International Journal of Systems and Society
Volume 5 • Issue 2 • July-December 2018

A Case for TIC:
A Complex Adaptive Systems Enquiry for Trauma Informed Care

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ABSTRACT

Trauma Informed Care (TIC) is an approach to human services based on the understanding that most people in contact with services are more likely to have experienced some level of trauma, adversity and loss and this understanding needs to be held by those involved so that it is may permeate service relationships and delivery. This article reviews TIC literature and introduces a case example outlining the successes and challenges of TIC implementation in practice, i.e. staff awareness, knowledge and skills, communication and quality of human interaction, wellbeing and resilience, organisational structures and artefact, measurement and monitoring for success. Insights from complexity and interpersonal neurobiology are interpreted in the context of facilitating TIC implementation, i.e. parallel safe-to-fail interventions, managing constraints and boundary conditions, monitoring change through trusted sensor networks, maintaining awareness development practices.

KEYWORDS

Complex Adaptive Systems, Complex Responsive Processes, Interpersonal Neurobiology, Trauma Informed Care

1. INTRODUCTION

The purpose of this paper is threefold: - review the concept of Trauma Informed Care (TIC) and identify challenges of implementation, as presented in the literature; - introduce experiences and learning from practice through a case example; - outline ontological and epistemological perspectives from complexity science and interpersonal neurobiology towards relevant action in facilitating TIC implementation.

2. TRAUMA INFORMED CARE – A VIEW FROM THE LITERATURE

The Trauma Informed Care (TIC) approach is based on the understanding that most people in contact with human services are more likely to have experienced some level of trauma, adversity and loss (Anda et al., 2006), and this understanding needs to be held by those involved so that it is may permeate service relationships and delivery (Fallot & Harris, 2001). It requires sustained system leadership

DOI: 10.4018/IJSS.2018070101

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and governance to address toxic stress in such organisations and a culture of open learning (Sandra L Bloom & Sreedhar, 2008). Paterson (2014) defines TIC as "a system development model that is grounded in and directed by a complete understanding of how trauma exposure affects service user's neurological, biological, psychological and social development" (Paterson, 2014).

There are several published sets of trauma-informed principles to guide implementation efforts (Elliott, Bjelajac, Fallot, Markoff, & Reed, 2005; Jennings, 2004). Quadara and Hunter (2016) define the principles of TIC as:

- Having a sound argument of the prevalence and nature of trauma arising from interpersonal violence and its impacts on other areas of life and functioning;
- Ensuring that organisational, operational and direct service provision practices and procedures do not undermine and indeed promote the physical, psychological and emotional safety of consumers and survivors;
- Adopting service cultures and practices that empower consumers in their recovery by emphasising autonomy, collaboration and strength-based approaches;
- Recognising and being responsive to the lived, social and cultural contexts of consumers, which shape both their needs as well as recovery and healing pathways;
- Recognising the relational nature of both trauma and healing.

Yatchmenoff, Sundborg, and Davis (2017) argue that TIC principles fall into three domains: safety, empowerment and self-worth. TIC is a systems-wide endeavour, to change the organisation and all of its aspects to be oriented with trauma. This does not require the organisation or the people within it to provide the treatment or interventions that work on the symptoms of trauma (Quadara & Hunter, 2016).

Efforts to define TIC, outline its principles and generate buy-in require a focus on implementation (Miller & Najavits, 2012). Service providers are requesting concrete examples of what it means in practice, and are seeking the most effective strategies to make the changes required for implementation. However, as expressed by Yatchmenoff et al. (2017), despite an abundance of national centres, web-based resources, conferences, training opportunities and experts offering technical assistance or consultation, much of the dialogue regarding implementation remains academic, resting on principles and general guidelines.

3. TRAUMA INFORMED CARE IN MENTAL HEALTH SERVICES

It is known that people in contact with mental health services who have experienced sexual or physical abuse in childhood typically undergo longer psychiatric treatment and are admitted more frequently into hospitals, are prescribed more medication, more likely to self-harm and are more likely to die from suicide than those who have not experienced variations of childhood abuse (Read, Bentall, & Fosse, 2009). Survivors are often re-traumatised when in contact with mental health systems; this is due to the operating principles of coercion and control (S.L. Bloom & Farragher, 2011). Current services and supports that do not acknowledge the role of trauma in people's lives and fail to realise the need for safety, mutuality, collaboration, and empowerment will expect to see re-traumatisation, enforcing the need for survivors to seek other means to cope (Sweeney, Clement, Filson, & Kennedy, 2016).

Staff can encounter conflicts between their own personal and ethical codes of conduct whilst working in mental health systems, due to the policies, procedures and practices they may be required to perform (Sweeney et al., 2016). An example is given by Sweeney et al. (2016): 'The use of seclusion and restraint as an institutional practice erodes the very meaning of compassion and care, the primary reasons why most staff enter their chosen field.' The conflictions between job duties and personal moral code warrant chronic stress for staff, and they must learn and adapt. Coping strategies can

include no longer possessing the ability to empathise, viewing people as "other" which disqualifies their humanity and basic human rights. (Sweeney et al., 2016). These occurrences can fabricate corrupted cultures in organisations. In "corrupted cultures", it is common that the basic values of the organisational are no longer sought, the needs of staff are placed above those of service users; the use of coercion and control may be used when less restrictive options are available (Sweeney, Filson, Kennedy, Collinson, & Gillard, 2018). Many working practices and routines (professional hierarchies and lack of supervision for staff) in place dehumanise both staff and service users and lead to human rights violations (Sweeney et al., 2016).

The Trauma Informed Approach is applicable to the delivery of all human services. There is significant interest in integrating Trauma-Informed Practices into mental health and wellbeing in the UK. Both Scotland & Wales already devote national resources to trauma-informed public services. These services incorporate the understanding that people using services may have experienced trauma and that this trauma may have impacted on them in ways which would influence their interactions with that service, e.g., they may find it difficult to form trusting relationships and not feel safe in services. Trauma-informed services, instead, are delivered in ways that prompt safety and trust and do not re-traumatise. Training, supervision and support for staff are essential towards this goal but also has the potential to decrease burnout and reduce staff turnover (Sweeney et al., 2016). Mental health services impact staff and service users in parallel. Service users may feel unsafe and show levels of aggression towards staff. In turn, this may lead staff to become wary and hostile. Organisations may respond with punitive and risk-averse measures. All staff involved in trauma-informed mental health services understand the impact of trauma on a person's ability to survive in the present moment. The most crucial shift being involve shifting from the thinking 'what is wrong with you' to 'what happened to you' (Fallot & Harris, 2001).

4. IMPLEMENTATION OF TIC

TIC initiatives usually subscribe to the Plan-Do-Study-Act (PDSA) model of iterative change. The early stages of the TIC initiative involve acquiring foundational knowledge, generating buy-in, and ensuring other elements of readiness. They begin with foundational training and the establishment of a workgroup that is charged with leading the implementation effort. All staff in the organisation are expected to receive training in the core knowledge areas. Shortly after training, the TIC workgroups monitor results, propose additions, identify strengths and challenges, etc. Yatchmenoff et al. (2017) identify the importance of the role of the workgroup to sustain momentum across the organisation and to model trauma-informed-practice. Effective communications can institutionalise the group and its practices and ensures that no one person is solely identified with the effort.

If trauma-informed care is in response to a wish to address the growing awareness around the role of trauma in mental health, then looking to models of organisational compassion might be fruitful. Frost et al. (2006) describes how a compassionate organisational response can focus on the interpersonal skill of the staff (primarily frontline staff), the systems that support those staff to do their job effectively and finally the organisational narratives around the nature of the tasks, that is, the way it is integrated into policies and strategies. Pathways are one way of describing the task; members of the trauma-informed workgroup can walk through the experience of a client from the moment the service need arises: the referral or self-referral, initial contact, appointment scheduling, entry and intake, the waiting room, location of bathrooms, signage, and so forth, all the way to exiting services. Examining each step for conditions that might activate a trauma response, fail to activate a trauma response or welcoming of a trauma response. This approach appeals to direct service staff because it is concrete rather than abstract and contains within it the experiences that service users might have shared with them. Utilising a narrative approach, it allows for ease and effectiveness for direct involvement from individuals with lived experience of trauma and of the service system in

question. The narrative approach can be useful for gathering information from consumer advisory groups or in listening sessions with service users (Yatchmenoff et al., 2017).

5. THE MEASUREMENT PROBLEM

Most of the current understanding of TIC rests on principles and values rather than specific recommendations for action (Yatchmenoff et al., 2017). The literature is devoid of detailed and concrete information about what commonly happens in the implementation process, the barriers that are encountered, factors that can facilitate the process, and how organisations are effectively moving forward despite significant challenges (Yatchmenoff et al., 2017). Building the planning process around the principles seem to be a common approach in facilitating TIC.

Research in TIC is impeded at present as there is no effective method to measure: what changes, how many changes, what type of changes would influence these or other outcomes, and how long it should take for outcomes to be realised (Yatchmenoff et al., 2017).

There are also issues in how trauma itself is measured. The Adverse Childhood Experience (ACE) scale is an orderly checklist of 10 childhood events (Anda et al., 2006). This has produced a lot of helpful public health data. However, the simplicity of the Adverse Childhood Experience scale does not describe either the full range of adverse experiences that can impact on people over a lifespan. There are differences in how people would define abuse and neglect, e.g. many people who have been physically abused think that it was punishment for their misdemeanours and not abuse. Also, the ACE score does not account for any adult traumas such as assaults, traumatic loss, accidents or war & displacement. Furthermore, each item on the scale covers a large variance of experience. The scale also pays no attention to resilience factors. I.e. we know that disclosure can moderate the impact of trauma, as long as it is managed well. Healthy relationships and belonging to a social group can prove helpful too. Trauma is therefore much more complex than a score on a questionnaire. It can instead be defined as anything that presents a threat to physical or emotional wellbeing that overwhelms resources at some point or that impacts on functioning. Traumatic events can include those which provoke fear, loss, or pain, those that exclude us from others, harmful or exploitative or controlling relationships, or finally an absence of care or neglect. It is of great significance that bearing witness to such events even if they did not happen to you can also impact on wellbeing, health and coping. Witnessing domestic violence between your parents, being a first responder at a major incident or hearing stories of trauma as a therapist can all be forms of trauma too.

6. IMPLEMENTATION. LEARNING AND CHALLENGES: A CASE EXAMPLE

A large mental health provider for the NHS in England has been working towards trauma-informed practices for some years. Early implementation efforts emerged after they developed a pathway of care for people who are in services and have traumatic experiences which may be contributing to their difficulties. Pathways aim to deliver agreed standards of care, to the right people, in the right order, at the right time, in the right place, with the right outcome. They are likened to an approach akin to NICE guidelines. They are usually diagnostic and evidence-based rather than flexible and patient centred and don't often allow for differing skill sets of staff. A pathway for Post-Traumatic Stress Disorder, would not cover the role of trauma in all of the other clinical presentations seen in mental health services. The Trauma Informed 'pathway' became the first clinical link pathway in 2009. It was so called because it was an adjunct to diagnostic pathways, being applicable if trauma was present regardless of the diagnosis. However, the standard pathway document that was produced was not helpful for clinical staff. In addition, a manual of guidance and resources were developed for staff. This consisted mainly of mind maps of ideas and summaries of good practice or evidence. The purpose was to provide a resource base for training and for staff to use in their encounters with service users or for leaders in organising and managing their staff and services. The guidance was crafted

in the form of a booklet, which could be printed out for easy accessibility and usability. Whilst the guidance is helpful for knowledge and developing transactional skills, healing from complex trauma requires therapeutic relationships between people rather than a series of tasks. Guidance and training are therefore as attachment focused as it is skills based and there are very few 'must do'. This is rare for pathways that tend to be transactional. This pathway allows staff to use the skills they have in trauma-informed ways rather than defining a narrow set of skills that the workforce was not equipped to deliver. This set out to empower staff to feel they could offer something, adapt and have confidence that they could have meaningful conversations with service users about the context of their difficulties.

As the pathway had some good results when piloted, a business case was developed for a formally funded project to embed into services.

The project's vision:

- Meet Department of Health guidelines regarding routine enquiry and handle such disclosures well;
- To develop our current therapists to be skilled in dealing with complex trauma and also be able to support services local to them in their endeavours to be trauma-informed;
- For clinical staff to have some core skills in managing disclosures well and access to resources that support their practice;
- For care plans and risk assessments to adequately reflect recovery from trauma as a goal of services;
- For trauma-informed care to be embedded into policies, programmes and local systems;
- For services to avoid causing iatrogenic harm where possible;
- To address issues of staff trauma and wellbeing;
- To contribute to the evidence base for trauma-informed practice.

Project management is suitable for tasks that have a clear and fixed output. However, creating a trauma-informed mental health service is not akin to a series of tasks. The outputs of TIC are many, varied, and multifaceted. Tasks to get there are iterative and change over time, responding to a local need, workforce pressures, and relevant strengths. Recovery from trauma requires empowerment. It needs choice over the method of recovery. A trauma-informed mental health service would see the person as having problems acting on them from outside and see their reactions as ways of responding to or surviving those external factors. The task of recovery-focused mental health services is, therefore, more akin to raising a child in its complexity than managing the project of a new building.

Such complexities may be better managed as a programme than a project. Programmes are more systemic ways that organisations can manage change than projects. They deal with outcomes that are uncertain at the start and have methods to manage many work streams. However, programmes are still often transactional in nature. Instead, the process of change towards trauma-informed care feels more like a social movement. The kind of leadership required so far has been less that of 'expert' and more of 'organiser' and 'catalyst'. The success in this provider since its conception of trauma-informed care in 2005 has been though galvanising people's inherent motivation towards change and building on their strengths. It has required allowing a multiplicity of voices about what trauma-informed care might involve. Thus, the kinds of organisational leadership attitudes towards facilitating TIC may include: -Developing expertise to demonstrate what can be achieved and demonstrate adequate ability; -Adopting the role of a 'coach' rather than that of an 'expert'; -Devolving power and control; - Use of co-production as a standard method; -Investing time; - Being persistent and patient; - Having conversations: informal power is relational; -Utilising 'slow drips' of information and insight.

The key learning from the process of trauma-informed change can be summarised as:

- Market a message that aligns with organisational concerns;
- Use established change processes as a vehicle;
- Push the boundaries to see where opportunities for change lie;

- Sometimes trauma is hidden, this is an issue for staff too;
- Build on local strengths;
- Local evidence and the power of testimony is greater than research in persuading people;
- Senior level sponsorship is helpful;
- Bring like-minded people together towards a shared cause, while allowing for critical voices.

Training for staff in trauma-informed care, therefore, needs to include more than skills and evidence. It needs to explore what motivates people as the stakeholders delivering this and how such a culture change links to that motivation. It needs teams to work out together what systems they need to change and who is responsible for the new tasks. It needs to link trauma-informed practices with established business priorities so that it becomes part of the narrative of the organisation and so that such practices can be seen to support successful solutions to those priorities. There is a need for working together, valuing everybody's contributions, and building on success. A national community of people working towards a compassionate response to trauma survivors would be great in creating the social movement required for such a culture shift.

The literature describes a variety of challenges faced during trauma-informed implementation: a lack of confidence or uncertainty, a lack of belief or hope, a lack of shared vision and goals (Yatchmenoff et al., 2017). It is important to contextualise the challenges. This local case example identifies the following specific issues:

- The huge scale of the organisation (staffing of 6517, the population of 2 million, Geographical spread, covering Durham, Darlington, and Teesside, Hambledon, Richmondshire, and Whitby, Humber Coast, and Vale, North Yorkshire, West Yorkshire, and Harrogate. (TEWV, 2017, 2017/8) and the different subcultures based on the previous merging of different organisations, differing clinical specialities, differences in the commissioned number of staff;
- The number of interdependencies between the trauma programme and other projects all aiming for system change;
- The pressure applied to staff who are already busy and have competing priorities and values;
- The changes in sponsorship of the project over time and changes in the way the organisation manages change;
- Trauma being difficult to contemplate prompting varying degrees of personal resistance;
- Mental health services have been based around a medical model of intrapersonal symptoms and diagnosis which is a very different way of seeing the problem of mental distress than a model based on cultural adversity;
- The skill and capabilities of staff in dealing with the significance of change;
- The small but significant issue of staff's own issues with trauma, both historical in nature and that endured as a result of their work;
- Fixing symptoms with short-term interventions rather than acknowledging the effectiveness of a longer term intervention that values relationships as a means of more sustained change.

7. FACILITATING CULTURE CHANGE: TOWARDS A COMPLEXITY APPROACH

The challenges in facilitating TIC culture change in practice, identified in the case introduced in the previous section span across five interrelated domains: - 1) awareness, knowledge, skills and motivation; - 2) emotional and physical wellbeing, resilience in dealing with difficult situations on a daily basis; - 3) quality of communicative interactions within the organisation and with service users, i.e. compassion, empathy etc.; - 4) systems artefacts, i.e. organisational structures and procedures, NICE and other sector determined regulations - 5) measurement, decision and action in innovation in a large scale organisation. The complexity facing the facilitators of TIC require a 'whole system

change' approach, where success can only be defined in general terms of improving quality of service and where desired outcomes emerge in the processes of day to day activities. Traditional approaches of 'plan-decide-act' lack the requisite variety, needed to absorb and address the myriad of interrelated challenges (Beer, 1981). There is a need for an integrative comprehension of the 'human system' to develop awareness, monitor, and act effectively in this complex context. Here, we outline certain ontology and epistemology perspectives from the latest developments in the natural sciences, i.e. interpersonal neurobiology and complexity science that we consider most relevant to addressing the challenges in TIC culture change programmes. We then consider activities of relevance in monitoring and facilitating culture change.

The application of complexity science in the human domain has somewhat varied interpretations, giving rise to frameworks such as Stacey's Complex Responsive Processes, Snowden's Cynefin, Arthur's Complexity economics and the concept of Increasing returns, etc. (Arthur, 2014; D. J. Snowden & Boone, 2007; Stacey, 2007). Large, Sice, Geyer, O'Brien, and Mansi (2015) argue that these interpretations are most effectively considered as complimentary towards developing insight into complex contexts, such as organizational innovation and culture change. Stacey (2007) suggests that the phenomenal domain of organizational innovation is realized through the network of interactions between the human actors. Such networks through the interactions of local agents are capable of spontaneous self-organization, to produce emergent orderly, evolving patterns of behaviours of the network without any prior comprehensive, system-wide blueprint for the evolution of the system. The immediate local 'intentions' of the interacting agents are continually emerging in a context (Stacey, 2007). Arthur (2014) focuses on uncovering the amplification feedback loops resulting from actions and action interpretations within the network and the dynamic complexity of intended and unintended consequences over time. D. Snowden (2002); D. J. Snowden and Boone (2007) view innovation and culture change as a complex adaptive system.

By a way of a general definition, we may say that a complex adaptive system is a system that exhibits a particular kind of behaviour. This particular kind of behaviour is characterised by self-organisation, emergence and sensitivity to initial conditions. Emergence is a key characteristic of a complex system, i.e. Behaviour that emerges from the micro-interactions without an intended blueprint (Nicolis, Prigogine, & Nocolis, 1989).

The notion of self-organisation is related to the interplay of feedback loops (Nicolis et al., 1989). When feedback systems are pushed far from equilibrium conditions, they are capable of spontaneously producing complex forms of behaviour. This is a form of self-organisation where (it is argued) behaviour emerges from processes at the level of micro (Nicolis et al., 1989). The system is considered sensitive when very small (even minute) perturbations or variations in conditions lead to observable outcomes that are inherently unpredictable. By 'unpredictable' we mean that one cannot add up (or integrate) all the small steps required to predict the long-term development.

Back in 1972, Gregory Bateson postulated that it is not possible to have total control over an interactive system of which one is a part. His perspective resonates with the insights from complexity science (Bateson, 1972). What the theory of complexity in its various interpretations tells us is, that the very nature of the multiple interacting and continuously changing relationships and constraints of the system, prevent precise prediction over longer periods of time, rendering the scientific approach of verification problematic (Sice, Rauch, & Bentley, 2018; D. J. Snowden & Boone, 2007). This has important implications for management; the focus needs to shift from pursuing a desired state to maintaining attention on how organizational members interact in the 'now', and what qualities of these interactions allow for learning and creativity. The system dynamics are determined by the pattern and nature of the actors' relationships and the response to any perturbation is determined by these very dynamics (Sice, Mosekilde, & French, 2008).

Imposing order in a complex context will fail, but setting the stage, stepping back, allowing patterns to emerge, and determining which ones are desirable will succeed (Snowden & Boone, 2007). Building on this, by devolving power downwards, leaders can empower employees, creating a culture

that makes people feel good about themselves and the work that they do. Thus, constructing a path to "well-being", which results in engagement with employees (Beggs, 2014)

Thus, a complexity ontology suggests that managing culture change would require:

- Setting boundaries:
  - Barriers can limit or delineate behaviour. The system can self-regulate within boundaries that are set. (Snowden & Boone, 2007). In the context of mental health services the boundaries would relate to general principles broadly defining Trauma Informed Care thus allowing for new interpretations and flexibility of practice to meet the variety of trauma circumstances, histories and responses. One such boundary would be the introduction of routine enquiry about trauma history or the completion of the adverse childhood experience scale (NHS Wales, 2015);
- Opening a dialogue to continue engaging in making sense of current 'reality' while holding assumptions and preconceptions open for exploration, enquiring into and managing boundaries:
  - By utilising approaches which allow for dialogue and deep listening (Bohm, 1996; Stowell, 2013);
  - Listening in silence can help everyone understand the value of empathic listening, speaking openly, and not taking criticism personally. (Snowden & Boone, 2007);
- Encouraging diversity to allow for different perspectives, mental models and the noticing and managing of 'weak signals', i.e. perturbations that may amplify and lead to a change in systems behaviour, i.e. unintended or intended consequences (Snowden & Boone, 2007). There is a need for a variety of narratives about good trauma informed practices, including those from people with lived experience of trauma, in order to facilitate a culture of compassion;
- Stimulating attractors:
  - Attractors are phenomena that arise when small stimuli and probes resonate with people. As attractors gain momentum, they provide structure and coherence. Therefore, when people see that engaging with people relationally about the cause of their distress perhaps utilising simple breathwork, staff realise they can have a positive impact which makes service users calmer and makes their job easier;
  - In the context of TIC, these stimuli and probes would take the form of safe-to-fail parallel interventions coherent with TIC general principles. Trauma informed developments need to have freedom to experiment with new approaches and systems and learn from experience that is both positive and negative. For example, yoga or music are not routinely offered but may be highly effective;
- Monitor for emergence. In practical terms this will require a trusted human sensor network continuously offering mini-narratives of experiences and self-interpreting(signifying) them, generating an organisation wide evidence system tracking the direction of change and aiding decision making in real time;
- Focus on describing and reflecting on interactions in the now and how these support/ hinders creativity and change.

Outcomes are unpredictable in a complex context, the focus needs to be on creating an environment from which good things can emerge, rather than trying to bring about predetermined results, and possibly missing opportunities that arise unexpectedly. Koya, Anderson, and Sice (2017); Koya, Anderson, Sice, and Kotter (2015); Koya, Sice, and Rauch (2016) undertake studies in understanding attributes of leadership in the health sector suggest that embracing uncertainty is a key characteristic of successful leaders. These findings resonate with current discourse in NHS leadership development (Woods, 2014).

Enactive cognitive science and insights from interpersonal neurobiology suggest that awareness, knowledge and skills are embodied. (Maturana & Varela, 1980; Siegel, 2011; Varela, 1979). The

intentionality of 'seeing reality' more clearly and continuously enhancing awareness and reflection capability requires the integration and stabilising of attention in monitoring body sensations, mental activity and relationships. In Western translation, a heightened state of awareness is often referred to as 'mindfulness'. This terminology is widely accepted in the West, where the state of 'mindfulness' is defined as an opposite to 'mindlessness', i.e. functioning on autopilot or simply downloading mental models, assumptions and prejudices rather than witnessing present experience as it unfolds. Kabat-Zinn (2003)provides an operational working definition of mindfulness as: 'The awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment'. It is important to clarify that our comprehension of mindfulness, as paying attention to experience as it unfolds, is not only connected to present moment sensations, but to accepting and witnessing our present moment experience, that may involve some or all aspects of experience, i.e. sensations, mental activity (thoughts, feelings, memory, intentions, beliefs, attitudes, etc.) and relational experience (connectedness to others, to our planet, to nature, etc.) (Siegel, 2011).

Research from neurobiology (Varela, 1979) provides evidence that awareness development practices are correlated with the development of the pre-frontal cortex of the brain, vertical (gut, heart and cortex) and horizontal (left, right brain hemisphere) integration of the brain and the development of qualities of: Emotional balance and modulation of fear; Response flexibility – pause before you act; Insight – linking past with present experience and future possibility; Empathy and compassion for ourselves and others; Morality – what is appropriate from the perspective of the common good; Intuition - non rational way of wisdom and knowing, and thus with wellbeing (Siegel, 2011; Vyas, Sice, Young, & Spencer, 2012). In the context of TIC practices such as mindfulness, mindful compassion and Mindsight are essential for maintaining awareness and noticing of 'weak signals', attunement in communication with staff and service users, developing resilience and wellbeing. Recent studies within the health sector suggest higher employee engagement in organisations that deliver work environments promoting both physical and mental wellbeing, and compassionate communication (Koya et al., 2017; Koya et al., 2016).

8. CONCLUSION

Facilitating change in the context of TIC requires attention to both communicative interactions and the cultivation of individual awareness and wellbeing. Leadership is both deeply personal and inherently collective and may be defined as shaping 'life-enhancing' conditions and promoting organisational wellness through a sensitive organisational culture (Sice, Koya, & Mansi, 2013).

The problem of measurement, monitoring and acting is best addressed through trusted human sensor networks acting as ethnographers in their organisations. Diversity and opening up dialogue is key to identifying 'weak signal' challenges and opportunities. Management of boundaries allows for maintaining 'stable' flexibility in TIC delivery.

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