

Public Involvement in Restorative Justice Conferencing: Growth Mindset, Dehumanisation & Blame Attributions

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Abstract

Restorative justice conferencing has many advantages compared to the retributive justice system such as higher victim satisfaction and collective efficacy as well as reduced reoffending. However, in practice recruiting a diverse set of community members becomes a difficult challenge. This study aimed to explore how individual differences in offender dehumanisation and blame as well as the type of mindset one has (growth vs. fixed) contribute to the decision to participate in conferencing. Moreover, a shortened version of an intervention approach called trauma education with growth mindset messaging was applied to examine its effects on public participation rates.

It was expected that a growth mindset within individuals positively affects one's willingness to participate in conferencing while dehumanising and blaming offenders negatively affects one's willingness to participate. To test these assumptions, an online experiment with 105 participants was conducted, in which they were asked to read a story about a fictional crime case and indicate to what extent they would be willing to participate in conferencing regarding the case imagining they would be an affected community member. Participants were randomly allocated to receive the intervention or not.

The results confirmed that offender dehumanisation is linked to a reduced willingness to participate in conferencing. This should be considered when designing future studies and interventions. Despite the intervention not achieving the desired effect in this sample, it remains important to investigate what information these types of interventions must convey and in which contexts they should be applied.

The current retributive justice system, which is focused on the punishment of offenders, results in high recidivism rates, bears the danger of wrongful convictions and contributes to social disparity (Hetey & Eberhardt, 2014; Karp & Frank, 2016). There has been a long-standing debate about alternative forms of justice (Johnstone, 2013). Restorative justice programmes which emerged in the 1970s (Wood & Suzuki, 2016) seem to be a promising way to address these problems, especially recidivism, and to restore the needs of victims, offenders, and the community after a crime (Sherman et al., 2015; Wood & Suzuki, 2016).

In restorative justice, crime is considered an interpersonal conflict rather than a disbalance of legal order (Jonas-van Dijk, 2024). The focus is on restoring the harm that has been inflicted in a collective effort by involving all of the affected parties. This aspect differentiates restorative justice from the retributive justice system in which the victim's needs are often neglected while the offender is punished (Jonas-van Dijk, 2024).

One of the most common practices is victim-offender mediation, in which the central idea is to provide the victim and offender the opportunity to meet each other so that they can have a conversation about the crime with the help of a mediator (Moss et al., 2019). If both agree to participate, they can express their emotions and needs and collectively discuss how to address the offence, thereby, repairing some of the harm done (Jonas-van Dijk, 2024). For the victim, this can provide relief from anxiety and a better understanding of the offender's reasons and circumstances (i.e., the offender is humanised). Next to that, it can help the offender to resocialise (Hansen & Umbreit, 2018).

In some cases, not only the victim and offender but also the community, such as family members, attorneys, counsellors, or the police are affected and, therefore, need to be actively involved in the meetings (Umbreit et al., 2002). This restorative justice practice, which originated in New Zealand, is called conferencing (Morris & Maxwell, 2001). In the context of juvenile offences such as vandalism and burglary, it is an especially relevant strategy to diverge young offenders from court, but it can also be applied to more severe types of offence as long as the offender is willing to change, takes responsibility and expresses guilt, and all parties voluntarily decide to participate (Bradshaw & Roseborough, 2005; Umbreit et al., 2002).

Next to the general advantages of restorative justice programs like conferencing and mediation such as being able to hold the offender accountable, receiving and offering forgiveness, and increased well-being for both parties as well as reduced reoffending and higher victim satisfaction, conferencing has additional benefits (Poulson, 2003; Strang et al., 2013). It has been argued that restorative justice conferencing contributes to community

building by engaging the community in the justice process and, thereby, heightening collective efficacy (Bazemore, 2000). Although community involvement is arguably one of the key features that separate restorative justice from retributive justice (Wilcox & Young, 2007), this aspect often lacks in practice due to problems in identifying and recruiting a diverse and representative set of stakeholders (Gerkin, 2012; Hoyle et al., 2002; Rossner & Bruce, 2016).

To date, there is a lack of understanding surrounding the factors that inhibit or reinforce the public's participation in such programmes (Rossner & Bruce, 2016). Previous research indicated that the type of mindset one has (growth vs. fixed) and whether one tends to dehumanise and blame offenders are critical in determining what stance that individual takes towards restorative justice (Hoyt et al., 2022; Moss et al., 2019). To gain a better understanding of what drives community members to participate in conferencing, the following research explores in which way those factors affect the public's willingness to participate in conferencing.

For that purpose, the following question is examined: To what extent is a growth mindset related to the willingness of the public to participate in the restorative justice process (conferencing) and what is the role of blame attributions and dehumanisation? Analysing these psychological mechanisms will potentially benefit future interventions that aim to improve public participation in conferencing programs, for instance, by directly targeting blame perceptions towards offenders and offender dehumanisation in the larger society or relevant community members. Eventually, this would make conferencing programs more effective due to the increased community participation rates. Lastly, trauma education with growth mindset messaging is incorporated to test its effectiveness as an intervention for improving participation rates in restorative justice conferencing.

Growth Mindset

According to the mindset theory, earlier called implicit theories (Dweck & Leggett, 1988), people either tend to believe that human attributes are fundamentally malleable or that they have a fixed nature that cannot be changed. The first belief is referred to as growth mindset and the latter as fixed mindset. Research has shown that individuals with a stronger growth mindset are more likely to base their evaluation of others' actions on contextual factors, external to the person rather than their dispositional factors (Hoyt et al., 2022). Thus, it can be said that they tend to exhibit the fundamental attribution bias, an overemphasis on internal factors when evaluating other's actions, to a smaller degree (Moss et al., 2019).

A growth mindset is also linked to favourable attitudes towards the rehabilitation of offenders, possibly because individuals with a growth mindset see the potential for personal development while those with a fixed mindset do not believe in the ability to change. For instance, Rade et al. (2018) found that a stronger growth mindset within individuals correlates with positive attitudes towards ex-offenders as well as support for their reintegration into society. Moreover, Tam et al. (2013) showed that participants who believed in the immutability of moral character (fixed mindset) were more likely to favour punishment compared to those who believed that moral character is malleable (growth mindset). Their study has also shown that this relationship was mediated by increased internal attributions of criminal acts and expectation of recidivism. Thus, it can reasonably be assumed that relevant community members with a growth mindset would be more willing to participate in restorative justice conferencing than those with a fixed mindset due to more positive attitudes towards rehabilitation:

H I: A stronger growth mindset within individuals positively impacts their willingness to participate in conferencing.

Blame Attributions

Despite its positive effects, a growth mindset alone is not always sufficient for reinforcing positive attitudes towards the rehabilitation of offenders. Hoyt et al. (2022) applied the *Double-Edged Sword (DES) Model of Mindsets in Stigmatised Domains* to the crime context and were able to show that its predictions hold true. The model states that a stronger growth mindset indirectly predicts less punitive and more rehabilitative attitudes due to a reduction in essentialist thinking (i.e., the belief that social groups have inherent, immutable characteristics) but also that it can lead to increased blame (i.e., view that offenders carry complete, personal responsibility for their criminal acts).

The more blameworthy an offender is considered to be, the more punitive attitudes towards them are endorsed (Hoyt et al., 2022). This was especially the case when people assumed that the offender's situation was somewhat controllable. However, Hoyt et al. (2022) also repeatedly confirmed that a stronger growth mindset is related to overall less punitive attitudes. The observed effects of the DES model were consistent even taking political ideology into account, which adds to the validity of the result that blame and essentialist thinking are important mediating factors. Conclusively, it seems like blame attributions towards the offender have the potential to negate the positive effects of a growth mindset

within affected individuals on their willingness to participate in restorative justice conferencing:

H II: The relationship between a growth mindset within individuals and their willingness to participate in conferencing is negatively impacted by blame attributions.

Dehumanisation

The public tends to dehumanise offenders by perceiving them as individuals that are incapable of making appropriate decisions, resisting impulses, and feeling less empathy (Haslam & Bain, 2007, as cited in Moss et al., 2019). Thus, offenders are often considered outsiders which justifies their punishment, because they are seen as unchangeable even by those who have a growth mindset (Haslam & Bain, 2007, as cited in Moss et al., 2019). Moss et al. (2019) tested if priming common human identity (i.e. feeling connected to all humans despite ideological and demographic differences) can counteract the dehumanising effect.

Common human identity was primed by inquiring participants about their opinion towards statements like “I am like all human beings, irrespectively of ethnic, political, religious, social or ideological differences” or “I am proud to belong to the human kind” (Albarelllo & Rubini, 2012, as cited in Moss et al., 2019). The participants in the treatment condition received the questions intended to prime common human identity before answering the other questions regarding their attitudes towards restorative justice, rehabilitation, and punishment. The control condition received the common human identity items at the end.

In line with what they assumed, Moss et al. (2019) found that a growth mindset within individuals does not always predict favourable attitudes towards rehabilitation. When offenders are dehumanised the belief that people can change is not extended to them. Thus, priming common human identity was beneficial for increasing acceptance of rehabilitation over punishment in individuals with a growth mindset. In turn, this implies that dehumanisation might reduce the acceptance of rehabilitation in general and therefore hinder participation in restorative justice conferencing:

H III: Dehumanisation of offenders reduces an individual’s willingness to participate in conferencing independent of their mindset (fixed vs. growth).

Trauma Education with Growth Mindset Messaging

Lastly, trauma education has been shown to potentially be a promising method to improve support for restorative justice (McKinsey et al., 2023). This is especially the case when growth mindset messaging is incorporated. Trauma education entails several teaching

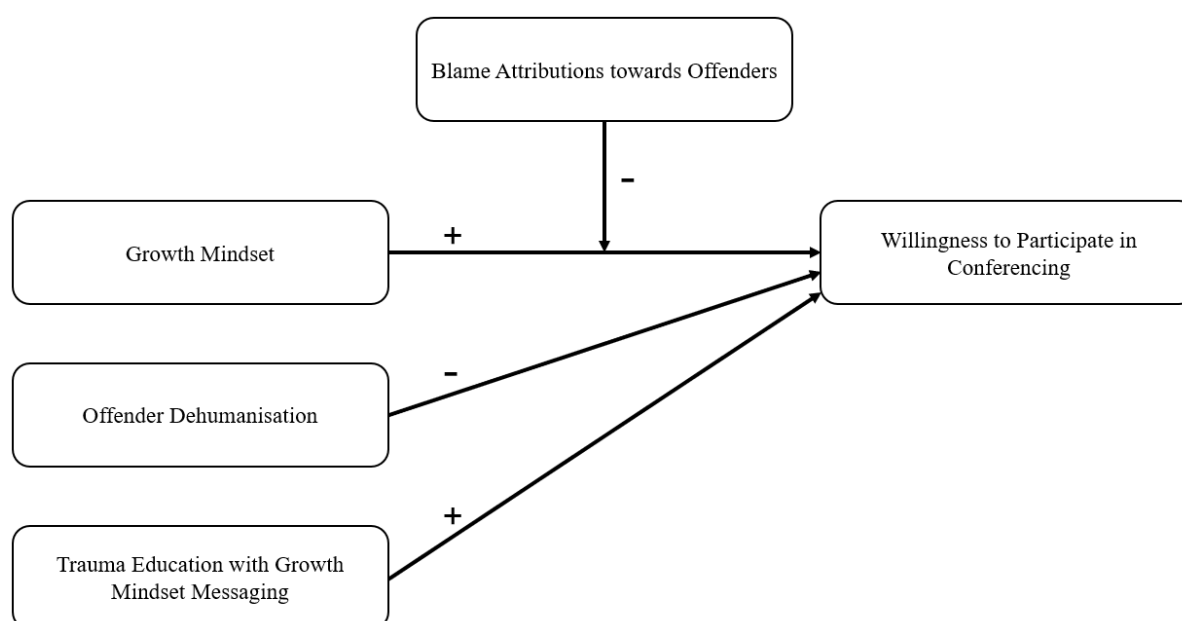
strategies aimed at elucidating the behavioural, physiological, and social consequences that traumatic experiences can have (McKinsey et al., 2023). One of those teaching strategies is growth mindset messaging. The focus here is on pointing out that even though these severe consequences occur, it does not imply that they are immutable.

Overall, greater trauma knowledge seems to be related to less punitive attitudes. In a two-part follow-up study, McKinsey et al. (2023) found that after having received trauma education, participants showed greater support for alternatives to incarceration. In contrast to the first part of the study, they also incorporated growth mindset messaging in the second part, which added to the effectiveness of the intervention. Based on that, it can generally be assumed that trauma education increases people's willingness to participate in conferencing when affected by a crime. However, without growth mindset messaging trauma knowledge potentially results in the assumption that trauma-related problems are unchangeable, and that restorative justice will therefore be unsuccessful (McKinsey et al., 2023). Thus, trauma education should be combined with growth mindset messaging to increase its effectiveness. Based on this, the following hypothesis is formulated:

H IV: Receiving trauma education with growth mindset messaging increases people's willingness to participate in conferencing.

Aim of this Study

To test these hypotheses, an online experiment was conducted in which participants either received trauma education with growth mindset messaging or not based on random allocation. Then, they were presented with a fictional crime scenario and asked to imagine being the neighbour (i.e., relevant community member) of the house that was burglarised in the scenario. Finally, the participants were asked to indicate how willing they would be to participate in conferencing regarding the crime case they read. Individual differences in growth mindset, offender dehumanisation, blame towards offenders, trauma knowledge, and political ideology were measured prior to that. The following figure includes a model that visualises the hypotheses (see Figure 1).

Figure 1***Research Model*****Method****Design**

This experimental research adopted a between-subjects design with two groups. Based on random allocation, one group took part in trauma education with growth mindset messaging (experimental group) while the other did not receive any treatment (i.e., control group). The manipulation was conducted to test its effect on the dependent variable willingness to participate in conferencing. Next to that, the moderator blame attributions towards offenders, and the independent variables offender dehumanisation (i.e., the tendency to dehumanise offenders) and mindset (growth vs. fixed) were measured in predicting the dependent variable willingness to participate in conferencing.

Additionally, the confounding variables trauma knowledge and political orientation (liberal vs. conservative) were examined to test their correlation with the other variables. Lastly, a manipulation check in the form of four questions relating to the experimental manipulation (i.e., trauma education with growth mindset messaging) was conducted, and the demographic variables age, gender, ethnicity, religion, educational level, occupation and income were included.

Participants

The participants were gained through snowball sampling by being contacted via social media platforms and asked to forward the questionnaire to other people they know. Moreover, Survey Circle was used to gain access to a broader audience. The data collection took four weeks in total. The participants were required to be older than 18 and needed to have sufficient English skills to properly understand the material.

The final sample of this study consisted of 105 participants. Participants who took less than five minutes to complete the study ($n = 39$) were excluded as the study consisted of extensive reading materials and several questionnaires resulting in an average participation time of 14 minutes and 49 seconds with a standard deviation of 8 minutes and 32 seconds. Of the final sample, 40 participants were male, 52 were female, two were non-binary, and one preferred not to indicate gender. The participants' ages ranged from 18 to 60 ($M = 26.84$, $SD = 7.73$). In Table 1, all other relevant demographics of the participants are summarised. Those variables are ethnicity, religion, educational level, occupation and income.

Table 1*Demographics (n = 105)*

Sample Characteristics	<i>n</i>	<i>%</i>
Ethnicity		
American Indian/Alaska Native, Hispanic/Latino/Spanish Origin, White	1	0.95
Asian	9	8.57
Asian, White	1	0.95
Black/African American	2	1.90
Black/African American, Hispanic/Latino/Spanish Origin	1	0.95
Hispanic/Latino/Spanish Origin	3	2.86
Middle Eastern/North African	5	4.76
Middle Eastern/North African, White	1	0.95
White	76	72.38
Other (unspecified)	2	1.90
Prefer not to answer	4	3.80
Religion		
Atheist	51	48.57
Christian	29	27.62
Hindu	4	3.81
Muslim	6	5.71
Other (unspecified)	15	14.29
Educational Level		
High School Diploma	31	29.52
Bachelor's Degree	38	36.19
Master's Degree	30	28.57
Ph.D. or other higher qualification	2	1.90
Vocational Training	1	0.95
No formal education	3	2.86
Occupation		
Student	72	68.57
Employed	25	23.81
Internship	1	0.95
Unemployed	3	2.86
Retired	1	0.95
Other (unspecified)	3	2.86
Income (euro)		
<20.000	66	62.86
20.000 - 40.000 €	19	18.01
40.001 - 60.000	10	9.52
60.001 - 80.000	2	1.90
80.001 - 100.000	3	2.86
>100.000	5	4.76

The participants were also inquired about whether they were already familiar with the concept of restorative justice and whether they have previously participated in conferencing. More than half of the participants stated that they were familiar with the concept ($n = 62$), while 51 participants stated that they were not familiar with it ($n = 51$). However, only 4 participants indicated that they had previously participated in restorative justice conferencing.

Materials

All of the following study materials including the questionnaires, intervention, manipulation check, fictional crime scenario, the explanation of restorative justice, and the debriefing part were added to the appendix (see Appendix).

Pre-experimental Questionnaires

Growth mindset measure. To evaluate the participants' tendencies towards either a growth or fixed mindset, a questionnaire constructed by Levy and Dweck was used (1997, as cited in Levy et al., 1998). The questionnaire consisted of eight items, of which four entail statements that relate to a growth mindset and four that relate to a fixed mindset. One example relating to a growth mindset is “People can substantially change the kind of person they are”, and an example relating to a fixed mindset is “Everyone is a certain kind of person, and there is not much that they can do to really change that”. The items were measured on a 7-point scale ranging from strongly disagree (1) to strongly agree (7). The scale has good internal reliability with a Cronbach’s alpha of .90. This can also be inferred from its test-retest reliabilities of .82 after one week and .71 after four weeks (Levy & Dweck, 1997, as cited in Levy et al., 1998; Moss et al., 2019).

Blame towards offenders. To measure blame attributions towards offenders, the “personal” subscale of the Criminal Attribution Inventory was used (Kroner & Mills, 2004). The scale indicates the degree to which one believes that crime is attributed to personal factors (e.g., lifestyle, personality) and that, therefore, offenders are responsible for their criminal acts. It is comprised of 10 items measured with dichotomous answer options (i.e., agree/disagree). Example statements are “People who do crime do so because of their personality traits” or “People with a lot of positive traits do less crime”. The internal reliability of the scale as measured in this current study is acceptable ($\alpha=.67$).

Offender dehumanisation. As a measure of offender dehumanisation, a questionnaire adapted from Viki et al. (2012) was conducted. Participants were presented with human- and animal-related words, such as “person”, “civilian”, “creature”, and “beast”, and asked to what

extent they think these words can be used to describe criminal offenders. The item “mongrel” was excluded from the scale because participants who are not native English speakers might not understand the term. The response options ranged on a scale from 1 (not at all) to 5 (very much), and the questionnaire indicates good internal reliability ($\alpha=.86$).

Trauma knowledge. Based on the study of McKinsey et al. (2023), four statements were implemented to assess the level of previous trauma knowledge. The participants were asked to indicate how much they agree or disagree with each item on a seven-point Likert scale. For instance, one item states “*Most justice involved individuals have experienced trauma*”. Lastly, a question was included about whether the participants already had any prior experience with trauma education training. The scale’s internal reliability is good with a Cronbach’s alpha of .79.

Political Ideology. Several studies have proven a robust relation between political orientation (conservative-liberal) and attitudes towards rehabilitation and punishment (Gromet & Darley, 2011; Payne et al., 2004). While liberals tend to express sympathy and favour reparative strategies, conservatives are more likely to prefer punishment of the offender in terms of a prison sentence. Thus, political ideology was included as a control variable. The participants had to indicate their political orientation on a 10-point scale from extremely liberal (1) to extremely conservative (10).

Intervention – Trauma Education with Growth Mindset Messaging

The intervention, trauma education with growth mindset messaging, is a shortened version of the intervention that was used by McKinsey et al. (2023) in their study. This was done to examine if the previously indicated effectiveness of the intervention can be achieved with a more compromised version that, ultimately, would make it feasible to employ the intervention for a broader audience, for instance, on a single webpage. It comprises four modules presented on screen that are aimed at educating the participant about trauma and its potential effects on the brain and behaviour of affected individuals. The last module entails the message that the brain and behaviour of those individuals can change due to neuroplasticity and personal growth even though they experienced severe trauma (i.e., growth mindset messaging).

The first module “Brain & Behaviour” shows how certain brain functions and neurotransmitters are related to behaviour. For instance, the example “The amygdala serves as the brain’s “fear center” (detecting danger and potential threats)” was given. The module also

points to the concept of neuroplasticity to underline the malleability of brain and behaviour. The second module “Trauma and its Impacts” explains how trauma affects the brain and behaviour and includes examples such as “Early or prolonged trauma may result in reduced volume in the hippocampus” and “Reduced volume in the hippocampus can lead to challenges differentiating true threats from false threats, and unsafe settings from safe settings”. The third module “The Criminal Justice Connection” elaborates on the connection between trauma and crime. It includes information about crime statistics “Studies indicate that up to 90% of youth involved in the criminal justice system report exposure to some type of traumatic experience” and about the relevance of trauma knowledge in the area of criminal justice. Lastly, the fourth module “The Brain’s Ability to Reshape” focuses on growth mindset messaging (i.e., people can learn, grow, and change their behaviour).

Crime Scenario

The fictional crime scenario was about a young man named Nick who grew up in poverty, which affected his mental health and emotional well-being and led him to a path of youth delinquency and drugs. When he was 18 years old, he committed burglary with his friends in a wealthy neighbourhood and got caught by the police. Since Nick regrets his choices and expresses a wish to better himself, the judge decides that it would benefit him to participate in conferencing. The crime scenario was presented in text format on screen.

Explanation of Restorative Justice

To introduce the participants to the concept of restorative justice conferencing, an explanation was presented: “Restorative justice conferencing is a process that brings together the victim, the offender, and relevant community members (e.g., family members, community members, counsellors, police) to discuss the harm caused by the crime as well as possible solutions for it with the help of a facilitator”. Besides that, the potential benefits of conferencing, such as being able to express one needs, ask questions, and seek understanding are mentioned, and it is pointed out that “In restorative justice, crime is considered an interpersonal conflict rather than a disbalance of legal order. The aim is not to punish the offender but to restore the damage”. Finally, a question is included to check if the participants already knew about the concept beforehand.

Post-experimental Questionnaires

Manipulation Check. To assess whether the group that participated in the intervention has learned something, and therefore, has an advantage over the control group answering the questions related to trauma, its effect on the brain, and its relation to crime (i.e.,

topics of trauma education training with growth mindset messaging), they were inquired about four items that were part of the intervention implemented in the study of McKinsey et al. (2023). The first was “What brain "center" does the amygdala serve as?”, the second “Which effect can trauma have on the hippocampus?”, the third “What percentage of justice-involved youth report exposure to some type of traumatic experience?”, and the fourth was “Brain and behaviour changes that may occur as a result of trauma are permanent”.

Willingness to Participate in Conferencing. To measure the extent to which one would be willing to participate in conferencing, the participants were asked to imagine being the neighbour of the person who was burglarised by Nick and his friends in the crime scenario, and that they are invited by a victim support service to participate in conferencing. Then, the participants indicated “How willing would you be to take part in restorative justice conferencing regarding his case?” on a 10-point Likert scale ranging from 1 (not at all) to 10 (very much).

Procedure

Before the start of this study, ethical approval to carry out the research was given by the BMS (department for Behavioural, Management and Social Sciences) Ethics Committee of the University of Twente (#240566).

The participants received a Qualtrics link to enter the study. At the start, the participants were presented with general information about the study as well as procedures implemented to ensure their anonymity and safety. However, the objectives of the intervention as well as specific details about the research were not disclosed before the debriefing part to prevent any potential bias. After giving consent to participate, the participants were asked to provide their demographics. Followingly, they conducted several questionnaires measuring growth mindset tendency, blame towards offenders, offender dehumanisation, previous trauma knowledge, and political ideology.

Then, based on random allocation, they either received trauma education with growth mindset messaging or skipped the part. Afterwards, all participants did the manipulation check, and read the fictional crime scenario about Nick. To give some background knowledge to the participants, they also received an explanation of restorative justice conferencing. Then, they were asked to indicate the degree to which they would be willing to participate in conferencing regarding Nick’s case imagine being the neighbour of the house that was burglarised by Nick and his friends. Lastly, the participants were debriefed about the purpose and underlying assumptions of the study and given a final opportunity to withdraw their data.

Data Analysis

To begin, the data was screened and missing responses as well as participants that took less than the average participation time minus its standard deviation were removed. Then, the experimental groups were coded, and some of the questionnaire items were reverse scaled. To summarise the quantitative data, means, standard deviations, and Pearson correlations were computed. Further, the data was visualised with the use of density plots. The demographic data was analysed with frequency tables. To test for normality of the dependent variable, a histogram was created, and the Shapiro-Wilk test was conducted. As a test for homogeneity of variance, Bartlett's test was chosen. Cronbach's alpha was calculated for the scales to test for internal consistency.

Then, the manipulation checks were examined utilising t-tests, and several regression analyses were conducted to test for the direct effects of the dependent variables growth mindset, offender dehumanisation, and trauma education with growth mindset messaging on the independent variable willingness to participate in conferencing. Lastly, a moderation analysis was performed to test for the interaction of blame attributions towards offenders on the relation of growth mindset and willingness to participate in conferencing. The data was analysed using RStudio.

Results

Descriptive Statistics

To get an overview of the data, the means, standard deviations, and Pearson correlations of the main variables were calculated and presented in the table below (see Table 2). The table includes the independent variables growth mindset, blame attributions towards offenders, and offender dehumanisation, the dependent variable conferencing willingness to participate in conferencing, and the confounding variables trauma knowledge and political ideology.

Table 2*Means, SDs, and Correlations (n = 105)*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Willingness to Participate in Conferencing (scale: 1-10)	7.07	2.31						
2. Growth Mindset (scale: 1-7)	4.49	1.15	.26					
3. Blame Attributions (1 = yes; 2 =no)	1.51	0.20	-.33	-.34				
4. Dehumanisation (scale 1-5)	2.02	0.90	-.76*	-.36	.21			
5. Trauma Knowledge (scale: 1-7)	5.56	0.94	.46	.18	-.51	-.71		
6. Political Ideology (conservative = 10)	3.78	1.88	-.50	-.41	.49	.56	-.77*	
7. Age	26.84	7.73	.00	.02	-.13	.01	-.33	.03

Note. * indicates $p < .05$

The mean and standard deviation of conferencing ($M = 7.07$, $SD = 2.31$) indicate that most participants in the sample were rather willing to participate in conferencing regarding the fictional crime case they read. Furthermore, there is a significantly negative correlation between dehumanisation and conferencing ($r = -.76$) which means that participants who tended to dehumanise offenders were less likely to be willing to participate in conferencing. There is also a significant negative correlation between political ideology and trauma knowledge ($r = -.77$) meaning that participants with conservative tendencies had lower levels of trauma knowledge.

Further, there is a moderate negative correlation between political ideology and conferencing ($r = -.50$). This indicates that participants with conservative tendencies were less willing to participate in conferencing regarding the fictional crime case. Contrary to that, trauma knowledge and conferencing ($r = .46$) are moderately positively correlated indicating that participants who had previous trauma-related knowledge were more likely to be willing to participate in conferencing.

The mean of trauma knowledge ($M = 5.56$, $SD = 0.94$) implies that most participants

in this sample already possessed a high level of previous trauma knowledge. Trauma knowledge is also moderately to strongly negatively correlated with blame attributions ($r = -.51$) and dehumanisation ($r = -.71$) which means that participants who had better previous trauma knowledge were less likely to blame and dehumanise offenders. However, it should be noted that these correlations were not significant which is why they might be due to random chance.

Manipulation Check

To evaluate whether the manipulation worked as intended several t-tests were conducted. A successful manipulation would be indicated when the control and treatment group significantly differed in answering the manipulation questions correctly.

For the first three manipulation questions, “*What brain "center" does the amygdala serve as?*”, “*Which effect can trauma have on the hippocampus?*”, and “*What percentage of justice-involved youth report exposure to some type of traumatic experience?*”, no significant differences between the two groups were found. This can be seen from the results of the t-tests, which are presented according to the previous order of the manipulation questions: $t(103) = -0.22, p = 0.83$; $t(99) = 1.61, p = 0.11$; $t(101) = -0.19, p = 0.85$.

The last t-test, however, showed that there was a significant effect of being in the treatment group on answering the fourth manipulation question, “*Brain and behaviour changes that may occur as a result of trauma are permanent*”, $t(100) = -3.74, p = <.001$. Participants in the treatment condition were more likely to consider this statement to be false ($M = 1.79, SD = 0.41$) than the control condition ($M = 1.45, SD = 0.50$). In sum, it can be said that the manipulation was largely unsuccessful. Nevertheless, the groups differed in how they answered the question related to a growth mindset towards offenders who experienced trauma.

Inferential Statistics

Hypothesis I

To investigate hypothesis one, “*A stronger growth mindset within individuals positively impacts their willingness to participate in conferencing*”, a linear regression model with the independent variable growth mindset and the dependent variable conferencing was tested. The regression model was marginally significant, $R^2 = .03, F(1, 103) = 3.73, p = .056$, and the model only explains 3% of the variance in the dependent variable. Moreover, the model showed a positive and marginally significant main effect of growth mindset on

conferencing, $b = 0.38$, $t(103) = 1.93$, $p = .056$. Thus, there was not enough evidence to reject the null hypothesis.

Hypothesis II

For the second hypothesis, “*The relationship between a growth mindset within individuals and their willingness to participate in conferencing is negatively impacted by blame attributions*”, a moderation analysis was conducted. The independent variables used in the model were growth mindset, blame attributions, and their interaction effect. The outcome variable was conferencing. The overall model did not have statistical significance, $R^2 = .03$, $F(3,101) = 2.16$, $p = .097$. Based on the low R^2 value, it can be stated that the model can only explain a small proportion of the variance in the dependent variable (3%). Moreover, no significant interaction effect of growth mindset and blame attributions on conferencing was revealed, $b = -1.46$, $t(101) = -1.64$, $p = .103$. In addition, the main effect of blame attributions on conferencing was not significant, $b = 6.07$, $t(101) = 1.54$, $p = .128$. For these reasons, hypothesis two is rejected.

Hypothesis III

Regarding the third hypothesis, “*Dehumanisation of offenders reduces an individual’s willingness to participate in conferencing independent of their mindset (fixed vs. growth)*”, multiple regression analysis was performed with the independent variables dehumanisation and growth mindset and the dependent variable conferencing. Overall, the regression model was statistically significant, $R^2 = .11$, $F(2,102) = 7.64$, $p < .001$. Furthermore, the model accounts for 11% of the variance in the dependent variable. The model showed that when accounting for growth mindset, dehumanisation had a significant negative main effect on conferencing, $b = -0.80$, $t(102) = -3.34$, $p < .001$. The main effect of growth mindset stayed marginally significant, $b = 0.33$, $t(102) = 1.76$, $p = .082$. Based on these results, it can be stated that the evidence supports hypothesis three.

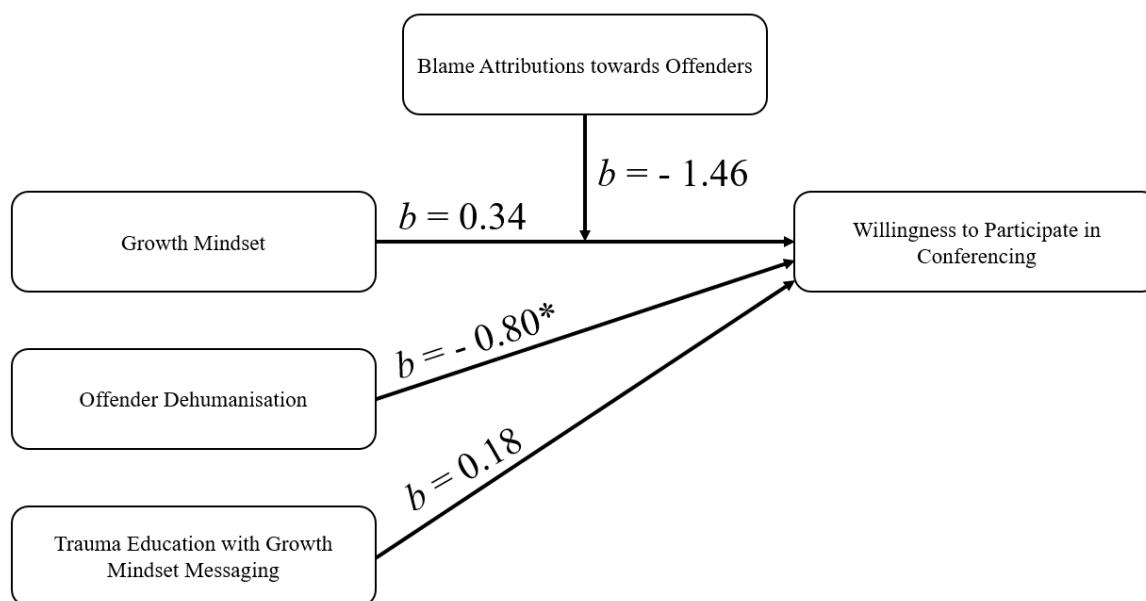
Hypothesis IV

To test the effectiveness of the intervention, the fourth hypothesis, “*Receiving trauma education with growth mindset messaging increases people’s willingness to participate in conferencing*”, was examined using a one-way ANOVA with the independent variable intervention groups and the dependent variable conferencing. There was almost no difference between the treatment group ($M = 7.08$, $SD = 2.32$) and the control group ($M = 7.06$, $SD = 2.33$) in their willingness to participate in conferencing, and the analysis of the ANOVA did not reveal a significant difference between the two groups, $F(1,103) = .00$, $p = .969$.

Therefore, the hypothesis could not be confirmed. Underneath you can find the research model including all effect strengths as measured in this study.

Figure 2

Research Model - Results



Note. * indicates $p < .05$

Discussion

This study explored how individual differences in mindset (growth vs. fixed), offender dehumanisation, and blame attributions towards offenders affect the public's willingness to participate in conferencing. Moreover, it was tested whether a shortened version of trauma education with growth mindset messaging is suitable to increase people's willingness to participate. The overarching goal was to investigate the individual factors that drive and hinder community participation in restorative justice conferencing. This might ultimately be useful for informing future interventions aimed at improving participation rates in conferencing, which will benefit the overall program.

Against expectation, the results did not indicate that a growth mindset within individuals relates to a higher willingness to participate in conferencing. The evidence did also not support that blaming offenders negatively affects the relationship between growth mindset and willingness to participate in conferencing. Nevertheless, it was shown that

offender dehumanisation relates to a reduced willingness to participate in conferencing. Further, the shortened version of trauma education with growth mindset messaging did not achieve the expected effects.

Contrary to what was expected in the first hypothesis, it was not found that a growth mindset within individuals positively influences one's willingness to participate in conferencing. This seems odd when considering previous research findings that people with a growth mindset are more likely to favour restorative justice over the punishment of offenders (Rade et al., 2018; Tam et al., 2013). The implication here could be that a preference for restorative justice does not always imply a higher willingness to participate in conferencing. Thus, reinforcing a growth mindset within individuals does not seem sufficient for improving public participation in restorative justice conferencing.

Next to that, the outcomes showed that it is likely that there are other more important factors in the decision to participate in conferencing. For example, it stood out from the results that conservatives tended to have less trauma knowledge, and it was indicated that conservatism relates to a reduced willingness to participate in conferencing. This fits previous research findings as several studies found a robust relation between conservatism and a preference for punishment over reparative strategies (Gromet & Darley, 2011; Payne et al., 2004). Therefore, further investigations are necessary to reveal the most critical individual differences that drive and hinder public participation in conferencing.

According to the assumption of hypothesis two, it was shown that offender dehumanisation (i.e., perceiving offenders as individuals who are incapable of making appropriate decisions, resisting impulses, and feeling empathy) predicts a reduced motivation to participate in conferencing. In line with this, Viki et al. (2012) found that dehumanising sex offenders leads to higher support for incarceration and less support for alternative forms of justice. Furthermore, Moss et al. (2019) pointed out that when offenders are dehumanised, restorative justice is considered less favourable even in those individuals who have a growth mindset. Considering all of this, it seems like offender dehumanisation critically influences public opinions towards the punishment of offenders, which negatively affects the public's willingness to participate in conferencing.

The third hypothesis that viewing offenders as personally responsible and, thus, attributing blame to them negatively affects one's willingness to participate in conferencing, even within individuals with a growth mindset, was not confirmed. Overall, blame attributions did not seem to be very relevant in this context. This contradicts the finding of Hoyt et al. (2022) that blame attributions towards offenders can negate the positive effect of a growth

mindset within individuals on favouring rehabilitation over punishment of offenders, and it might be explained due to a slightly different conceptualisation of blame underlying the applied questionnaires.

While the study by Hoyt et al. (2022) included questions about internal and external attributions of blame as well as items about lack of control and blameworthiness, this study's questionnaire was only focused on whether one ascribes internal responsibility to offenders. This focus might have been too narrow to capture the same idea. Viewing offenders as personally responsible for their acts might not necessarily be the same as considering them blameworthy or lacking control. For instance, one could think that offenders are internally responsible for their criminal acts but still believe they should rather be supported and reintegrated instead of blamed and punished. Therefore, it is beneficial to apply a rather broad concept of blame when researching in the restorative justice context.

Lastly, the shortened version of trauma education with growth mindset messaging was not proven to be effective. In this sample, the participants did not differ much in their willingness to participate in conferencing regardless of whether they were part of the control or treatment group. Most participants were rather willing to participate. This might be due to several reasons. For instance, most participants in this sample already had relatively high levels of trauma knowledge to begin with. Since trauma knowledge has been shown to be related to less punitive attitudes (McKinsey et al., 2023), participants might have endorsed restorative justice conferencing regardless of participating in the intervention.

Moreover, the majority of participants in this sample were students with a relatively low income. Social dominance theory states that those in positions of power have an interest in sustaining their position by oppressing others (Sidanius et al., 2004). This is linked to the belief that character traits and competence of others are unchangeable (fixed mindset). Since most participants in this sample were arguably not in positions of power, they were more likely to have a growth mindset which is linked to a higher willingness to participate in conferencing.

Strengths & Limitations

Although restorative justice practices have been debated in research since the 1970s, the aspect of community involvement remains somewhat unclear (Latimer et al., 2005; Rosenblatt, 2015). Therefore, this paper contributes to the field by testing an intervention to improve participation rates (i.e., trauma education with growth mindset messaging) and by exploring how individual differences in mindset and perception of offenders affect the

public's willingness to participate in conferencing.

It should be noted that in this study the manipulation check did not work out as intended meaning that the intervention was unsuccessful. This might have been due to the fact that the intervention was shortened or due to other differences in the study design of McKinsey et al. (2023) compared to this study. However, it seems more likely that the manipulation questions were too easy for this sample, so no difference in knowledge could be found in those who participated in the intervention. Therefore, when attempting to replicate this study's intervention to test it in a different context it is recommended to adjust the manipulation questions.

The majority of participants in this sample were students, highly educated, and white. This makes it difficult to generalise the results to the whole population. Depending on the individual characteristics of the sample and offender in the crime scenario (e.g., gender, educational level, ethnicity), different results are likely to be achieved. The participants in this sample were already knowledgeable about trauma and its effects on the brain possibly due to their higher levels of education, which likely affected them to be generally more willing to participate in conferencing.

Additionally, the severity and type of crime in the fictional crime scenario could potentially have a critical effect on the view that the public holds towards the offender. For instance, when a case of murder or rape would have been presented, it can be expected that the attitudes towards the offender would be significantly more negative and that people would, therefore, be less willing to participate in conferencing. In this specific scenario of a burglary committed by a young man who seems to genuinely regret his mistakes afterwards, most participants were willing to participate.

Future Research

It is recommended that future interventions and research regarding the issue of restorative justice participation incorporate strategies to combat offender dehumanisation as it seems to be an important influence on the attitudes that the public holds towards offenders as well as on people's willingness to participate in conferencing. Dehumanisation makes punishing offenders justifiable as they are seen as outsiders who should receive different treatment (Haslam & Bain, 2007, as cited in Moss et al., 2019). One such strategy to potentially combat offender dehumanisation as previously applied by Moss et al. (2019) is to prime a common human identity in participants.

Since so far, the results regarding trauma education with growth mindset messaging

are inconclusive, it is suggested to translate the intervention into different languages and examine it in several contexts. Moreover, it could be tested whether growth mindset messaging on its own could result in increased community participation in restorative justice conferencing. A shorter intervention would be beneficial as then it could, for instance, be presented on a single web page which would make it accessible to a broader audience.

Furthermore, it is worth investigating how different fictional crime scenarios (e.g., case of murder) and offenders (e.g., female offender, black offender) affect public perceptions and people's willingness to participate in conferencing regarding these instances. Previous research indicated that especially black male offenders and Hispanic male offenders tend to be more harshly punished than other groups of offenders (Brennan & Spohn, 2009). Thus, the public might be less willing to participate in conferencing regarding these cases.

Additionally, differences in the sample characteristics can significantly affect the results. For instance, Payne et al. (2004) found that liberal ideology, younger age, and being female predict less punitive attitudes towards offenders. In line with this, the outcomes of this study indicated that political ideology and trauma knowledge have an important impact on the decision to participate in conferencing. Thus, for future research in the context of restorative justice, it is recommended to take these individual differences into account while designing a study and collecting a sample.

Conclusion

When looking at the potential benefits of community participation in conferencing and the lack of community involvement in actual cases, it is necessary to find practical ways of improving participation rates in these programmes. It stood out from this study that the tendency to dehumanise offenders can result in a reduced willingness to participate in conferencing. This as well as other potentially relevant individual differences such as political ideology and trauma knowledge are worth considering when designing interventions aimed at improving community participation in conferencing.

Although the intervention tested in this study did not prove to be effective, as previous research has shown, this must not imply that similar interventions could not be effective in different contexts. The individual characteristics of the sample as well as the specific crime case studied can affect how willing people are to participate in conferencing. Therefore, this should be taken into account when deciding where to apply restorative justice interventions. Ultimately, community involvement, which is a critical aspect of conferencing, has been

chronically under-researched in the past. Therefore, it remains highly relevant to further investigate the topic in future research.

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Appendix

Study Materials

Use of Tools: “During the preparation of this work the author used ChatGPT in order to collect ideas for the fictional crime scenario and develop a draft. After using this tool, the author reviewed and edited the content as needed and takes full responsibility for the content of the work.”

Start of Block: Opening Statement

General Information **Thank you for your willingness to participate in this study!**

What is the study about?

The main topic in this research under investigation is restorative justice.

Am I eligible to take part?

To participate in this study, it is required that you are over the age of 18, and are proficient in understanding and communicating in English.

Do I have to take part?

No, it is your decision whether you want to participate in this study or not. You can withdraw from this study at any time without having to explain any reason and without facing any consequences by closing your browser window or tab. Your data will be stored anonymously and only used for this research. If you change your mind during the study, you can still withdraw your consent at the end.

What will happen when I agree to take part?

If you consent to take part in this study, you will be directed to the questionnaire which will take you approximately 15-20 minutes to complete. The survey starts with questions about your demographics. Only the most relevant demographic questions were included to preserve anonymity. After that, you will be asked several questions about your personal attitudes and beliefs. Please keep in mind that there are no right or wrong answers and that we want to know your personal opinion regarding these topics. Lastly, you will read an offender's case description and a short introduction of restorative justice conferencing, and answer a follow-up question.

Risks of taking part

Please keep in mind that being confronted with an offender story could cause emotional distress. If you think this is likely to upset you, please do not start the experiment. If you start the experiment and later do not feel comfortable, feel free to stop by closing your browser window.

What will happen to my data and to the results of this study?

This study is being conducted by a psychology student at the University of Twente in the context of a bachelor thesis. Throughout the whole questionnaire no identifiable information is being collected. The collected data itself will be stored securely on a password protected device for at least 10 years in line with the auditing requirements of our research integrity policy. Data may be shared with the research community in accordance with the principles of Open Science, however only anonymised data is shared. The results of the study may be submitted for publication and used for further research in this area.

Benefits of participating in our study

If you are a student at Twente University then you will be credited 0.25 SONA-points for taking part in this study.

Users of the research platform SurveyCircle.com receive SurveyCircle points for their participation at the end of the study.

Informed Consent If you want to participate in this study, please read the following statements and give your consent:

- I confirm that I voluntarily want to take part in this study and that I am at least 18 years old.
- I have read the information sheet and understand the purpose of this study.
- I understand that my data will be collected anonymously and that I will not be personally identifiable.
 - I confirm that I have sufficient English in order to complete this study.
 - I understand that I can withdraw from the study at any time.

If you read and understand the statements above and want to consent to take part in this study, then you can click the button "I consent" at the end of the page.

I consent (1)

I do not consent (2)

End of Block: Opening Statement

Start of Block: Demographics

Gender What gender do you identify with?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)
-

Age How old are you (in years)?

Ethnicity What ethnicity categories best describe you? (Please mark all that apply)

- American Indian or Alaska Native (1)
- Asian (2)
- Black or African American (3)
- Hispanic, Latino, or Spanish Origin (4)
- Middle Eastern or North African (5)
- Native Hawaiian or Other Pacific Islander (6)
- White (7)
- Other (8) _____
- Prefer not to answer (9)

Religion What religion do you identify with?

- Christian (1)
 - Muslim (2)
 - Hindu (3)
 - Other (4) _____
 - Atheist (5)
-

Educational Level What is the highest level of education you completed?

- No formal education (1)
 - High school diploma (2)
 - Vocational training (3)
 - Bachelor's Degree (4)
 - Master's Degree (5)
 - Ph.D. or other higher qualification (6)
 - Prefer not to say (7)
-

Occupation What is your occupational status?

- Student (1)
 - Employed (2)
 - Internship (3)
 - Military (4)
 - Unemployed (5)
 - Retired (6)
 - Other (7) _____
-

Income What is your income (a year)?

- (1)
- 20.000-40.000 (2)
- 40.001-60.000 (3)
- 60.001-80.000 (4)
- 80.001-100.000 (5)
- >100.000 (6)

End of Block: Demographics

Start of Block: Growth Mindset Measure

GMM In this section, we will ask you some questions about your beliefs on human behaviour.

GMM Matrix Please indicate how much you agree or disagree with the following statements:

(5) Everyone, no matter who they are, can significantly change their basic characteristics . (5)

(6) People can substantially change the kind of person they are. (6)

(7) No matter what kind of a person someone is, they can always change very much. (7)

(8) People can change even their most basic qualities. (8)

End of Block: Growth Mindset Measure

Start of Block: Trauma Knowledge

Trauma Knowledge In this section, we will ask you some questions about your beliefs on trauma and its impact.

Trauma Knowl. Matrix Please indicate how much you agree or disagree with the following items:

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
(1) Early trauma is likely to have an impact on a person's development and behaviour. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(2) Most justice involved individuals have experienced trauma. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(3) I can explain what trauma is, including its effects. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(4) There is a strong link between childhood trauma and brain development. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Trauma Education Have you previously participated in a trauma education training?

Yes (1)

No (2)

End of Block: Trauma Knowledge

Start of Block: Criminal Attribution Inventory

CRAI Below are some statements on how people view crime. Please give your honest response by indicating your agreement or disagreement with each statement using your initial response.

Page Break

CRAI Matrix Read each statement carefully and decide if you agree or disagree. For these statements, crime is what YOU know the average type of crime to be.

	Disagree (1)	Agree (2)
(1) Being crime free is a result of the one's personality. (1)	<input type="radio"/>	<input type="radio"/>
(2) A person's traits has very little to do with doing crime. (2)	<input type="radio"/>	<input type="radio"/>
(3) Crime is not caused by one's personality. (3)	<input type="radio"/>	<input type="radio"/>
(4) People with a lot of positive traits do less crime. (4)	<input type="radio"/>	<input type="radio"/>
(5) People are wrong to believe that the way one lives is related to crime. (5)	<input type="radio"/>	<input type="radio"/>
(6) People who do crime do so because of their personality traits. (6)	<input type="radio"/>	<input type="radio"/>
(7) Good lifelong habits prevent people from getting into trouble. (7)	<input type="radio"/>	<input type="radio"/>
(9) A positive lifestyle is not related to being crime free. (8)	<input type="radio"/>	<input type="radio"/>
(10) One's type of personality has nothing to do with committing crime. (9)	<input type="radio"/>	<input type="radio"/>

End of Block: Criminal Attribution Inventory

Start of Block: Offender Dehumanisation Questionnaire

ODQ Matrix To what extent can the following words be used to describe criminal offenders:

	Not at all (1)	A little (2)	Undecided (3)	Somewhat (4)	Very much (5)
(1) creature (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(2) humanity (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(3) person (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(4) beast (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(5) animal (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(6) people (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(7) civilian (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Offender Dehumanisation Questionnaire

Start of Block: Political Ideology

Political Identity Liberalism is defined as a political ideology that emphasises individual freedom, equality, and social justice. Conservatism, on the other hand emphasises traditional values, limited government, and free markets.

Where would you place yourself on this scale?

Extremely liberal Extremely conservative

1 2 3 4 5 6 6 7 8 9 10

How liberal or conservative do you consider yourself to be? ()	
--	--

End of Block: Political Ideology

Start of Block: Intervention - Trauma Education with Mindset Messaging (shortened)

Introduction In this next section of the survey, you will be working through a trauma education training comprised of **4 modules**.

Please read everything carefully to learn what science has to say about how trauma affects the brain and behaviour. You will be asked questions afterwards to check your understanding of the material.

Page Break

Q74

Brain & Behaviour

Are the brain and behaviour connected?

Science shows that the brain, as well as other parts of our biology, influences our behaviour, thoughts, and feelings. Research on localisation of brain function, neurons, and neurotransmitters has advanced our understanding of how the brain and nervous system work, and how such functioning can impact behaviour.

Here are some examples of how parts of the brain are involved in behavioural outcomes:

- The **frontal lobe** of the brain is involved in functioning related to higher-level cognition and expression (rational thought, emotion regulation, impulse control)
- The **amygdala** serves as the brain's "fear center" (detecting danger and potential threats)
- The **hippocampus** is a part of the brain involved in memory and context processing.

Can the brain change? YES. *Neuroplasticity* refers to the brain's ability to change and adapt.

In other words, the brain is malleable. We have learned that our brains can reorganize pathways, form new neural connections, and sometimes, create new neurons — all resulting in a changed brain. This means that the physical structure of the brain can and does change.

What does this information mean in terms of behaviour? If the brain can change, behaviour can change too.

Page Break

Q71

Trauma and its impacts**Let's consider trauma.**

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), examples of events or experiences that precipitate trauma include:

physical, psychological, or sexual abuse; domestic, family, or community violence; individual-level and system-level discrimination; loss; or natural disasters.

Research shows that **trauma** is one of the types of experiences that **can change the brain**.

How exactly does trauma affect the brain?

Evidence shows that experiencing early, severe, and/or repeated trauma can change the structure and function of different areas of the brain.

For instance, early or prolonged trauma may result in:

- **Reduced volume** in the **hippocampus**
- **Greater activation** of the **amygdala**
- **Lesser activation** of the **prefrontal cortex**

These brain changes may also affect behaviour.

For example:

- Reduced volume in the hippocampus can lead to **challenges differentiating true threats from false threats, and unsafe settings from safe settings.**
- Greater activation of the amygdala can lead to **greater and more constant feelings of fear and stress, making it difficult to calm down.**
- Lesser activation of the prefrontal cortex can lead to **difficulty focusing and thinking clearly.**

Among other impacts, such challenges may cause individuals to experience overwhelming feelings of fearfulness, powerlessness, anger, or extreme emotional pain; thereby, **impacting everyday functioning.**

In an attempt to feel better or avoid getting hurt again, trauma survivors may adopt behaviours to help them cope and survive.

Certain **coping behaviours** that trauma survivors adopt may be **problematic for functioning in the world.**

For instance, some trauma victims may:

- abuse alcohol and drugs to suppress feelings and memories;
- become aggressive despite the absence of a real threat; or
- isolate themselves because it feels safer to be alone.

Q75

The Criminal Justice Connection

Many of the behavioural challenges and coping mechanisms seen in trauma survivors are also seen in people who engage in violent and criminal behaviour.

A growing body of research has confirmed the links between trauma and criminal behaviour, as well as higher rates of traumatic experiences among offenders than among the general population. Studies indicate that up to 90% of youth involved in the criminal justice system report exposure to some type of traumatic experience.

Why is knowledge of trauma relevant to criminal justice?

Learning about the impact of trauma on the brain can help us understand criminal behaviour in a more comprehensive way by enhancing knowledge of how such behaviour may occur and develop. This information can help us make informed and appropriate decisions about the consequences one must face after engaging in criminal behaviour. It may also help avoid re-traumatising, ensure safety of all, reduce the likelihood of reoffending, promote recovery, and ease management.

Such knowledge highlights how the brains of people who have experienced early, prolonged, and severe trauma may function in a different way than people who have not experienced trauma. In other words, their brains may be playing from a different set of rules than other peoples' brains.

Page Break

Q73

The Brain's Ability to Reshape

So far, we have learned how the brain can change in response to trauma and how these changes may impact behaviour in a negative way. But remember, **THE BRAIN IS MALLEABLE**. It can reorganise pathways, form new neural connections, and create new neurons.

Through exposure to positive experiences and stimuli, **the brain can reshape and restructure**. Such experiences include:

practising good behaviours; establishing good habits; becoming involved in supportive environments; undergoing evidence-based cognitive behavioural therapy; developing safe and nurturing relationships.

Like a muscle, the brain can become stronger through training, hard work, and practice. This means that brain and behaviour changes that may occur as a result of trauma do not have to be permanent. Brain and behaviour changes are difficult to achieve and may take a long time to occur; however, they are possible. People can successfully learn different ways of acting. And when they do this, they can actually change the connections in their brains. This means that **behaviour is not static. People can learn, grow, and change**.

Let's review...

The brain is malleable, therefore, it can change in response to good and bad experiences.

Because the brain influences behaviour, if the brain can change, so can behaviour.

Therefore, PEOPLE CAN and DO CHANGE.

Page Break

Q65 You have now completed this trauma education training.

Thank you for your participation!

Please continue to the next page.

End of Block: Intervention - Trauma Education with Mindset Messaging (shortened)

Start of Block: Control Group

Control Group Please continue to the next page.

End of Block: Control Group

Start of Block: Manipulation Check

Manipulation Check Please answer the following questions about trauma, its effects on the brain, and its relation to crime.

Man. check Q1 What brain "center" does the amygdala serve as?

- (1) The control center (1)
 - (2) The fear center (2)
 - (3) The language center (3)
-

Man. check Q3 Which effect can trauma have on the hippocampus?

- (1) Reduced volume (1)
 - (2) Enlarged volume (2)
-

Man. check Q5 What percentage of justice-involved youth report exposure to some type of traumatic experience?

- (1) 30% (1)
- (2) 60% (2)
- (3) 90% (3)
-

Man. check Q7 Brain and behaviour changes that may occur as a result of trauma are permanent.

- (1) True (1)
- (2) False (2)

End of Block: Manipulation Check

Start of Block: Offender Story

Offender story **Let's consider an example.**

Nick grew up in a low-income neighbourhood with his single mother, who worked tirelessly to provide for their family. Despite her efforts, they often struggled to afford basic necessities like food and clothing. Nick learned from a young age the stress and uncertainty that came with living paycheck to paycheck which heavily affected his emotional and mental well-being. In an effort to fit in and escape the harsh realities of his home life, he gravitated towards a group of friends who engaged in risky behaviour. These friends provided a sense of belonging to Nick which helped him to cope with his situation, but they also introduced him to a world of drugs and delinquency.

When he was 18 years old, he committed a burglary due to pressure from his peers and a desire for quick money. He targets a wealthy home with his friends, which turns out to be your neighbour's house. When caught by the police, he realises the gravity of his choices and starts regretting what he did.

Followingly, Nick faces legal consequences for his actions. His involvement in the burglary weighs heavily on him as he reflects on how his choices have affected not only himself but also his family and the victims of the crime. He hopes for a chance to change his future. The judge thinks it might be good for Nick to participate in conferencing, which is an example of restorative justice.

End of Block: Offender Story

Start of Block: What is restorative justice conferencing?

What is restorative justice conferencing?

Restorative justice conferencing is a process that brings together the victim, the offender, and relevant community members (e.g., family members, community members, counsellors, police) to discuss the harm caused by the crime as well as possible solutions for it with the help of a facilitator. This way, the involved parties can express their needs, ask questions, and seek understanding. Moreover, the offender can take responsibility by apologising for what they did and eventually receive forgiveness.

In restorative justice, crime is considered an interpersonal conflict rather than a disbalance of legal order. The aim is not to punish the offender but to restore the damage that has been inflicted on all involved parties and find ways to reintegrate the offender back into the community. This is mainly done by dialogue.

Q78 Did you already know about restorative justice?

- No (1)
- Yes (2)

End of Block: What is restorative justice conferencing?

Start of Block: Willingness to Participate in Conferencing

Q23 After what happened to your neighbour, you are still in shock. This makes you think about how it could have been your house that got burglarised by Nick and his friends.

Since you are part of the community, you receive a letter from the victim support service offering you the possibility to participate in conferencing.

Please answer the question below:

	Not at all	Very much
	1	2 3 4 5 6 6 7 8 9 10
How willing would you be to take part in restorative justice conferencing regarding his case? ()		

Q77 Have you previously participated in a restorative justice intervention?

- No (1)
- Yes (2)

End of Block: Willingness to Participate in Conferencing

Start of Block: Debriefing

Debriefing **Debriefing**

Thank you for participating in this research. This data will be used to explore individual factors that seem to be relevant in determining the public's willingness to participate in restorative justice conferencing. Moreover, it was tested whether trauma education with mindset messaging is an effective strategy to increase willingness to participate in conferencing. The case of Nick presented in this study was fictional, none of these things happened, but similar cases do occur.

Research has found that there are several individual factors that influence someone's willingness to participate in conferencing. This study was focused on the following: offender dehumanisation and blame, growth mindset (i.e., belief that human attributes are fundamentally malleable) vs. fixed mindset, trauma knowledge, and political orientation. Next to that, previous evidence supports the view that trauma knowledge is related to less punitive

attitudes towards offenders and that, therefore, trauma education is an efficient method to foster a mindset in favour of restorative justice. However, without growth mindset messaging (i.e., inclusion of information about the potential for the brain and behaviour to change after experiencing traumatic events) trauma knowledge potentially results in the assumption that trauma-related problems are unchangeable, and that restorative justice will therefore be unsuccessful. Thus, trauma education should be combined with growth mindset messaging.

To test whether trauma education with growth mindset messaging positively affects one's willingness to participate in conferencing, half of the group was randomly allocated to receive the intervention while the other half only did not. Individual factors were measured prior to that to examine if there is a difference, for instance, between people who have more of a growth mindset compared to those with a fixed mindset or those who have a liberal political orientation as opposed to a strongly conservative political orientation.

Now, after your participation in this study, we want to remind you that all your data is collected anonymously. If after reading the debriefing about this research you wish to withdraw your participation, please feel free to do so. Please click on the "Withdraw my data" button below. If you wish to continue to participate you can simply close your browser window or click the "Keep my data" button below.

Q27 If you want to withdraw from this study, please indicate here:

Q28 Additionally, feel free to contact us in case of any questions:

Thank you for participating!

End of Block: Debriefing
