-style-type: none"> – Being self-aware, calm, and open to the needs of others increases connection. – Being mindful and using intentional observations permits us to monitor anxiety levels and ascertain how to interact (Siegel, 2012). | <p>Be environmentally mindful:</p> <ul style="list-style-type: none"> – Many aspects within an environment may trigger a 'fear' response in others e.g., loud or sudden noises, displayed images. | <p>Be mindful of an individual's regulatory state:</p> <ul style="list-style-type: none"> – Being attuned to someone's regulatory state, can aid decision making. – To achieve set goals, nurture and structure are needed. Nurture provides care and support for growth whilst structure gives scaffolding for goal achievement. – For example, a student who missed an assessment deadline needs nurture through understanding, but also structure to enable task completion (Purvis et al., 2013). |
| <p>Make time and space to connect:</p> <ul style="list-style-type: none"> – Schedule regular meetings (either in person or via zoom) to establish, facilitate, and maintain connections (Porges, 2017). | <p>Build trust:</p> <ul style="list-style-type: none"> – Share power by giving choices that meet the same outcome. In this way we work 'with' rather than 'for' the individual (Purvis et al., 2013). | <p>Support decision making:</p> <ul style="list-style-type: none"> – Choices give structure whilst working 'with' rather than 'for'. – Compromises broaden the scope to reach a goal and enable coping (Purvis et al., 2013). |
| <p>Engage with mentors:</p> <ul style="list-style-type: none"> – Being willing to mentor and be mentored supports connection. | <p>Be prosody aware:</p> <ul style="list-style-type: none"> – Use intonation. Pitch and volume can provide semantic information. – - Mindful use of volume, tone, pace, and pitch can reduce hypervigilance (Porges, 2017). – Short and concise phrases, in the presence of dysregulation, will support language processing (Purvis et al., 2013). | <p>Co-regulate:</p> <ul style="list-style-type: none"> – Co-regulation is an essential aspect of healthy relationships. – Use empathy and compassion to build understanding and offer emotional support. - Co-regulating can be used to work together, share ideas and find solutions (Badenoch, 2018). |
| <p>Use story sharing:</p> <ul style="list-style-type: none"> – Storytelling creates powerful neural connections that build togetherness in relationships (Baylin & Hughes, 2016). – Use information provided by a student to create a shared story. For example, information from an extension request can be used to build a mindful reply. | <p>Be conscious of non-verbal communication:</p> <ul style="list-style-type: none"> – Develop awareness of mannerisms and body language. This is significant during virtual meetings, where body language can be easily read. Non-verbal communication that contradicts verbal language has the capacity to reduce felt safety (Porges, 2017). | <p>Find time to talk:</p> <ul style="list-style-type: none"> – Conversation is a powerful tool. – Consciously naming feelings enables experiences to be verbally processed. Conversation promotes reflection which fosters mindfulness, a powerful strategy for creating calm (Baylin & Hughes, 2016). |
| <p>Build mutual presence:</p> <ul style="list-style-type: none"> – Use active listening. – Engage in eye contact (where culturally appropriate). – Be attuned to others' feelings (Badenoch, 2018). | <p>Withhold judgement:</p> <ul style="list-style-type: none"> – Listen, be receptive and responsive to alternative perspectives, whether written or spoken. This practice increases open communication. (Badenoch, 2018). | <p>Use predictability:</p> <ul style="list-style-type: none"> – The brain thrives in predictable situations. – For example, advanced warnings regarding timetabling or staffing changes reduces anxiety and maintains regulation (Siegel & Bryson, 2011). |
| <p>Engage in reciprocal activities:</p> <ul style="list-style-type: none"> – Use reciprocal activities, it is not possible to be disconnected whilst being rhythmically in-sync (Porges, 2017). This is achievable in both on campus and online contexts. | <p>Give voice:</p> <ul style="list-style-type: none"> – Giving voice by asking questions, listening and responding to what is heard reduces stress and increases resilience (Purvis et al., 2013). | <p>Meet needs:</p> <ul style="list-style-type: none"> – Being attuned, asking questions, and listening enables student needs to be met (Purvis et al., 2013). |

Case study

The hypothetical case study below recounts a conversation between a teaching academic and PhD student. This case analysis demonstrates how the MI tool *practices* were used to reduce psychological distress. As aforementioned, *understandings* are pre-requisites which inform *practices*.

Sam, a research student, begins study with an experienced supervisory team who are unaware of her trauma history. The team provide instructions relative to research relationships and expectations. Despite attempts to renegotiate the team requirements, Sam is unsuccessful. Power and loss of voice trigger previous memories and she becomes emotionally unwell. Sam then seeks support from central services who advise her to comply with supervisory team requirements or, if mental health prevents, defer. Not wanting to defer, she seeks support from Dr A, a university teaching academic who Sam feels is safe. During conversation, Dr A remains calm despite Sam becoming upset and observes Sam to assess her level of anxiety. Using a low and regulated tone, Dr A asks clarifying questions and listens as Sam tells her story. Dr A shares personal stories of her own PhD experience, acknowledging the challenges and emotions of the PhD journey. Sam calms and engages in discussion about possible ways forward. Eventually, she can reflect on the situation and agrees to meet with her supervisors. Dr A asks Sam if she will go alone or take an advocate; she decides to take an advocate. Sam then organises the meeting where she negotiates a mutually agreeable way of working and continues her study successfully.

Analysis of the case study shows:

Dr A uses connection *practices* by being mindful of her own emotions, remaining calm and using observation to monitor Sam's anxiety levels. She also uses storytelling, from her own PhD experiences to help her to connect with Sam. Felt safety *practices* are demonstrated when Dr A is mindful of prosody and uses questioning and listening strategies to give voice to Sam. Here Dr A builds trust within a context of shared power. Self-regulation/coping *practices* can be observed as Dr A co-regulates with Sam, using empathy and compassion as Dr A acknowledges and aligns with Sam's emotions. Once regulated, Sam can reflect on the situation, and work with Dr A to share ideas and explore possible solutions. Structure is provided by offering Sam two choices; to attend a meeting alone or take an advocate. Finally, Sam is empowered to organise and attend the meeting and a successful outcome is achieved.

Guiding principles

Trauma informed communities have a shared vision that guides practice. Whole community commitment is essential for a cohesive vision to be effective (Kinash, 2021). The "10 things" Kinash (2021) knows for certain about student experience, align with the *guiding principles* provided in this tool. Statements such as "students should be acknowledged, nurtured and heard" (p. 3). And "equity means that students are not treated the same, but they are given the supports they require to succeed" (p. 8), along with the sentiments of working 'with' rather than 'for' are reflected throughout these principles. So too, the notion of staying tuned to proactive solutions and looking "upstream" to understand the cause of student distress. Kinash (2021) states that

one way for university communities to move forward is “by adopting ... practice-based frameworks grounded in shared principles” (p. 11).

CHAT (Engeström, 2000) illustrates that the practices enacted by individuals within the community are reflected in the rules, policies and procedures that inform the ways in which the community functions. Thus, the MI tool *guiding principles* are provided to support the development of a shared way of working that will inform policy and practice to support the individual needs of all members. MI tool *understandings* and *practices* are underpinned by the *guiding principles* which are listed below.

Principle 1: Safety: Understand that students need to feel safe; mindful interactions can promote a sense of safety.

Principle 2: Trustworthiness and Transparency: Build a culture of connection; trusting and sustainable relationships support transparency and student resilience.

Principle 3: Peer support: Create opportunities for mutual connections; sharing lived experience through student peer support promotes self-help and healing.

Principle 4: Collaboration and Mutuality: Support resilience by partnering; work with, rather than for, when finding solutions to student problems.

Principle 5: Empowerment, Voice and Choice: Prioritise voice; empower students by offering choices to support shared decision making.

Principle 6: Cultural, Historical, and Gender Issues: Value each student as an individual; respect that the student is an expert in their own life with their own cultures and histories.

Discussion

Implications of early adversity are well documented and potentially lifelong, but they do not need to be excluding or defining. How teaching academics interact with students can have a powerful impact on student success (Doughty, 2019). The Polyvagal theory explains why this may be the case. Porges (2017) identifies that a sense of safety is required to provide a calm and regulated state necessary for learning. The autonomic state (how calm we are) influences and is influenced by what is experienced (Porges, 2017). Thus, teaching academics have opportunities to increase or decrease a students' sense of safety by their interaction practices and therefore, ameliorate or exacerbate the impact of psychological distress and resulting levels of success. Universities are not structured for safety, they “function consistently with a clear and objective evaluative model. Evaluative models...shift physiological state to support defence” (Porges, 2017, p. 42). By choosing to be more mindful in interactions with students, teaching academics can create relationships and environments that counteract the impact of evaluative models to promote success (Stephens, 2020). These relationships do not need to be face-to-face or take time to build, nor does extra work need to be undertaken. Positive difference can be made by changing the ways in which everyday interactions occur. Whilst initially this ‘state of mind’ may need thoughtful awareness, “regular practice supports movements from a state created during practice to a trait that becomes...a way of being (Siegel, 2018, p. 88).

The MI tool has been designed as a cultural tool to support growth and development of mindful practice for individuals and teams working in higher education. By providing beginning

understandings of the impact of early adversity, *practices* that support the development of mindful interactions and *guiding principles* to develop an agreed way of working, this practical tool intends to enable a reflexive approach to working with students that can support best practice. As educators, “we ...need to critique ourselves to see if our own actions perpetuate the very cycle from which we hope to escape” (Door, 2014, p. 89).

It has been suggested that teaching academics require professional learning to support changes to their practice (Baik et al., 2019; Trolan et al., 2020). In addition to providing a framework from which to work, it is envisaged that the MI tool, as presented in this paper, could also be used to structure university professional learning. The *understandings*, representing a synthesis of current theoretical thinking and literature would engage teams in academic dialogue, raise awareness and construct knowledge. Vignettes which include lived experiences would be used to support, consolidate, and deepen understanding. Scenarios, role play, or video analysis would be used to explore the *practices* and enable specific context practices to emerge. Finally, the *guiding principles* provide a vehicle for critical reflexion. Here, carefully crafted reflexive questions would facilitate robust team discussions and be used to challenge professional, individual and group beliefs (Door, 2016). It is anticipated that outcomes of these discussions would lead to; an agreed vision from which to work; stronger team cohesion; personal professional development and inspire changes to practice. “Change involves not looking inward, as such, but assessing thinking through action in the world” (Door, 2016, p. 97). All three MI tool elements may be implemented in stages and built on over time.

A MI tool handbook, currently under development will provide additional support and guidance for professional learning. The MI tool handbook will offer additional resources to aid professional learning and practices to support implementation. It is important to note here that being trauma informed is not just about what we do, it is about who we are (Stephenson, 2023) and as such becoming trauma informed is a journey. Notably every member of a community will be at their own point on that journey. When a community is truly trauma informed, every member will have their voice heard and respected as they travel along their path. Walking alongside colleagues who may be beginning their journey, offering respectful constructive critique, and listening with empathy are at the heart of organisational growth and change (SAMHSA, 2014). By using the MI tool to reflect on practice and raise awareness of the impact of psychological distress, it is envisaged that practices can grow, and a shared way of working can be developed. These actions will create a learning environment where a sense of safety and success are woven into the fabric of the university.

CHAT acknowledges that policy can both guide and constrain practice (Foot, 2014). Desired practice, therefore, should be reflected in policy. If the MI tool is embraced by teaching academics (subject) this will influence changes to policy and procedures (rules) and facilitate the relationship between teaching academics (subjects) and school/faculty staff and students (community).

Future research directions

Preliminary research into the usability and effectiveness of the MI tool by university teaching academics is intended. The MI tool will be introduced through professional learning as discussed above. Data will be gathered from each core component of the activity system (the university) to map changes over time. CHAT will be used to analyse the impact of implementation of the MI tool

on each of the core components. Similar research in higher education is advised to build an empirical evidence base.

It is recommended that future research directions explore the effectiveness of the MI tool more broadly within the university system. This could be achieved by shifting the focus of the subject and/or object to achieve a different outcome. In addition, contextualising the *guiding principles* by changing key words would be necessary to specifically align the tool with the intended research outcome/s. For example, if the research outcome is teaching academic wellbeing, the subject could be changed to leadership with the object being their practice. In this instance, teaching academic would replace the word student in each of the *guiding principles*.

Research into the application and impact of the MI tool beyond the university system, such as corporate training or sports coaching, would further inform refinements to the tool.

Limitations

Challenges associated with teaching large cohorts who study online, with microphones muted and screens closed, may compromise the effectiveness of some practices in the MI tool. In addition, the isolation of online learning whereby communication takes place on a discussion board and is often sporadic, adds to disconnection. The *guiding principles* can assist university teaching academics through critical reflexion to make innovative pedagogical adaptations.

Conclusion

Resources like the MI tool are needed to respond to the global rising trend of university student mental ill-health (Australian Bureau of Statistics, 2009; Davidson, 2020; Solmi et al., 2021; Stephens, 2020) which have been exacerbated since the onset of COVID-19 (Liyonagi et al., 2022).

There may be many reasons why university students experience mental ill-health, however, links between the traits of those identified as most at risk of developing mental health issues and adverse childhood experiences have been highlighted. This connection has given rise to the idea of viewing student mental health through a trauma-informed lens which provides an alternative way to think about practices in the higher education context from that traditionally employed. Here the concepts of connection, felt safety and regulation (Bath, 2015) have been foregrounded, with the recognition of the power of the student-teacher relationship and the impact of interactions that occur in this dyad (Doughty, 2019; Stephens, 2020).

CHAT empowered the authors to “understand and explain human activity” (Foot, 2014, p. 3) by enabling analysis of interactions within a university system. This analysis highlighted how cultural tools within a system are used to effect change. To create the change needed to promote student mental health (the research objective), the MI tool was designed. This innovative tool provides theoretical guidance which informs pedagogy (understandings), strategies for translating theory into practice (practices) and a catalyst for critical reflection (guiding principles) all of which support the development of mindful interactions.

Providing a tool by itself, however, is not sufficient to create and sustain the changes necessary to promote university student mental health. It is recommended that professional learning be provided to enable teaching academics to work together to critically reflect on beliefs, further their

knowledge and awareness of the impact of trauma and develop practices that promote mindful interactions over time. It has been suggested that the MI tool can provide a resource on which such professional learning can be based.

Finally, the significance of the teaching academic – student relationship should not be underestimated. In addition to creating a sense of safety that is essential for learning (Porges, 2017), mindful interactions within this context promote ongoing reflexion (Door, 2014) whilst simultaneously offering a window of understanding into the life of the student. As Door (2014) noted, “where transformation is the aim ... no change of the world of social relations can take place separately from the transformation of individuals, particularly those on the “dispensing” side of the education system” (p. 96).

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Conflict of Interest

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References

- Adams, S. A., & Riggs, S. A. (2008). An exploratory study of vicarious trauma among therapist trainees. *Training and Education in Professional Psychology, 2*(1), 26–34.
<https://doi.org/10.1037/1931-3918.2.1.26>
- Alvord, M. K., & Grados, J. J. (2005). Enhancing resilience in children: A protective approach. *Professional Psychology, 36*, 238–245.
- Australian Bureau of Statistics. (2009, March). *Australian social trends, Mental Health*: (No. 4102.0).<https://www.abs.gov.au/ausstats/abs@.nsf/lookup/4102.0main+features30marc h%202009>
- Australian Institute of Health and Welfare. (2020). *Mental health services in Australia*.
<https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/summary-of-mental-health-services-in-australia>
- Avery, J. C., Morris, H., Galvin, E., Misso, M., Savaglio, M., & Skouteris, H. (2020). Systematic review of school-wide trauma-informed approaches. *Journal of Child and Adolescent Trauma, 14*(3), 381–397. <https://doi.org/10.1007/s40653-020-00321-1>
- Badenoch, B. (2018). *The heart of trauma: Healing the embodied brain in the context of relationship*. W.W. Norton & Company Inc.
- Baik, C., Larcombe, W., & Brooker, A. (2019). How universities can enhance student mental wellbeing: The student perspective. *Higher Education Research & Development, 38*(4), 674–687. <https://doi.org/10.1080/07294360.2019.1576596>
- Bath, H. (2008). The three pillars of trauma-informed care. *Reclaiming Children and Youth, 17*(3), 17–21.
https://www.hope.ms.gov/sites/mccj/files/Hope%20training%20January%202021/read_3%20Pillars%20of%20TIC.pdf
- Bath, H. (2015). The three pillars of traumawise care: Healing in the other 23 hours. *Reclaiming Children and Youth, 23*(4), 5–11.
https://www.traumebevisst.no/kompetanseutvikling/filer/23_4_Bath3pillars.pdf
- Baylin, J., & Hughes, D. (2016). *The neurobiology of attachment focussed therapy: Enhancing connection a trust in the treatment of children and adolescents*. WH Norton & Co.
- Biddle, N., Edwards, B., Gray, M., & Sollis, K. (2020). *Initial impacts of COVID-19 on mental health in Australia*. ANU Centre for Social Research and Methods.
https://csrcm.cass.anu.edu.au/sites/default/files/docs/2020/6/Mental_health_before_and_during_the_COVID_crisis.pdf
- Bore, M., Pittolo, C., Kirby, D., Dluzewska, T., & Marlin, S. (2016). Predictors of psychological distress and well-being in a sample of Australian undergraduate students. *Higher Education in Research and Development, 35*(5), 869–880.
<https://doi.org/10.1080/07294360.2016.1138452>

- Butler, L. D., Maguin E., & Carello, J. (2018). Retraumatization mediates the effect of adverse childhood experiences on clinical training-related secondary traumatic stress symptoms. *Journal of Trauma & Dissociation*, 19(1), 25–38. <https://doi.org/10.1080/15299732.2017.1304488>
- Campbell, J. A., Walker, R. J., & Egede, L. E. (2016). Associations between adverse childhood experiences, high-risk behaviours, and morbidity in adulthood. *American Journal of Preventative Medicine*, 50(3), 344–352. <https://doi.org/10.1016/j.amepre.2015.07.022>
- Carello, J., & Butler, L. D. (2014). Potentially perilous pedagogies: Teaching trauma is not the same as trauma-informed teaching. *Journal of Trauma and Dissociation*, 15(2), 153–168. <https://doi.org/10.1080/15299732.2014.86757>
- Crawford, J. (2021). During and beyond a pandemic: Publishing learning and teaching research through COVID-19. *Journal of University Teaching & Learning Practice*, 18(3), 1-7.
- Crosby, S. (2015). An ecological perspective on emerging trauma-informed teaching practices. *Children & Schools*, 37(4), 223–230. <https://doi.org/10.1093/cs/cdv027>
- Davidson, C. (2020). *The single most essential requirement in designing a fall online course*. HASTAC <https://www.hastac.org/blogs/cathy-davidson/2020/05/11/single-most-essential-requirement-designing-fall-online-course>
- Door, V. (2014). Critical pedagogy and reflexivity: The issue of ethical consistency. *International Journal of Critical Pedagogy*, 5(2), 88-99. <https://doi.org/10.1080/1360144980030102>
- Doughty, K. (2019). *Increasing trauma informed awareness in higher education*. 45th Biennial Convention (16-20 November, 2019). [Doctoral dissertation. Wilmington University]. <https://www.proquest.com/openview/7b876634b286ebc8f501429f0f5ddff9/1.pdf?pq-origsite=gscholar&cbl=18750>
- Engeström, Y. (2000). Activity theory as a framework for analysing and redesigning work. *Ergonomics*, 43(7), 960–974. <https://doi.org/10.1080/001401300409143>
- Felitti, V., Anda, R., Nordenberg, D., Williamson, D., Spitz, A., Edwards, V., ... Marks, J. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. *American Journal of Preventive Medicine*, 1(245–258).
- Foot, K. (2014). Cultural Historical Activity Theory: Exploring a theory to inform practice and research. Retrieved from <https://faculty.washington.edu/kfoot/Publications/Foot-CHAT-explored-dist-tf.pdf>
- Gilin, B., & Kauffman, S. (2015). Strategies for teaching about trauma to graduate social work students. *Journal of Teaching and Social Work*, 35(4), 378–396. <https://doi.org/10.1080/08841233.2015.1065945>
- Harlow, H. (1958). The nature of love. *American Psychologist*, 13, 673–685.
- Howard, J. A. (2018). *A systemic framework for trauma-aware schooling in Queensland*. Unpublished report. Queensland University of Technology, Brisbane. <https://www.eprints.qut.edu.au/120276/1/Howard%2C%20State->

[Wide%20Framework%20Trauma-Aware%20Schooling%2C%20Research%20Report%202018.pdf](#)

- James, S.A. (1994). John Henryism and the health of African Americans. *Culture, Medicine and Psychiatry*, 18(2), 163-182. <https://doi.org/10.1007/bf01379448>
- Kinash, S. (2021). Student experience: 10 things I know for certain. *Journal of University Teaching & Learning Practice*, 18(8). <https://doi.org/10.53761/1.18.8.2>
- Larcombe, W., Finch, S., Sore, R., Murray, C. M., Kentish, S., Mulder, R. A., Lee-Stecum, P., Baik, C., Tokatlidis, O., & Williams, D. (2016). Prevalence and socio-demographic correlates of psychological distress among students at an Australian university. *Studies in Higher Education*, 41(6), 1074–1091. <https://doi.org/10.1080/03075079.2014.966072>
- Li, J. & Julian, M. (2012). Developmental relationships as the active ingredient: A unifying working hypothesis of ‘what works’ across intervention settings. *American Journal of Orthopsychiatry*, 82(2), 157–166. <https://www.researchgate.net/publication/224050595>
- Liyanaige, S., Saqib, K., Khan, A. F., Thobani, T. R., Tang, W. C., Chiarot, C. B., AlShurman, B. A., & Butt, Z. A. (2021). Prevalence of anxiety in university students during the COVID-19 pandemic: A systematic review. *International Journal of Environmental Research and Public Health*. 19(62), 1-13.
- Maté, G. (2021). *Trauma is not what happens to you, it is what happens inside you*. YouTube. <https://www.youtube.com/watch?v=nmJOuTAk09g>
- Parris, S. R., Dozier, M., Purvis, K. B., Whitney, C., Grisham, A., & Cross, D. (2015). Implementing Trust-Based Relational Intervention® in a charter school at a residential facility for at-risk youth. *Contemporary School Psychology*, 19, 157–164. <https://doi.org/10.1007/s40688-014-0033-7>
- Porges, S. (2017). *The pocket guide to the polyvagal theory. The transformative power of feeling safe*. W.W. Norton & Company Inc.
- Ports, K. A., Ford, D. C., & Merrick, M.T. (2016). Adverse childhood experiences and sexual victimization in adulthood. *Child Abuse & Neglect*, 51, 313–322. <https://doi.org/10.1016/j.chiabu.2015.08.017>
- Purvis, K. B., Cross, D. R., Dansereau, D. F., & Parris, S. R. (2013). Trust-Based Relational Intervention (TBRI) ®: A systematic approach to complex developmental trauma. *Child & Youth Services*, 34, 360–386. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3877861/>
- Purvis, K. B., Cross, D. R., & Sunshine, W. L. (2007). *The connected child: Bring hope and healing to your adoptive family*. McGraw Hill.
- Rotella, S. (2020, November, 1). Editorial. *The Lancet Infectious Diseases*. 20(11), 1349-1482.
- Rudolph, J., Itangata, L., Tan, S., Kane, M., Thairo, I., & Tan, T. (2021). ‘Bittersweet’ and ‘alienating’: An extreme comparison of collaborative autoethnographic perspectives from higher education students, non-teaching staff and faculty during the pandemic in the UK and Singapore. *Journal of University Teaching & Learning Practice*, 18(8). <https://doi.org/10.53761/1.18.8.10>

- Schon, D. A. (2016). *The Reflective Practitioner. How professionals think in action*. Routledge.
- Schore, A. N. (2003a). *Affect dysregulation and disorders of the self*. W.W. Norton & Company Inc.
- Schore, A. N. (2003b). *Affect regulation and the repair of the self*. W.W. Norton & Company Inc.
- Scobie, H., & Picard, M. (2018). Embedding mental wellbeing in Australian regional universities: Equity interventions. *English Language and Foundation Studies Centre and the Centre of Excellence for Equity in Higher Education*. 5(1), 65–79.
- Siegel, D. J., & Bryson T. P. (2011). *The whole-brain child*. Delacourte Press.
- Siegel, D. (2012). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.). The Guilford Press.
- Siegel, D. (2018). *Aware. The science and practice of presence*. Penguin Random House.
- Sinatra, G. M., Heddy, B. C., & Lombardi, D. (2015). The challenges of defining and measuring student engagement in science. *Educational Psychologist*, 50(1), 1-13.
<https://doi.org/10.1080/00461520.2014.1002924>
- Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., de Pablo, G. S., Shin, J. I., Kirkbride, J. B., Jones, P., Kim, J.H. et al. (2021). Age at onset of mental disorders worldwide: Large-scale meta-analysis of 192 epidemiological studies. *Mol. Psychiatry*, 17(22), 281-295.
- Souers, K., & Hall, P. (2016). *Fostering resilient learners: Strategies for creating a trauma sensitive classroom*. Alexandria: Association for Supervision and Curriculum Development (ASCD).
- Stallman, H. M. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, 45(4), 229–236.
- Stephens, D. (2020). Trauma-informed pedagogy for the religious and theological higher education classroom. *Religions*, 11, 1–14. <https://doi.org/10.3390/rel11090449>
- Stephenson, E. (2023, June 21). Trauma-informed practice in early childhood education. In *Oxford Research Encyclopedia of Oxford Research Encyclopedia of Education*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190264093.013.1874>
- Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. HHS Publication No. (SMA) 14-4884. Substance Abuse and Mental Health Services Administration.
- Teicher, M. H., Andersen, S. L., Polcari, A., Anderson, C. M., & Navalta, D. M. K. (2003). The neurobiological consequences of early stress and childhood maltreatment. *Neuroscience & Behavioural Reviews*. 27(1-2), 33–44.
- Torsney, B., Burke, K., Milidou, M., Mansur, M., & Torsney, C. B. (2022). Coping with COVID-19: An exploratory mixed-methods investigation of the impact of John Henryism on urban college students' engagement in schoolwork. *Journal of University Teaching & Learning Practice*, 19(3). <https://ro.uow.edu.au/jutlp/vol19/iss3/14>

- Trolan, T. L., Archibald, G. C., & Jach, E. A. (2020). Well-being and student–faculty interactions in higher education. *Higher Education Research and Development*, 1–15.
<https://doi.org/10.1080/07294360.2020.1839023>
- Trust, T. (2017). Using cultural historical activity theory to examine how teachers seek and share knowledge in a peer-to-peer professional development network. *Australasian Journal of Educational Technology*, 33(1), 98–113.
<https://ajet.org.au/index.php/AJET/article/view/2593>
- van der Kolk, B. A. (2005). Developmental trauma disorder: Toward a rational diagnosis for children with complex trauma histories. *Psychiatric Annals*, 35(5), 401–408.
- van der Kolk, B. A. (2014). *The body keeps the score. Brain, mind, and body in the healing of trauma*. Penguin.
- World Health Organisation. (2018). *Mental health: Strengthening our response*.
<https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>