

# Trauma and resilience informed research principles and practice: A framework to improve the inclusion and experience of disadvantaged populations in health and social care research

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Natalie L Edelman<sup>1,2</sup> 

## Abstract

Trauma, socio-economic, cultural and structural issues are associated with poor outcomes for most health conditions and may also make research participation difficult and onerous, perpetuating intervention-generated inequalities by generating evidence from those least in need. Trauma-informed and resilience-informed approaches to care may help address these concerns across health and social care research. These approaches take an empowerment-based response to adversity, and are suitable for integration and extension as Trauma and Resilience Informed Research Principles and Practice (TRIRPP) for studies beyond the topics of resilience and trauma. Four TRIRPP aims were identified: addressing the adversity context that may underpin the lives of research participants and the phenomenon under study; improving study accessibility and acceptability for individuals and populations facing adversity; recognising and addressing traumatisation in potential participants; and recognising and promoting resilience. Recommendations include interview participant control of recording devices, over-sampling of under-represented populations in population surveys, and actively seeking to engage disenfranchised individuals in patient and public involvement from design to dissemination. The practice of research has the power to address adversity and trauma or to perpetuate it at both an individual and a societal level. It is feasible and worthwhile to integrate trauma-informed and resilience-informed approaches across research topics and designs. Further work should extend the TRIRPP recommendations and evaluate their use.

## Keywords

health inequalities, research and development, inclusion

## Introduction

Poor health is linked to the social inequalities that arise from inequities in power, money and resources,<sup>1</sup> with high rates of trauma in general populations impacting health and access to interventions.<sup>2</sup> The majority of health outcomes, and many of the ‘risk behaviours’ known to precipitate them such as substance use, are associated with social inequalities and trauma,<sup>3</sup> and it has been argued that ‘Given population prevalence estimates of sexual violence and other traumatic experiences, it is worth considering whether standards for ethical research practice in general should be guided by trauma-informed (TI) principles’.<sup>4(p.4769)</sup> Those facing greater adversity also have fewer emotional, financial, time and other resources to access health and social care and to act on public health information.<sup>5</sup>

These associations remain largely unaddressed in research methodologies and ethics, yet they are important because adversities can also affect willingness and ability to engage with research, such that societies’ most disenfranchised may be less likely to experience good health and to participate in the studies which inform health care

<sup>1</sup>Principal Research Fellow in Applied Sexual & Reproductive Health, School of Sport & Health Sciences, University of Brighton, UK

<sup>2</sup>Honorary Research Fellow, Department of Primary Care & Public Health, Brighton & Sussex Medical School, UK

### Corresponding author:

Natalie L Edelman, University of Brighton, Westlaine House, Village Way, Brighton BN2 4AT, UK.

Email: [N.Edelman@brighton.ac.uk](mailto:N.Edelman@brighton.ac.uk)

decisions. This has been referred to as ‘academic capitalism’, which describes the structural academic drivers that favour studies of ‘tame populations’ willing and able to participate quickly and efficiently.<sup>6</sup> Without careful attention to study design, there is a propensity to recruit ‘tame individuals’ from within populations of interest. Those whose lives are shaped by different forms of adversity may find those adversities to act as disenfranchisements, reducing their ability to participate in health and social care research, and undermining their ability to undertake preventive health actions or access health care. Structural injustices are also seen in attitudes towards research, for example, lack of trust forming a barrier to research participation by those from racially minoritised populations.<sup>7</sup> This reflects a broader distrust of institutions and the legacy of research such as the Tuskegee experiment in the USA.<sup>8</sup>

Lack of participation by those facing greater adversity may lead to ‘intervention-generated inequality’, meaning that health inequalities are worsened when interventions are inadvertently developed to be most inclusive of those facing least adversity.<sup>9</sup> This is both a methodological concern, primarily due to sample bias and non-generalisability of findings, and an ethical concern as this practice breaches the ethical principle of justice as the right to access health care and participate in research.<sup>10</sup> Although intervention evaluation may address social inequality,<sup>11</sup> earlier stage guidance on study design and execution is needed to minimise the likelihood of intervention-generated inequality occurring in the first place.

At the same time, the ethical principles of beneficence, non-maleficence and autonomy<sup>10</sup> may also be violated where those facing the greatest adversity *do* take part in research and for whom participation may be more onerous and uncomfortable, and potentially distressing.<sup>12</sup> Different forms of adversity are likely to create different challenges. For example, those experiencing regular infringement of their rights may feel less empowered to assert their needs regarding study information, data collection, withdrawal and dissemination. Others may have to make greater personal sacrifices in order to participate for a variety of personal or practical reasons and might find the process anxiety provoking, in particular those facing abuse in their homes or workplace for whom there is no clear and easy exit strategy. Without due care to such factors, communities and individuals may be less likely to take up future offers to participate in research and more likely to feel harmed by participation.

Research topic and design may also affect the ability and willingness to participate in research, and the experience of doing so. For example, online participation will exclude those without internet access but be more acceptable for anonymously researching populations or topics characterised by illicit, sensitive experiences, for example, parents with problematic drug use.

Regardless of topic sensitivity or study population, requirements for participation may present difficulties for individuals facing adversity, including trauma, who are *within* the sampling frame but whose trauma or adversity experiences do not define the sampling frame or the topic of interest. Thus, the conventions of research may in themselves be traumatic for, or excluding, of some who fall within the eligibility criteria for a study.<sup>13</sup>

This concept paper sets out the rationale, conceptual basis and overview of the Trauma and Resilience Informed Research Principles and Practice (TRIRPP) framework, as a tool to address inclusivity and participant experience.

## Existing work to enhance research inclusion and experience

### *Patient and public involvement and co-production*

There are several approaches that seek to enhance inclusion and participant experience in health research. In England, these include cultural competence training for health services delivery and randomised controlled trials (RCTs) to redress low study participation from black and minority ethnic communities.<sup>14</sup> In many countries, health research funders have championed patient and public involvement (PPI) to improve the acceptability, accessibility and relevance of health and social care research. For example, in our own work of women with problematic drug use, PPI led to improved access (targeting advertisements to public toilets known for drug use) and a more positive participant experience by removing from the survey questions colloquial terms for sexual activity that were deemed offensive.<sup>13</sup> Concerns remain however that PPI enlists contributions from the most enfranchised and focuses on researchers’ agendas, that is, conducting impactful research, rather than principles of justice or social equity.<sup>2</sup> A trauma-informed and intersectional approach to PPI has been suggested to ensure health inequalities are not reproduced in PPI and that instead seldom-heard groups and individuals can influence research design.<sup>2</sup>

Research co-production has also gained traction in recent years, co-producing knowledge through partnership working between academia and communities at all stages of the research. Overlapping with approaches such as user-led research, participatory, strengths, assets-based and action research, co-production aims to ensure that the experience not only of research participation but of *conducting* the research is an empowering and positive experience and which includes the voices of those whom the research seeks to benefit.<sup>15</sup> Co-production is well-suited to intervention development aimed at particular communities and populations defined by a health condition or type of adversity. However, larger-scale quantitative studies, such as general population surveys and RCTs, may not be well-suited to co-

**Table 1.** Recommendations for a trauma-informed approach to research about sexual violence.

1. Recognise impact – be prepared to hear
2. Identify recovery as a primary goal – offer resources
3. Employ an empowerment model – give participants choices, use transparent language
4. Maximise choices and control – give participants choices regarding data sharing
5. Frame the relationship as relational – reduce power imbalances – emphasise rights during recruitment
6. Create safe, respectful, accepting atmosphere and space – data collection sites
7. Emphasise strengths and resilience – use validation in interviews and recognise adaptive strategies
8. Minimise re-traumatisation – avoid intrusive procedures/questioning-describe data protection strategies
9. Strive to be culturally competent – avoid vague language/be clear
10. Solicit participant input in the research process – PPI collaboration and dissemination

Source: adapted from Campbell et al.<sup>4</sup>

production and may be particularly vulnerable to PPI and study participation from ‘tame populations’, thus perpetuating intervention-generated inequalities.

Overall, co-production and PPI make important contributions to improving inclusivity and participant experience in research. However, a broader framework of research principles and practice may widen the mechanisms by which we can address these issues, encompassing co-production and PPI within.

## Existing work to adapt trauma-informed and resilience-informed approaches to care for research purposes

### *Trauma-informed approaches to care and research*

Trauma-informed (TI) approaches respond to the knowledge that inattention to the impact of trauma may deter people from accessing or maintaining contact with services.<sup>16</sup> Trauma-informed approaches aim to improve engagement by *realising* the widespread impact of trauma, *recognising* signs and symptoms, *responding* in practice and policy, and preventing *re-traumatisation* through the same.<sup>17</sup> These aims are realised using the principles of: safety, trustworthiness and transparency, peer support, collaboration, empowerment, cultural, historic and gender issues.<sup>17</sup> Trauma-informed approaches to care may be adaptable to improve research inclusion and experience. Existing work includes the application of TI approaches to mental health qualitative research<sup>18</sup> and a TI approach has already been comprehensively set out for sexual violence research (Table 1).<sup>4</sup>

For research on topics other than trauma, encouraging and enabling disclosure of traumatic experience, as recommended in some TI approaches,<sup>19</sup> might be impractical however for example, in large-scale surveys and unethical, for example, where no immediate support is available. Campbell et al. have provided recommendations for general population surveys of trauma-related phenomena that may be suitable to other quantitative designs and topic areas,

such as delaying recruitment for those who are recently traumatised, and unobtrusive means of study withdrawal or skipping triggering questions.<sup>4</sup>

### *Resilience-informed approaches to care and research*

Resilience is conceived of as positive phenomena or activities in response to adverse contexts, acknowledged and fostered through resilience-informed (RI) approaches.<sup>15</sup> Resilience-informed approaches may similarly be of benefit when adapted to improve inclusivity and experience in research. However, conceptually, resilience places the onus on individuals to adapt and cope,<sup>15</sup> which would allow those in power to ignore the underlying social inequalities. ‘Resilience for Social Justice’ (RSJI) has been developed to address these concerns with the intention to ‘encompass this potential for marginalised people to challenge and transform aspects of their adversity, without holding them responsible for the barriers they face’.<sup>15(p.1)</sup>

The RSJI approach has been applied to research on the topic of resilience, with the core features set out in Table 2.<sup>15</sup>

Resilience for Social Justice recommends ‘moves’, which constitute acts of change or transformation made by individuals, organisations and communities. However, these moves have been developed largely for intervention development within geographically or virtually located disenfranchised communities and using co-production. Some moves are therefore not easily applied to studies that do *not* focus on intervention development or for which the sampling frame includes, but is not defined by, disenfranchised communities. Collaborative PPI may not be possible for studies of this kind, particularly large-scale cross-sectional surveys of general populations. Nonetheless, the RSJI principles can inform new practices that address inequalities and foster resilience. Full capture and analysis of socio-economic and structural quantitative variables would serve a longer-term goal of tackling inequalities, aligning with social and critical

**Table 2.** 'Practical moves' for a RSJI informed approach to research on resilience.

1. Unite with social justice – tackling deprivation and health inequalities
2. Focus on social practices rather than individuals as agents of change
3. Include socially transformative elements into the research, rather than solely individually transformative ones
4. Develop accessible research tools and methods (e.g. measurement tools)
5. Empower individuals and communities – control over events that determine health
6. Purposefully practice inclusion – for example, disadvantaged groups represented in research
7. Knowledge co-production – communities and individuals as researchers and agents of change
8. Influencing research policy makers and improving understanding of the impact of inequalities

Source: adapted from Hart et al.

epidemiology.<sup>20</sup> It may also be possible to study social practices when the individual is the unit of analysis, as is commonly the case in quantitative studies.

## An integrated framework of TRIRPP

Resilience for Social Justice approaches have not been applied to research beyond the topic of resilience or study designs that do not easily lend themselves to co-production or intervention development, while TI approaches have been largely confined to qualitative research methodologies;<sup>18</sup> yet both are likely to be suitable for wider use. I here propose an integrated framework of TRIRPP, which is applicable to a wide range of topics and methodologies to improve inclusion of the voices of the most disenfranchised and traumatised into our understandings of, and response to, adverse health outcomes.

### *Rationale for Integration*

As noted, TI and RI approaches take an empowerment-based approach, and each explicitly acknowledges the concept foregrounded by the other. More specifically, TI approaches seek to foster resilience<sup>16</sup> to reduce, recover from or avoid trauma,<sup>19</sup> while RI approaches position trauma as part of the adversity context from which resilience may emerge.<sup>15</sup> Giving both concepts equal salience in principles, practice and title was a deliberate act by the author, aiming to raise awareness of the importance of addressing both resilience and trauma in research processes, rather than foregrounding one or the other. This decision was born of the author's lived experience as a researcher and a single-parent with post-traumatic stress disorder (PTSD), carer responsibilities and socio-economic challenges. Using quantitative and mixed methods approaches to the sensitive topic of sexual and reproductive health and associated psychosocial issues over 20 years, fostered awareness of how trauma often underpinned people's experiences and perceptions, and the need for a framework from which to innovate research practice improvements. Personal experience highlighted the challenges of participating in and conducting research and of

using services. The stark difference in experience where one's resilience as well as one's trauma are recognised and respected was a significant driver in the decision to make both concepts salient in the framework's name and approach.

### *The TRIRPP framework*

The aims of TRIRPP are as follows:

- To identify, acknowledge and address the adversity context which may underpin the lives of research participants and the research phenomenon under study.
- To improve study accessibility, acceptability and participation from disenfranchised and/or traumatised individuals and populations.
- To recognise and address the likelihood of trauma experiences among research participants and researchers and seek to avoid re-traumatisation.
- To recognise and promote the resilience of research participants and researchers.

A key assumption of TRIRIPP is the notion that the research context itself can attenuate, exacerbate or present new adversities such that 'an individual's needs for special protections in the research context depend...on the particular features of the research project and environment in which it is taking place'.<sup>21(p.47)</sup>

Without careful attention, the research context may re-traumatise or disincite participation from those with trauma or those who face chronic adversities, while also being a site that can maintain and foster resilience by transforming aspects of adversity. Research practices, regardless of topic and methodology, might easily accommodate an *assumption* of underlying trauma, acknowledging this possibility in the treatment of *all* participants and those in the sampling frames from which participants are recruited. Trauma and Resilience Informed research Principles and Practice therefore invites the researcher to consider the fine details of contexts and processes through which activities such as recruitment, data collection and dissemination are conducted.

### Developing the TRIRPP framework

The development of the TRIRPP framework involved, first, an exploration of the concepts of resilience and trauma to identify areas of congruence and dissonance and develop an integrated understanding to underpin the framework. Second, I reviewed the principles and activities of TI and RSJI approaches for use in the TRIRPP framework. The third phase of testing and refinement of the framework is the subject of ongoing work.

### The concepts of trauma and resilience

Both trauma and resilience are constructed as responses to contexts of adversity. Trauma can be understood as a failure of context; that is, the impact on neurology and sense of self of overwhelming adverse experiences not adequately contained by the individual, the environment or those around them.<sup>22</sup> The corollary of this is that social support provides the best protection against developing trauma responses, such as PTSD, to adverse events and contexts.<sup>22</sup> Resilience conversely, is a *positive* response to adverse contexts. While some RI approaches focus on 'internalised resilience' (psychological attributes and behaviours of individuals),<sup>15</sup> the RSJI approach conceptualises resilience as 'overcoming adversity, whilst also potentially subtly changing, or even dramatically transforming, (aspects of) that adversity'.<sup>15(p.10)</sup> As discussed above, this conceptualisation comprises 'moves' practiced at the level of organisations and communities as well as individuals. Importantly, TI and RSJI approaches both foreground the importance of relationships and social context; neither trauma nor resilience can be understood, fostered or attenuated without recognising the interdependence of context and individual.<sup>23</sup> They also focus on empowerment and address cultural issues, to define meaningful outcomes in the case of RSJI<sup>24</sup> and to recognise cultural legacies and context (TI).<sup>16</sup>

Conceptualisations of trauma may differ between the resilience and trauma literature. The latter recognises both singular events and cumulative incidents and adversities as trauma-inducing, such as in the case of complex/childhood PTSD. In contrast, resilience literature has increasingly moved away from conceptualising chronic adversity as itself traumatic; in order to simplify resilience research, there has been a tendency to conceptualise trauma in relation only to singular 'potentially traumatic events' (PTEs), the effects of which may be avoided or attenuated through resilience.<sup>25</sup>

The high degree of congruence between TI and RSJI approaches makes them suitable for integration and expansion, using the TRIRPP framework. The TRIRPP framework seeks to acknowledge the complexity and multiplicity of trauma and resilience, recognising in particular that both can *co-exist* in contexts of adversity<sup>24</sup> and taking the position that resilience emerges (and can

be fostered) in the contexts of both trauma arising from PTEs *and* trauma arising from contexts of chronic adversity.

### Reviewing the principles and practices of TI and RSJI approaches to research

The TRIRPP framework comprises eight principles that derive from the TI and RSJI principles described in Tables 1 and 2. Where possible the TI and RSJI principles were merged and/or otherwise adapted in order to create an integrated framework with principles suitable for the wider health research arena. The TRIRPP principles are shown in Table 3, which also provides adjunct practice examples for each principle, and an indication of their place in the research process. The principles are intended to be suitable for use with all research topics and populations, while some practices are necessarily specific to particular study designs. They represent a starting point that will hopefully be added to by researchers across a range of health research over time.

### Discussion

Drawing on and expanding existing TI and RSJI research recommendations, TRIRPP offers a framework from which to approach research with the explicit intention of addressing intervention-generated inequalities, by creating inclusive opportunities for engagement in research for and with disenfranchised and traumatised individuals and populations, including researchers, promoting well-being throughout that process. It does so by seeking to avoid re-traumatisation and promote resilience, and transform aspects of adversity both within and beyond the research context itself. Trauma and Resilience Informed Research Principles and Practice invites us to lay down assumptions that the individuals and populations we seek to engage as participants are not traumatised or face adversity, nor ourselves as researchers. Instead, TRIRPP acknowledges and works inclusively with this reality.

Trauma and Resilience Informed Research Principles and Practice's focus on reducing intervention-generated inequalities through research processes is consistent with intervention development models such as APEASE, which are used to assess interventions across a number of criteria including equity,<sup>11</sup> and with Beauchamp and Childress' biomedical ethics framework.<sup>10</sup> However, TRIRPP also attends to critiques that the ethical principles of autonomy, non-maleficence, and justice cannot adequately address differences in adversity among participants and the populations from which they are recruited without due attention to trauma.<sup>4</sup> Trauma and Resilience Informed research Principles and Practice further addresses the notion of

**Table 3.** Trauma and resilience informed research principles and practice.

Principle	Practice	Research stage			
		Topic choice & study design	Recruitment & data collection	Analysis & dissemination	
1. Take active steps to seek participation from disenfranchised groups and individuals Adapted from RSJl (Table 2, No.6).	Develop and/or validate accessible and acceptable measurement tools with disenfranchised populations	X	X	X	
	Regardless of study population or type, question and recognise possible disenfranchisements to participation	X	X	X	
	Use transparent and clear language in PPI work, study materials and study delivery with clear and honest expectations	X	X	X	
	Employ sampling strategies designed specifically to ensure adequate representation from disenfranchised populations such as lower socio-economic groups, ethnic and gender minorities in quantitative as well as qualitative research	X	X	X	
	Ensure PPI from disenfranchised individuals identified with a view to intersectionality – to inform data collection materials, and recruitment and dissemination plans and delivery.	X	X	X	
	Ensure research questions take account of social inequalities e.g. by examining structural inequalities, socio-economic status	X	X	X	
	Include socially-transformative elements into the research where possible - methods and intended impact	X	X	X	
	Advocate for research questions that focus on social practices rather than individuals as agents of change	X	X	X	
	Develop impact plans that aim to improve understanding of the impact of inequalities and influence research and policy	X	X	X	
	Emphasise the right to refuse participation or to withdraw	X	X	X	
2. Unite with social justice; tackling deprivation and health inequalities. Adapted from RSJl (Table 2, No.1 & No.8).	As a researcher aim to be warm, 'real' and not aloof. Give participants the choice to not only withdraw but also to continue to participate if distressed but wishing to	X	X	X	
	Provide alternative survey measures so that participants can opt out of triggering questions without alerting others to this	X	X	X	
	Where possible use co-production so that communities and individuals are researchers and agents of change	X	X	X	
	Where possible, give study participants control of recording devices - when to activate them and what is recorded	X	X	X	
	Give participants choices of where to sit and agreed signals for wanting to stop or take a break	X	X	X	
	Give participants choices of data sharing	X	X	X	
	Revisit informed consent at different stages of the research process according to participant preference and, if practicable, actively remind participants of the right to withdraw or limit data sharing	X	X	X	
	Offer greater choice of withdrawal of data and communication of findings to participants – even in large-scale surveys and trials	X	X	X	
	Ensure participant information sheets are clear about what is meant by a research 'interview' – use of follow-up questions, enquiry about context and decisions, not counselling etc.	X	X	X	
	3. Frame the researcher- participant relationship as relational. Adapted from TI (Table 1, No.5) & RSJl (Table 2, No.7)	Empower individuals and communities through choice and agency. Adapted from TI (Table 1, No.3 & 4) & RSJl (Table 2, No.5)	X	X	X
Provide alternative survey measures so that participants can opt out of triggering questions without alerting others to this		X	X	X	
Where possible use co-production so that communities and individuals are researchers and agents of change		X	X	X	
Where possible, give study participants control of recording devices - when to activate them and what is recorded		X	X	X	
Give participants choices of where to sit and agreed signals for wanting to stop or take a break		X	X	X	
Give participants choices of data sharing		X	X	X	
Revisit informed consent at different stages of the research process according to participant preference and, if practicable, actively remind participants of the right to withdraw or limit data sharing		X	X	X	
Offer greater choice of withdrawal of data and communication of findings to participants – even in large-scale surveys and trials		X	X	X	
Ensure participant information sheets are clear about what is meant by a research 'interview' – use of follow-up questions, enquiry about context and decisions, not counselling etc.		X	X	X	
4. Empower individuals and communities through choice and agency. Adapted from TI (Table 1, No.3 & 4) & RSJl (Table 2, No.5)		Provide alternative survey measures so that participants can opt out of triggering questions without alerting others to this	X	X	X
	Where possible use co-production so that communities and individuals are researchers and agents of change	X	X	X	
	Where possible, give study participants control of recording devices - when to activate them and what is recorded	X	X	X	
	Give participants choices of where to sit and agreed signals for wanting to stop or take a break	X	X	X	
	Give participants choices of data sharing	X	X	X	
	Revisit informed consent at different stages of the research process according to participant preference and, if practicable, actively remind participants of the right to withdraw or limit data sharing	X	X	X	
	Offer greater choice of withdrawal of data and communication of findings to participants – even in large-scale surveys and trials	X	X	X	
	Ensure participant information sheets are clear about what is meant by a research 'interview' – use of follow-up questions, enquiry about context and decisions, not counselling etc.	X	X	X	
	5. Empower individuals and communities through choice and agency. Adapted from TI (Table 1, No.3 & 4) & RSJl (Table 2, No.5)	Provide alternative survey measures so that participants can opt out of triggering questions without alerting others to this	X	X	X
		Where possible use co-production so that communities and individuals are researchers and agents of change	X	X	X
Where possible, give study participants control of recording devices - when to activate them and what is recorded		X	X	X	
Give participants choices of where to sit and agreed signals for wanting to stop or take a break		X	X	X	
Give participants choices of data sharing		X	X	X	
Revisit informed consent at different stages of the research process according to participant preference and, if practicable, actively remind participants of the right to withdraw or limit data sharing		X	X	X	
Offer greater choice of withdrawal of data and communication of findings to participants – even in large-scale surveys and trials		X	X	X	
Ensure participant information sheets are clear about what is meant by a research 'interview' – use of follow-up questions, enquiry about context and decisions, not counselling etc.		X	X	X	

(continued)

Table 3. (continued)

Principle	Practice	Research stage		
		Topic choice & study design	Recruitment & data collection	Analysis & dissemination
5. Emphasise strengths and resilience. Adapted from TI (Table 1, No.7) & RSJ (Table 2, No.2, 3 & 5)	Use active listening and validate experience and feelings surrounding trauma if disclosed Use the term 'survivor' rather than 'victim' if appropriate Validate expressions of resilience by participants		X	
6. Minimise re-traumatisation. From TI (Table 1, No.8)	Avoid intrusive procedures/questioning Use active listening and validate experience and feelings if disclosure occurs Describe data protection strategies		X	
7. Recognise potential impact of trauma and adversity in all participants. Adapted from TI (Table 1, Nos. 1, 6) & RSJ (Table 2, Nos. 2, 3).	Don't ask about traumatic experiences unless relevant to study Don't assume agency; use neutral language (e.g. 'experience' rather than 'behaviour') and ask if decisions were freely made Give information on mental health & social support resources in Participant Information Sheet regardless of study topic Don't assume that studies of 'non-sensitive' topics or with general populations will not exclude or traumatise some individuals/ groups – assume sensitivity possible and provide generic resources with the participant information sheet 'In direct engagement data collection, understand and be prepared to hear a wide variety of traumatic experiences' 4 (p. 4769)	X	X	X
8. Strive to be culturally competent and promote safety. From TI (Table 1: No.9).	Ensure PPI and study consent and data collection happen in inclusive places that feel emotionally and physically safe for everyone – clear unobstructed exits, opportunities to take a break or withdraw, clear expectations and instructions Ensure researchers receive adequate training to support distressed participants during and after interview and survey participation Recognise and respect participants' coping mechanisms. E.g. expressed desire to not become distressed, switching to third person description, completing a survey in an alternative space Strive to ensure that cultural understandings and manifestations of the topic under study – e.g. depression – are extant in the research questions, measurement tools and/or outcomes and impact plan Seek out and foster research environments that feel culturally safe, with careful attention to physical space, presence of different authority figures etc.; conversely, choose to have a safe person present during a research interview may be appropriate Ensure culturally-relevant PPI to inform all study materials - avoid deceptive, vague or unintentionally offensive language Ensure that PPI activities are directly concerned with identifying and redressing research questions, methods and outcomes which ignore cultural factors and which otherwise disempower individuals and/or populations	X	X	X

justice by aiming to offer fair opportunity to access health care, participate in the research that underpins it, and transform aspects of adversity. The TRIRPP framework thus reframes PPI as a means of redressing intervention-generated inequalities. This approach to PPI aligns with recent pleas for greater diversity in PPI<sup>26</sup> while moving beyond arguments that it is morally right to include the end users of research in its design<sup>27</sup> or that PPI can improve the rigour of a study.<sup>12</sup> Instead, PPI is conceptualised within the TRIRPP framework as a deeper change to how we conceptualise health research as a social justice activity.

### Conceptual issues

Conceptual issues emerged during TRIRPP development concerning the generic meaning of the words ‘recommendations’, ‘principles’ and ‘practices’ and the extent to which they differ from each other. For example, although resilient moves are described as practical, they are applicable variously to topics, impact and research methods and are for the most part congruent with the definition of ‘principle’, although the proposed TI recommendations for sexual violence research more clearly delineate principles from practice. There is a corresponding lack of generic enquiry into the process by which principles are translated into practice. Practice theory may offer a lens from which to notice and address that process, enacted through communities of practice and with attention to the reflexivity embedded in TI research.

This attention to practice may also be useful in identifying and addressing tensions between the aims of a study and the use of TRIRPP practices in study processes. Indeed, tensions between the aims of trauma research and the application of TI principles have previously been described: conflict between participants’ privacy and public availability of data; providing informed consent and trauma-induced difficulty with decision-making; and the need for unbiased population samples versus the need for transparent participant information which may disincline traumatised people from participation.<sup>4</sup> Similarly, employing the TRIRPP practice suggestion of describing the depth of questioning used in research interviews may be at odds with methodological aims by deterring participation and thus biasing sample and findings towards those more comfortable with in-depth questioning. Process and realist evaluation may be helpful in identifying possible tensions and assessing possible impact.

The conceptualisation and focus of TRIRPP may not appear to be novel, as many of its principles and practices have been proposed previously. Some elements of TRIRPP may be seen to deviate from RSJI and/or TI approaches; the framework may be considered at odds with an RSJI approach because co-production is not recommended for studies such as population surveys, and because RSJI authors have

highlighted that a focus on vulnerability (akin perhaps to trauma and other deficit-based constructs) ‘is neither constructive nor ethical’.<sup>15(p. 5)</sup> The RSJI approach also speaks directly to egalitarianism and empowerment as discrete but related concepts; further conceptualisation of TRIRPP in relation to these is needed. Nonetheless, TRIRPP’s focus on tackling inequalities aligns with RSJI values in creating mechanisms by which the marginalised can transform aspects of the adversity they face.<sup>15</sup> Thus, TRIRPP might itself be considered a resilient move.

### Areas for TRIRPP development

Consultation and testing work to further refine and expand TRIRPP is planned, incorporating the lived experience of others with trauma and those who conduct research. Trauma and Resilience Informed research Principles and Practice recognises that researchers may themselves face their own trauma and other adversities. The potential impact of qualitative research on researchers has been noted, alongside a propensity to explore topics that hold personal resonance,<sup>2</sup> but less so for quantitative or non-human studies, which may be conducted in social and cultural settings characterised by conflict or climate adversity. A separate TRIRPP publication is planned, applying the framework to improve *researcher* inclusivity and experience.

Trauma and Resilience Informed research Principles and Practice also offers opportunities for methodological innovation. Quantitative study designs, particularly large-scale RCTs and observational studies, might accommodate more purposive sampling strategies of under-represented groups, alongside nuanced data-sharing preferences. The COVID-19 pandemic has also precipitated a shift towards internet-mediated research, necessitating further development of TRIRPP in this domain.

The cultural aspects of TRIRPP also need further development regarding both cultural competency and cultural safety. Firstly, trauma and resilience can only be understood within cultural contexts and may manifest in ways that do not conform to the Global North’s conceptualisations.<sup>23</sup> Accordingly, TRIRPP needs development with regard to cultural competency to ensure that research contexts are culturally appropriate in supporting participation, minimising re-traumatisation, and promoting resilience. Trauma and Resilience Informed Research Principles and Practice also needs further development in terms of creating cultural safety by changing how research is conducted so that those from racially and other minoritised populations have a positive experience of participation.<sup>28</sup> For example, the notion that research interviews should be conducted with only the interviewer and researcher present may feel unsafe to some, providing an opportunity to revisit and re-assess the rationale for such conventions. Practice



recommendations particularly may vary by setting and culture. For example, the recommendation to over-sample disenfranchised groups itself assumes a variation in experience across society. Conversely, in settings framed by widespread poverty or conflict, trauma and resilience may be important concepts for the *whole* population and regardless of research topic.

## Conclusions

The practice of research can either address adversity or perpetuate it, at both individual and societal level and thus challenge researchers to develop new research procedures.<sup>4</sup> Trauma and Resilience Informed research Principles and Practice has the potential to reduce harm and intervention-generated inequalities by strengthening our research practices to be more inclusive and safe; introducing and normalising structures and processes that empower individuals and populations. Evaluation of these potential benefits is needed to establish if TRIRPP meets its aims, to identify and ameliorate inadvertent harms and to extend TRIRPP practices.

Trauma and Resilience Informed research Principles and Practice is founded on the belief that attention to the details of how research is conducted and to broader social contexts may improve the likelihood of participation by those facing greater adversity, and improve their subsequent experience of so doing. In doing so, it reframes health and social research as social justice activities that actively seek to reduce intervention-generated inequalities, using research practice as a means to tackle inequalities through inclusivity, empowerment and safety.

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## ORCID iD

Natalie L Edelman  <https://orcid.org/0000-0001-6935-8877>

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