RUNNING HEADER: AGGRESSION SUPPORTIVE BELIEFS IN FORENSIC PATIENTS

Abstract

Purpose: This preliminary study aims to investigate and describe aggression supportive normative beliefs among patients of a high secure hospital. **Design:** Therapy data from a sample of high secure forensic hospital patients ($N = 11$) who had participated in Life Minus Violence-Enhanced (LMV-E), a long-term violence therapy, was examined using Interpretative Phenomenological Analysis (IPA). During therapy, cognitions linked to past incidences of aggression were explored using Aggression Choice Chains (ACCs). **Findings:** IPA was applied to data generated through this process to examine the presence and nature of normative beliefs reported, identifying seven themes: *Rules for Aggressive Behaviour; Use of Violence to Obtain Revenge; Processing Emotions with Violence; Surviving in a Threatening World; Do Not Become a Victim; Employing Violence to Maintain Status;* and *Prosocial Beliefs*. **Originality:** Findings demonstrate that forensic patients have specific aggression supportive normative beliefs, which may be malleable. Limitations and implications are discussed.

Introduction

Theories on aggression converge on deeming this behaviour an enactment of aggression supportive cognitive structures consciously or automatically selected during a decision-making process (Allen et al., 2002; Finkel, 2014; Huesmann, 2018). Socio-cognitive models explaining violence (e.g. Allen et al., 2018; Huesmann, 2018) are particularly pertinent in this regard. According to the *General Aggression Model* (GAM) (Allen et al., 2018), there are knowledge structures related to aggression that contain information about objects or events, people or groups, and behaviour with associated consequences. The *Integrated Information Processing Model* (IIPM; Huesmann, 2018) equally places considerable emphasis on a role of cognition and belief structures that are based on social learning, which culminate in the concept of behavioural scripts (e.g., guides to social [aggressive] action). Likewise, a more recent meta-theory of aggression, the *I^3 Model* (Finkel, 2014) suggests that aggression supportive cognitive structures contribute to aggression proclivity. This commonality suggests a developing consensus among researchers on the importance of these cognitive structures.

Indeed, the proposed association among aggression supportive cognitive structures and aggressive behaviour has been routinely confirmed. A key example of an aggression associated knowledge structure is the hostile attribution bias (HAB) (Nasby et al., 1980). This refers to the tendency to interpret the ambigous behaviour of others as hostile. A systematic review by Klein Tuente et al. (2019) showed HAB to be associated with aggressive behaviour in male and female participants from community and forensic samples. Another form of aggression supportive knowledge structures are behavioural scripts. These incorporate information about what will occur in a situation, what the appropriate behaviour is thought to be, and what the outcome of such behaviour is (Huesmann, 2018). A review from Gilbert & Daffern (2017) showed that holding a higher number of aggressive behavioural scripts is associated with violence among offenders. However, Dunne et al. (2019) and Podubinski et al. (2017) have

demonstrated that while aggressive behavioural scripts are associated with aggression in univariate models in prisoner and patient samples, this association weakened once a model including personal characteristics (e.g., hostility, risk-taking) was tested. This suggests that frequency of aggressive script rehearsal contributes to violent behaviour but is unlikely to be the sole determinant.

Normative beliefs are another explanatory factor. According to socio-cognitive theories of aggression, (e.g. IIPM), for a behavioural script to be enacted it needs to correspond to the individual's normative beliefs (i.e., beliefs an individual holds which they feel others hold) (Huesmann, 2018). Normative beliefs represent a range of permissible and impermissible acts that inform conduct (Huesmann & Guerra, 1997) and are likely to be rooted in implicit theories. Such theories represent systems of beliefs that guide behaviour by forming expectations for social interactions. Polaschek et al. (2009) identified four implicit theories present in violent offenders: *I am the law*; *violence is normal*, *I get out of control*, and *beat or be beaten*, with self-preservation and self-enhancement subtypes. As implicit theories have a prescriptive nature, they are likely to be a basis from which a more specific prescriptive normative belief springs and dictate the degree to which a conduct in a specific situation is (un)acceptable. This suggests that normative beliefs are a more immediate antecedent of aggressive behaviour.

Indeed, a review by Bowes and McMurran (2013) concluded that normative beliefs supportive of aggression were associated with violence. Hosie et al. (2014) also demonstrated that both behavioural script rehearsal and aggression supportive normative beliefs correlated with aggressive behaviour among forensic patients. However, Dunne et al. (2019) showed in a multifactor model that the effect of normative beliefs on aggression among prisoners dissipates, as the latter is explained more by anger and risk taking. Different findings are reported among student samples by Zhang et al. (2017), who found normative beliefs about aggression to be the mediator between exposure to violence, interpersonal trust, and aggressive behaviour.

Likewise, in a longitudinal study of adolescents by Huesmann et al. (2017), aggression favouring normative beliefs mediated the effect of past exposure to violence and aggressive behaviour.

One explanation for higher consistency of results in a community population as opposed to a prisoner or forensic patient population might lie in the measures of normative beliefs. It is possible that instruments do not include a full range of normative beliefs present in non-community samples. Two well-applied measures, the EXPAGG Revised scale (Archer & Haigh, 1997) and Normative Beliefs About Aggression Scale revised (NOBAAS – R; Huesmann & Guerra, 1997) were developed based on community samples. Thus, they lack ecological validity when applied to more specialised populations, such as prisoners or forensic patients. The EXPAGG Revised scale contains a list of specific normative beliefs including items describing situations when a person can be aggressive (e.g., stress or annoyance) or the utility of using aggression (e.g., keeping someone in line). Meanwhile, the NOBAAS – R includes normative beliefs about general acceptability of violence and appropriateness of aggression in response to physical or verbal provocation. However, neither include normative beliefs attaching positive emotions to aggressive acts that are shown to be present among forensic populations with a history of aggressive behaviour (Reidy et al., 2011)

The Measure of Criminal Attitudes and Associates (MCAA) (Mills et al., 2002, 2004) and the Criminal Attitudes to Violence Scale (CAV) (Polaschek et al., 2004) represent an attempt to rectify the ecological challenges by creating a scale based on offenders in Canada and New Zealand, respectively (Mills et al., 2004; Polaschek et al., 2004). They add to the list of previously identified normative beliefs. For instance, the belief that aggression is an acceptable way of attaining positive emotions (e.g., feeling happy after winning a fight) or relieving negative ones.

However, neither MCAA nor CAV include normative beliefs about aggression that refer to the presence of psychotic symptoms (e.g., delusions), which are pervasive in forensic populations, and have been associated with aggressive conduct (Yee et al., 2020). Further, while both provide quantitative measurements of general or specific normative beliefs, there is a lack of recent studies showing the broad range of cognitions that inform normative beliefs specifically. Lastly, neither of these scales have been validated in different cultures and therefore are not necessarily generalisable to other populations.

Thus, the present study builds on the preceding literature in several ways. The primary aim of this study is to investigate aggression supportive normative beliefs that are specific to forensic hospital population in the United Kingdom, which have received less attention than cognitive distortions (Burn & Brown, 2006) or cognitive structures specific to sex offenders (Kåven et al., 2019). It is important to highlight that in the UK, patients of forensic hospitals[1] represent a unique population at the intersection between psychiatric hospital patients, exhibiting symptoms of mental health issues, and prisoners, those found guilty of committing a criminal offence. For instance, Timmerman & Emmelkamp (2005) showed that forensic patients have reported less care from mothers than prisoners. This difference might strengthen a normative belief related to the necessity to rely only on oneself. Additionally, the current study employs a qualitative rather than quantitative approach to map the underlying cognitive structures that facilitate creation and maintenance of particular normative beliefs. That is, examining the construction of aggressive supportive normative beliefs rather than on their association with aggressive behaviour. Thereby the study shows how normative beliefs, which are prescriptive in nature, can develop from more descriptive implicit theories. Finally, given

[1] In the UK a patient can be admitted to high secure hospital in two ways. First, if it was proven in court that during the time of the offence, they experienced mental illness symptoms that have significantly contributed to the offence. Second, if during the prison sentence, it is discovered that a person has mental health issues that required treatment.

that the data was collected from patients during a long-term violence therapy (LMV-E) there was also a unique opportunity to capture change in aggression supportive normative beliefs.

Method

Participants

Data was reviewed from 11 adult male forensic patients, who had completed Life Minus Violence-Enhanced (LMV-E: Ireland, 2009) therapy. The participants were aged between 30 and 60 years old (M=36.95). All were detained because of a criminal history of aggression and were given pseudonyms. Due to the high-profile criminal histories of some of the participants, limited identifying information could be collected. Permission granted by an NHS trust to complete this evaluation required that appropriate ethical guidelines were followed. However, because the study was conducted as part of a service evaluation within the trust, and no data in addition to that required by the service evaluation was collected, research ethics board (REB) approval was not required.

Data Collection

The data consisted of Aggressive Choice Chains (ACCs) and Non-Aggressive Choice Chains (NACCs), which patients complete as part of LMV-E therapy to explore acts of aggression. LMV is a long-term intervention based on a cognitive behavioural framework which aims to reduce aggression and violence. When completing an ACC, patients reflect on the sequence of choices that led to an aggressive behaviour – generally their index offence. Each chain is comprised of four to eight *links*, with each link capturing a choice the patient made that brought them closer to committing the aggressive act. Afterwards, patients are asked to think about alternative choices that could have reduced their likelihood of behaving aggressively (NACC). The cognitive behavioural underpinnings of the choice chains are apparent in that they are designed to capture emotions, normative beliefs, fleeting thoughts,

choices, evaluation of choices, and consequences of the aggressive choice made, as explained by the patients. In the current sample, each link had between one and 15 statements produced by the patients. The choice chain data was transferred from paper flip charts to an excel sheet verbatim and included beliefs and thoughts alongside how these cognitions were connected to their behaviour. The focus was on the cognitions that emerged from these choice chains. Figure 1 shows a blank example of an ACC.

<Insert Figure 1 here>

Data Analysis

The data collected was analysed using Interpretative Phenomenological Analysis (IPA), which focuses on high-quality data generated by a small sample (Pietkiewicz & Smith, 2014). It allows for a consideration of individuals' subjective experiences in depth (Smith et al., 2009), in this case, the individuals' thoughts and beliefs in relation to their index offences. As there is a lack of qualitative studies examining aggression supportive normative beliefs in patients of psychiatric forensic hospitals, it was determined that there was value in examining the experiences and choices leading up to (or inhibiting) an act of aggression in detail. The purpose of this approach was to better understand the individuals' perceptions of the choices they made in the lead up to the offence, and to understand their cognitive processes (Smith et al., 2009). The analysis stage followed the protocol set out by Smith et al. (1999), which consisted of transcribing the data, re-reading the transcript numerous times whilst coding it, then examining the coded data for potential themes. There was a focus on attempting to make sense of the participants' experience (Smith et al., 2009). Themes and sub-themes were identified within each transcript. The transcripts were divided between three researchers (IS, LS, LG), quotes and themes were discussed, as well as understanding of the information provided by participants, and consensus was achieved IPA has a focus on ensuring the data is valid and of

high quality. Although the authors did not complete the primary data collection, the LMV facilitation protocol ensures that data generated is of high quality. Strategies include repeating and rephrasing questions to support the participants to generate thoughts and beliefs they held at the time and displaying empathy. Participants ultimately lead the discussion, which aligns with the IPA approach (Virginia & Smith, 2017). However, given the forensic context, it is possible that the participants generated what they perceived to be the 'correct' responses. Facilitators are trained to utilise their knowledge of the individual (e.g., incident reports, interdisciplinary consultation, supervision) to evaluate the validity of this information. When the facilitators were known to the researchers, it was possible to clarify ambiguous information to gain a better understanding of the data produced.

It is important to highlight that given the narrow focus of the service evaluation data collection, it was not possible to contextualise the participants' responses to the ACC activity within their overarching therapeutic process or clinical history. However, this is a core activity within the LMV-E framework, often taking a significant number of sessions to complete, approximately 30 sessions, lasting between one and two hours, and typically provides rich insight into the thinking and decision-making processes of each patient. Further, the reflective nature of the activity encourages sharing of relevant biographical context. Thus, it was determined that this data set would be suitable for IPA analysis. The authors further acknowledge that there was the possibility of bias during the analysis process. This is particularly the case when distinguishing fleeting thoughts from normative beliefs, as there can be conceptual overlap between these categories. To mitigate this risk, all available data was accessed to clarify meaning, ensuring as much as possible that normative beliefs were the focus.

Results and Discussion

Analysis of the ACC documentation resulted in the identification of seven core themes: *Rules for Aggressive Behaviour; Use of Violence to Obtain Revenge; Processing Emotions with Violence; Surviving in a Threatening World; Do Not Become a Victim; Employing Violence to Maintain Status;* and *Prosocial Beliefs*.

In line with the socio-cognitive models of aggression, such as *General Aggression Model* (GAM) (Allen et al., 2018), they represented cognitive structures that condoned or facilitated use of violence (Table 1).

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Theme 1: Rules for Aggressive Behaviour

Participants expressed belief in unwritten rules for how they and those around them should conduct themselves. This resembles Polacsheck et al.'s (2009) *I am the law* Implicit Theory (IT), characterised by a sense of entitlement to aggress towards those perceived as endangering their safety. Subthemes that emerged included *maintaining masculinity*, *sparing the vulnerable*, and *distrust authority*. The subthemes below describe instances where aggression is warranted.

Maintaining Masculinity

Participants reported that it was important for men to stand up for themselves and their family. They described motives for aggressive behaviour related to ensuring respect and protection of their family, highlighting that it was their responsibility as a man to protect the family.

> "A man has to stick up for his family […] I need to show that no one can disrespect my family." (John)

> "It's okay to use a good bit of violence to protect your family […] I am a protector, I protect my sisters, it's just the way I am, it's the way I am built, I want the best for my sisters." (Ben)

The reason these participants might have emphasised defending their family could be an internalisation of traditional gender norms, wherein the man is seen as the protector of the family (Warner et al., 2022). It is further noted that males might use aggression to maintain the honour of themselves and their family (Heber, 2017).

Some participants also voiced standards as to how women should behave.

> "Women are not supposed to act 'like a man'. They are supposed to be a lady. Being patient, forgiving, happy, kind, supportive […] If you behave like a man, I'll treat you like a man." (Dominic)

> "Girls don't go out once they have a baby […] Girls don't go out on their own." (Nick)

There is a traditional belief that women are caring, warm, and should be submissive to men (Mahalik et al., 2005). When these norms are transgressed, this can be met with hostility and punishment (Prentice & Carranza, 2002). It is suggested that males holding traditional masculine beliefs are more inclined behave aggressively. (Prentice & Carranza, 2002).

Sparing the Vulnerable

Although these participants were known to behave aggressively, they identified rules as to whom it was unacceptable to direct that behaviour towards.

> "People who threaten old people are cowards." (John)

> "You shouldn't hit women or kids. I've never harmed a girl or a kid." (Dominic)

There appeared consensus among participants that it was morally wrong to harm what they considered to be a vulnerable group, such as women, children, or the elderly. The former

was consistent with their expressed hypermasculine beliefs. Another reason for their views could include a fear of increasing their own risk of victimisation. Prisoners, for example, have noted that it is unacceptable to harm children, as within the prison system that those who sexually offend towards children are more likely to be targeted (Ricciardelli & Moir, 2013). Similarly, those who hurt females might also be more at risk, as it has been found to be unacceptable among offender populations. Disapproval of victimisation of the elderly was a finding unique to this study, suggesting a wider perspective of vulnerable populations.

Distrust Authority

Expectations were also shared about engagement with the police and the importance of not informing on others to those in a position of authority.

"Snitches [informers] ask the police for help - snitches are cowards." (Tom)

"I don't believe in talking to the screws [prison officers]. It won't work." (Robert)

Several possibilities emerged for why participants would avoid involvement with the police. One may be that they had to be seen as someone who can protect themselves without assistance of others to maintain the perception of them being strong and capable (Huey & Quirouette, 2010). Additionally, there was a need to not be seen as someone who informed, with such individuals viewed as low on the social hierarchy among their peers (Pyrooz et al., 2021). Further, reluctance to involve police might stem from distrust in their ability to enforce effectively following previous encounters (Anderson, 1999; Machura et al., 2019).

Theme 2: Use Violence to Obtain Revenge

Participants reported engaging in violence and aggressive behaviour after they had been victimised themselves. This evokes Polascheck et al.'s (2009) *beat or be beaten* Implicit Theory, characterised by the belief that they do not instigate aggression, but rather aggress to

retaliate. The participants described how they would teach others who had hurt them in the past a lesson by taking revenge.

> "If someone shoots you it ok to shoot them - They deserve it they started it." (Robert)

> "Order must be restored, I've been betrayed, there must be a response - I must have vengeance. It can't be left unanswered - I shouldn't let him get away with it." (Joe)

Participants generally blamed their victim for their own excessive use of aggression. Historically, revenge was utilised to restore balance and one's status with a group (Waldmann, 2001). When an individual perceives they were victimised, the aggression they inflict can be more severe than what they suffered (Ent & Parton, 2020), making such beliefs salient. Alternatively, the act of revenge could be related to the honour of defending oneself, since retribution has been thought to prevent loss of status (Thrasher & Handfield, 2018).

Theme 3: Processing Emotions with Violence

Participants also discussed violence as a method for processing challenging emotions, which is comparable to Polascheck et al. (2009) *I get out of control* Implicit Theory, identified by difficulties regulating emotions. Both negative and positive emotions were reported preceding or accompanying violent acts.

Relieving Negative Emotions Through Violence

Most participants focused on negative emotions. Specifically, they described how anger influenced their desire to hurt others, and how it could help them mentally and physically prepare to be aggressive:

> "Still felt angry so wanted to keep hurting him i.e., chasing after him […] I need to feel satisfied before I stop." (Kevin)

> "Fear can easily morph into aggression." (Mark)

Those with a history of aggression have been shown to have greater levels of anger, disregarding strategies to decrease anger through non-aggressive acts (Roberton et al., 2015). Further, these individuals often display difficulties regulating anger, with fewer attempts made to control it (Roberton et al., 2015), which appears supported by the comments noted here.

Attaining Positive Emotions Through Violence

Some participants reported positive emotions, such as relief, following the use of aggression and violence. For others it was not only the act of aggression but also the anticipation of engaging in violence that resulted in positive emotions.

> "Relief: no fear. Felt in control. Anger & fear were leaving me with each punch. Felt better than before." (Dominic)

> "Staff got hurt and it made me feel better and I proved the point […] I enjoy hurting people." (Robert)

The fact that aggressive acts can reduce emotional tension has been reported previously (Verona & Sullivan, 2008). Reports of experiencing enjoyment from hurting others are consistent with literature showing that violence can induce a positive emotional state (Buckels et al., 2013).

Theme 4: Surviving in a Threatening World

Participants identified aggression supportive beliefs stemming from a viewing the world as an inherently threatening place. The Implicit Theory *Normalization of violence* is similar, in that violence is perceived as effective in problem solving and increasing respect from others (Polascheck et al., 2009). In this study, beliefs fell into four subthemes: *Treat authority figures as hostil*e; *always be vigilant*; *distrust others;* and *prepare to maintain personal safety.* One participant summarised this theme saying, "The world hurts and takes the piss out of weak people." (John)

Treat Authority Figures as Hostile

Several patients expressed negative views towards authority. Such a stance provides a foundation for the perception of the world as hostile place. It is assumed that those who are supposed to help will not, either because they are inept or because they want to harm you.

"Police are the enemy, tools of the state." (Joe)

"The screws [prison officers] cannot help, they don't care about your family" (Ben)

The expectation that others have hostile intentions, (HAB), has been consistently linked with aggressive behaviour (Klein Tuente et al., 2019). Furthermore, since patients have assigned hostile intentions to authority figures in secure settings, it might facilitate feelings of anger from treatment perceived as unjust. It is also possible that this view towards authority is underpinned by in-group versus out-group dynamics, which have been found to be stronger in offenders than the general population (Scheeff et al., 2018).

Always be Vigilant

Another characteristic reinforcing a hostile view of the world was the need to be watchful of their surroundings, as others might harm them or their property.

"People might rob me because I have nice things." (Kevin)

"My enemies have real guns with bullets […] they might kidnap me, they might shoot me. They might rob me." (Tom)

It is possible that this type of vigilance could be explained by the nature of the sample. Psychotic disorders and traumatic experiences, which are more common among forensic populations (e.g., McKenna et al., 2019), are linked with hypervigilance (APA, 2022; Garwood et al., 2013). However, heightened threat sensitivity has been argued to be informed by HAB

itself (Bondü, 2018) and does not necessarily have to be based in predetermined psychopathology.

Distrust Others

The extension, or possibly direct antecedent, of hypervigilance is a lack of trust. This was reported by several patients. In addition to lack of faith in other people, the participants expressed an anticipation of betrayal.

"Everyone sells me out […] I can't trust anyone" (Carlos)

"I've been betrayed before I will not allow people to do it again" (Joe)

As evidenced by the quotes above, distrust can be based on past experiences. It can be related to the perception of mothers as not caring (Timmerman & Emmelkamp, 2005) Although some apprehension in this regard might be considered reasonable (i.e., not trusting someone who has betrayed them in the past), the overarching pattern suggests a lack of trust in anyone, which is not adaptive. A likely foundation for the distrust exhibited by patients could be hostile information processing. Exposure to real or virtual violence decreases trust in others, which has been found to moderate the relationship between exposure to violence and aggressive behaviour (Rothmund et al., 2015; Zhang et al., 2017). Thus, distrust of others can be both a consequence and facilitator of aggression.

Always be Prepared for Aggression

For some patients, a direct corollary of world being threatening was a clear understanding that they need to be prepared for aggression. Since they believed that harm could befall them at any time, they would employ strategies to feel safer and to be ready to act fast.

"Hit them before they hit me […] I need to carry a knife with me." (John)

"I need to hurt them before they hurt me […] I need to carry weapons to survive." (Carlos)

The need to be prepared closely reflected the concept of aggression preparedness from the General Aggression Model (GAM) (Allen et al., 2002), which is posited to be informed by several personal factors, including beliefs (Roberton et al., 2012). The expressed desire to be prepared also parallels the suggestion that aggressive behaviour is driven in part by the availability of aggressive behavioural scripts (Gilbert & Daffern, 2017). Furthermore, weapon carrying has been shown to be associated with increased aggression as compared to not carrying a weapon (Benjamin et al., 2018).

Theme 5: Do Not Become a Victim

Patients reported endorsing cognitions placing the blame for their violence on the victim, which is comparable to the Implicit Theory *self-preservation* (Polascheck et al., 2009). It is characterised by perceiving oneself as being prone to victimisation and exploitation, thus, violence is used to prevent future victimisation. Victim blaming is a form of moral disengagement, through which the aggressor mentally bypasses moral values they hold or claim to (Bandura, 2002). One of the forms of victim blaming shown by the patients was adoption of a narrative in which once a person was victimised, they invite further victimisation. Importantly, within this framework victims are afforded agency as they enable harm that befalls them.

"If I allow someone to take advantage once, they will do it again and again." (Mark)

"If someone hurts you and you let them, they will keep doing it." (Carlos)

Arguably the main function of these beliefs, like of any moral disengagement, is to ensure that aggressors can sustain a positive self-perception (Shalvi et al., 2015). In addition to

attributing blame to the victim, such cognitions create a justification for continuous aggression, as victims become a group that can, and perhaps should in their view, be harmed.

Theme 6: Employing Violence to Maintain Status

Participants commonly contextualised their use of violence as a means of obtaining, maintaining, or re-establishing respect. This aligns with the implicit theory *beat or be beaten* (Polascheck et al., 2009), as participants viewed those lower on this respect hierarchy as vulnerable.

> "If you don't get respect off others, people will treat you like an idiot… People who are aggressive get respect." (John)

Some participants identified how this relationship between violence and respect served to reinforce a social hierarchy, as well as their position within it.

> "I'm a strong person – strong people never let anyone take the piss." (Robert)

> "I take no shit - get respect and let people know where they stand." (Trevor)

The strong emphasis on respect and use of violence and aggression to reinforce hierarchy are ideas that permeate what has been identified as the *code of the street* (Anderson, 1999). This is described as a set of attitudes and behaviours primarily related to the utility of aggression in enforcing social order among marginalised populations. Anderson (1999) hypothesised that this phenomenon arises in communities with poor socio-economic conditions and low trust in and engagement with authority or mainstream institutions. Respect is a paramount currency within these systems. Support has been found for the *code of the street* on violence across populations (Moule & Fox, 2021). Some participants also expressed concern that not enforcing respect, whether through deference to others or retaliation in the face of disrespect, would result in victimisation:

"If you allow people to get away with disrespect then you are weak = victim." (Joe)

"If you disrespect someone, they will disrespect you back = mutual disrespect = Violence - this is a rule." (Dominic)

Thus, by appearing to accept or show disrespect they would invite future victimisation. This further supports the *beat or be beaten* framework and has been supported in studies showing that demonstrating the ability to resolve disputes violently can reduce the likelihood of future threats (Brookman et al., 2010). It may also reflect beliefs around honour and signalling that they are not to be victimised (Thrasher & Handfield, 2018).

Theme 7: Prosocial Beliefs

Unlike previously described themes, theme seven focuses on the normative beliefs that changed during the intervention and demonstrate newly adapted norms. Patients believed that acting in accordance with these norms would prevent aggressive behaviour in situations where they previously acted violently. To show the change, we present evidence both of aggression-supportive and aggression-inhibiting beliefs,but use only the latter for the subthemes' titles. Four new beliefs were identified: *Consider the Consequences, Do Not Carry Weapons, Maintain Self-control, and Attain Positive Emotions Through Desistance from Aggression.*

Consider the Consequences

Several patients reported little consideration of the negative consequences of violent behaviour.

"Prison does not bother me - knew I would go back no matter what." (John)

"I don't give a shit about the consequences." (Robert)

Post-intervention, some patients demonstrated a changed perception of such consequences.

"Even if we go fight them & win, we still lose as we will go to prison" (Dominic)

"The long-term consequences are the most serious" (Tom)

While this shift is encouraging, it is important to note that these judgments were made in a safe environment. It is possible that use of effective coping strategies, which induce calm states, are a necessary condition for changed cognitions to influence behaviour in everyday life. However, acknowledgement of a sentence as a cost of aggressive violent actions demonstrates an engagement in cost-benefit analysis, which has been linked to direct aggression among both community (Archer et al., 2010) and prison samples (Archer & Southall, 2009).

Do not Carry Weapons

Patients stated that carrying weapons helps them prepare for aggressive situations and that using them ensures victory in such confrontations. Importantly, their beliefs about weapons' usefulness outweighed concerns about the illegality of possessing them.

"We should take the gun as there are men in the pub and women. Shoot some of them […] weapons help win fights." (Dominic)

"Guns work - guns scare people - guns even situations (if someone is bigger)." (Tom)

Meanwhile, after the intervention, patients reflected on the negative effect of possessing weapons as well as highlighting what changing this behaviour would mean for them.

"You don't have to carry guns." (Tom)

"Weapons don't make me strong, the way I think makes me strong." (Kevin)

It is possible that a positive association with weapon carrying may be linked to an escalation of previous aggression or associated with exposure to gun violence (Beardslee et al., 2018), which is a common correlate with men showing more extreme aggression histories. Another explanation is that approval of weapon use represents an extension of general aggression supportive cognitions. Simply seeing a weapon has been shown to increase violent

thoughts, due to a network of aggression supportive cognitive structures (Benjamin et al., 2018). This network might work in a reverse order, where the presence of aggression supportive cognitions encourages gun acceptance.

Maintain Self-control

Patients reflected on the relationship between self-control and aggression. When discussing their offence, they described a lack of control, which facilitated violence.

> "I can't control violence it will come out. The violence within me reached a boiling point." (Joe)

However, following therapy, patients highlighted how newly developed skills could help them maintain control and prevent aggression.

> "Changing your mind can be a real strength, not a weakness - I am in control - I can take perspective and admit I was wrong." (Mark)

> "I am a strong person, I can control myself/learn to control myself. I need to tell myself to calm down, I know what I am capable of." (Trevor)

The inverse relationship between self-control and aggression has been postulated in several prominent theories of aggression (e.g., GAM). This especially applies to reactive aggression where violence can result from a failure of impulse inhibition in response to a stressor (Bertsch et al., 2020). Consequently, it is possible that the noted beliefs simply reflect patients' increasing self-efficacy insofar as differently managing challenging emotions.

Attain Positive Emotions Through Desistance from Aggression

Although previously participants described enjoying aggression and the positive emotions felt after being aggressive, they felt ambivalent about the benefits of violence post-

therapy. Some participants reported that there were more negative consequences of being aggressive, whilst desisting could result in positive emotions.

> "Dealing with it and staying out of trouble feels good." (John)

> "I would be out and I would be home with my family. My mates would be free and clear. And no-one would get hurt. I would feel good, content and relieved." (Ben)

Thus, a clear shift in beliefs appeared, participants became less accepting of aggression and refocused on consideration of positive consequences of non-aggressive behaviour. This would be expected to result in decreased hostility and reduced aggression (Tomlinson & Hoaken, 2017), and thus, is an expected outcome of violence therapy. To the authors' knowledge, this is a novel finding among this population.

Relationship Among Themes

All outlined normative beliefs were closely related to each other. Respect for the hierarchy and adoption of rigid expectations for appropriate behaviour based on the group membership may appear as a response to perceiving the world as a threatening place where only the strong survive. Likewise, victim blaming beliefs provide additional justification for violence, as victims are positioned at the lowest level of the hierarchy, thus 'deserving' of aggression. Further, as victims are perceived as having an agency by allowing aggression to happen to them, this creates drive to avoid victimisation at all costs. In relation to perceptions of hierarchy, revenge may serve to ensure that one does not fall from their desired position within the hierarchy. Maintaining a respected position within the hierarchy is arguably of utmost importance in what participants perceive as a threatening world that denies them assistance. The perception of tenuous positioning in such a dangerous context understandably results in strong emotional responses. Hence, a notable purpose of violent behaviour becomes

the relieving of tension. Positive emotional associations with violence (e.g., release) reinforce the beliefs that negative feelings can be coped with by engaging in aggressive behaviour.

While the first six themes partially corresponded to the implicit theories identified by Polaschek et al. (2004), the last theme represented a unique aspect of this study, as it captured changing normative beliefs. Through the course of long-term violence therapy (LMV-E), patients had opportunities to reflect on their index offence and challenge their thoughts and beliefs. Taking this into account, it is promising that patients highlighted evaluation of consequences, self-control, and attitudes towards weapons as beliefs that have become less aggressive supportive. Meanwhile, the first six themes highlight clear targets for aggression interventions as they describe the superordinate structures that likely serve as a foundation for specific normative beliefs.

Most of the subthemes reflected the previously established normative beliefs, listed in existent instruments (Archer & Haigh, 1997; Bowes & McMurran, 2013; Huesmann & Guerra, 1997; Mills et al., 2002, 2004; Polaschek et al., 2004). This match between normative beliefs identified in violent offenders from different cultures suggests the cross-cultural relevance of specific cognitive structures in informing aggressive behaviour. However, the distrust in authorities or other people coupled with constant readiness for violence appear to be specific to offenders. Furthermore, the change in the belief that positive emotions can be achieved through violence to the belief that pleasant outcomes can be reached through non-aggression show that patients of high secure hospitals use a hedonistic approach in evaluating their behaviour.

The present study is not without limitations. Being an exploratory study, the sample size was small and highly specific in scope, including only male, high-risk, forensic patients. Thus, the results cannot be easily generalised. This limitation also contributed a strength,

however, in that it contributed to the limited body of research addressing specifically normative beliefs of the patients of high secure hospitals in the United Kingdom. A second limitation was the potential for incomplete data sets. Participant quotes were often transcribed by the therapist during the session onto the flipchart rather than being written by the patient themselves. LMV-E therapists are trained to transcribe their client's words as close to verbatim as possible, reducing the risk of misrepresenting them, but there was potential for human error. Further, given the context of these therapy sessions, within a forensic unit, participants may feel inclined to over-emphasise positive changes in their belief system. However, the honesty these participants demonstrated in expressing their aggression supportive beliefs early in therapy instils some confidence in the accuracy of their self-report. Related to these limitations is the fact that aspects of the analysis and greater case context had to be omitted in the paper due to being offence specific and potentially jeopardising participant anonymity. This affected the inclusion of idiosyncratic information typically explored in the application of IPA. However, measures were taken to ensure the validity and quality of the data collected (e.g., confirmation from the service provider when possible) and the depth and breadth of exploration inherent to the ACC process was deemed sufficient for the administration of IPA. Nonetheless, future studies of this kind would benefit from inclusion of a larger sample size and the use of more detailed, directly sourced data from the therapy sessions, such as a recording of the participant. That being said, observing the changes in participants' expressed beliefs to be less aggression supportive overall following LMV-E indicates value in providing such treatments.

Conclusion

This preliminary study highlighted themes from a high-risk forensic patient sample regarding their beliefs about the use of aggression. It explored both the generation and maintenance of beliefs over time. The participants initially had positive beliefs about the use of aggression and how it could be used for retaliation, protection of self and others, and

management of their emotional state. A change in normative beliefs following engagement in a violence reduction intervention was evidenced. Despite its limitations, the study has implications with regards to understanding both the diversity of aggression-relevant beliefs and the potential for positive change. It potentially highlights the need to identify and target a range of specific aggression supportive beliefs. Findings within the current sample demonstrated some consistency with beliefs of other groups, such as avoiding becoming victimised, retaliatory violence, and maintaining the respect of peers, but there is divergence in the areas of pervasive distrust and a need to be always prepared for aggression. The need therefore to capture a full range of populations in identifying beliefs, perhaps with a view to quantifying them for measurement, becomes key.

Timmerman, I.G.H. and Emmelkamp, P.M.G. (2005), Parental rearing styles and personality disorders in prisoners and forensic patients. *Clin. Psychol. Psychother., 12:* 191-200. https://doi.org/10.1002/cpp.449

References

Allen, J. J., Anderson, C. A., & Bushman, B. J. (2018). The General Aggression Model. *Current Opinion in Psychology*, *19*, 75–80. https://doi.org/10.1016/j.copsyc.2017.03.034

Anderson, C. A., & Bushman, B. J. (2002). Human Aggression. *Annual Review of Psychology*, *53*, 27–51.

Anderson, C., & Bushman, B. (2018). Media Violence and the General Aggression Model. *Journal of Social Issues*, *74*(2), 386–413. https://doi.org/10.1111/josi.12275

Archer, J., & Haigh, A. M. (1997). Do beliefs about aggressive feelings and actions predict reported levels of aggression? *British Journal of Social Psychology*, *36*(1), 83–105. https://doi.org/10.1111/j.2044-8309.1997.tb01120.x

Benjamin, A. J., Kepes, S., & Bushman, B. J. (2018). Effects of Weapons on Aggressive Thoughts, Angry Feelings, Hostile Appraisals, and Aggressive Behavior: A Meta-Analytic Review of the Weapons Effect Literature. *Personality and Social Psychology Review*, *22*(4), 347–377. https://doi.org/10.1177/1088868317725419

Bowes, N., & McMurran, M. (2013). Cognitions supportive of violence and violent behavior. *Aggression and Violent Behavior*, *18*(6), 660–665. https://doi.org/10.1016/j.avb.2013.07.015

Burn, M. F., & Brown, S. (2006). A review of the cognitive distortions in child sex offenders: An examination of the motivations and mechanisms that underlie the justification for abuse. *Aggression and Violent Behavior*, *11*(3), 225–236. https://doi.org/10.1016/j.avb.2005.08.002

Dunne, A. L., Lee, S., & Daffern, M. (2019). Extending the general aggression model: contributions of DSM-5 maladaptive personality facets and schema modes. *Psychology, Crime and Law*, *25*(9), 875–895. https://doi.org/10.1080/1068316X.2019.1597089

Finkel, E. J. (2014). The I3 Model. Metatheory, Theory, and Evidence. In *Advances in Experimental Social Psychology* (Vol. 49). Elsevier Inc. https://doi.org/10.1016/B978-0-12-800052-6.00001-9

Finkel, E. J., & Hall, A. N. (2018). The I3 Model: a metatheoretical framework for understanding aggression. *Current Opinion in Psychology*, *19*, 125–130. https://doi.org/10.1016/j.copsyc.2017.03.013

Gilbert, F., & Daffern, M. (2017). Aggressive scripts, violent fantasy and violent behavior: A conceptual clarification and review. *Aggression and Violent Behavior*, *36*(October 2015), 98–107. https://doi.org/10.1016/j.avb.2017.05.001

Hosie, J., Gilbert, F., Simpson, K., & Daffern, M. (2014). An examination of the relationship between personality and aggression using the general aggression and five factor models. *Aggressive Behavior*, *40*(2), 189–196. https://doi.org/10.1002/ab.21510

Huesmann, L. R. (1998). The Role of Social Information Processing and Cognitive Schema in the Acquisition and Maintenance of Habitual Aggressive Behavior. In *Human Aggression* (pp. 73–109). Elsevier. https://doi.org/10.1016/B978-012278805-5/50005-5

Huesmann, L. R. (2018). An integrative theoretical understanding of aggression: a brief exposition. *Current Opinion in Psychology*, *19*, 119–124. https://doi.org/10.1016/j.copsyc.2017.04.015

Huesmann, L. R. . (1988). An information processing model for the development of aggression. *Aggressive Behavior*, *14*(1), 13–24. https://doi.org/10.1002/1098-2337(1988)14:1<13::AID-AB2480140104>3.0.CO;2-J

Huesmann, L. R., Dubow, E. F., Boxer, P., Landau, S. F., Gvirsman, S. D., & Shikaki, K. (2017). Children's exposure to violent political conflict stimulates aggression at peers by increasing emotional distress, aggressive script rehearsal, and normative beliefs favoring aggression. *Development and Psychopathology*, *29*(1), 39–50. https://doi.org/10.1017/S0954579416001115

Huesmann, L. R., & Guerra, N. G. (1997). Children's normative beliefs about aggression and aggressive behavior. *Journal of Personality and Social Psychology*, *72*(2), 408–419. https://doi.org/10.1037//0022-3514.72.2.408

Kåven, A. S., Maack, J. K., Flåm, A. M., & Nivison, M. (2019). "It's My Responsibility, But…" A Qualitative Study of Perpetrators' Understanding of Child Sexual Abuse. *Journal of Child Sexual Abuse*, *28*(2), 240–258. https://doi.org/10.1080/10538712.2018.1523815

Klein Tuente, S., Bogaerts, S., & Veling, W. (2019). Hostile attribution bias and aggression in adults - a systematic review. *Aggression and Violent Behavior*, *46*(July 2018), 66–81. https://doi.org/10.1016/j.avb.2019.01.009

Martinelli, A., Ackermann, K., Bernhard, A., Freitag, C. M., & Schwenck, C. (2018). Hostile attribution bias and aggression in children and adolescents: A systematic literature review on the influence of aggression subtype and gender. *Aggression and Violent Behavior*, *39*(August 2017), 25–32. https://doi.org/10.1016/j.avb.2018.01.005

Mills, J. F., Kroner, D. G., & Forth, A. E. (2002). Measures of Criminal Attitudes and Associates (MCAA): Development, factor structure, reliability, and validity. *Assessment*, *9*(3), 240–253. https://doi.org/10.1177/1073191102009003003

Mills, J. F., Kroner, D. G., & Hemmati, T. (2004). The Measures of Criminal Attitudes and Associates (MCAA) - The prediction of general and violent recidivism. *Criminal Justice and Behavior*, *31*(6), 717–733. https://doi.org/10.1177/0093854804268755

Nasby, W., Hayden, B., & DePaulo, B. M. (1980). Attributional bias among aggressive boys to interpret unambiguous social stimuli as displays of hostility. *Journal of Abnormal Psychology*, *89*(3), 459–468. https://doi.org/10.1037/0021-843X.89.3.459

Podubinski, T., Lee, S., Hollander, Y., & Daffern, M. (2017). Patient characteristics associated with aggression in mental health units. *Psychiatry Research*, *250*(November 2016), 141–145. https://doi.org/10.1016/j.psychres.2017.01.078

Polaschek, D. L. L., Calvert, S. W., & Gannon, T. A. (2009). Linking Violent Thinking. *Journal of Interpersonal Violence*, *24*(1), 75–96. https://doi.org/10.1177/0886260508315781

Polaschek, D. L. L., Collie, R. M., & Walkey, F. H. (2004). Criminal attitudes to violence: Development and preliminary validation of a scale for male prisoners. *Aggressive Behavior*, *30*(6), 484–503. https://doi.org/10.1002/ab.20081

Reidy, D. E., Zeichner, A., & Seibert, L. A. (2011). Unprovoked Aggression: Effects of Psychopathic Traits and Sadism. *Journal of Personality*, *79*(1), 75–100. https://doi.org/10.1111/j.1467-6494.2010.00691.x

Smith, J.A., Flowers, P. & Larkin, M. (2009). Interpretative phenomenological analysis: theory, method and research. Los Angeles, [Calif.] ;: SAGE.

Virginia, E., & Smith, J. A. (2017). Interpretative phenomenological analysis: In. C. Willing & W. Stainton Rogers. (eds). *Handbook of qualitative psychology*. 2nd ed. London, UK: Sage. Pp193-211

Warburton, W. A., & Anderson, C. A. (2015). Aggression, Social Psychology of. In *International Encyclopedia of the Social & Behavioral Sciences: Second Edition* (Second Edi, Vol. 1). Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.24002-6

Yee, N., Matheson, S., Korobanova, D., Large, M., Nielssen, O., Carr, V., & Dean, K. (2020). A meta-analysis of the relationship between psychosis and any type of criminal offending, in both men and women. *Schizophrenia Research*, *220*, 16–24. https://doi.org/10.1016/j.schres.2020.04.009

Zhang, L., Liu, S., Xu, Q., Wu, X., & Yang, M. (2017). Long-term effect of violence exposure in real-life on aggressive behaviors: A moderated mediation model. *Acta Psychologica Sinica*, *49*(1), 50. https://doi.org/10.3724/sp.j.1041.2017.00050

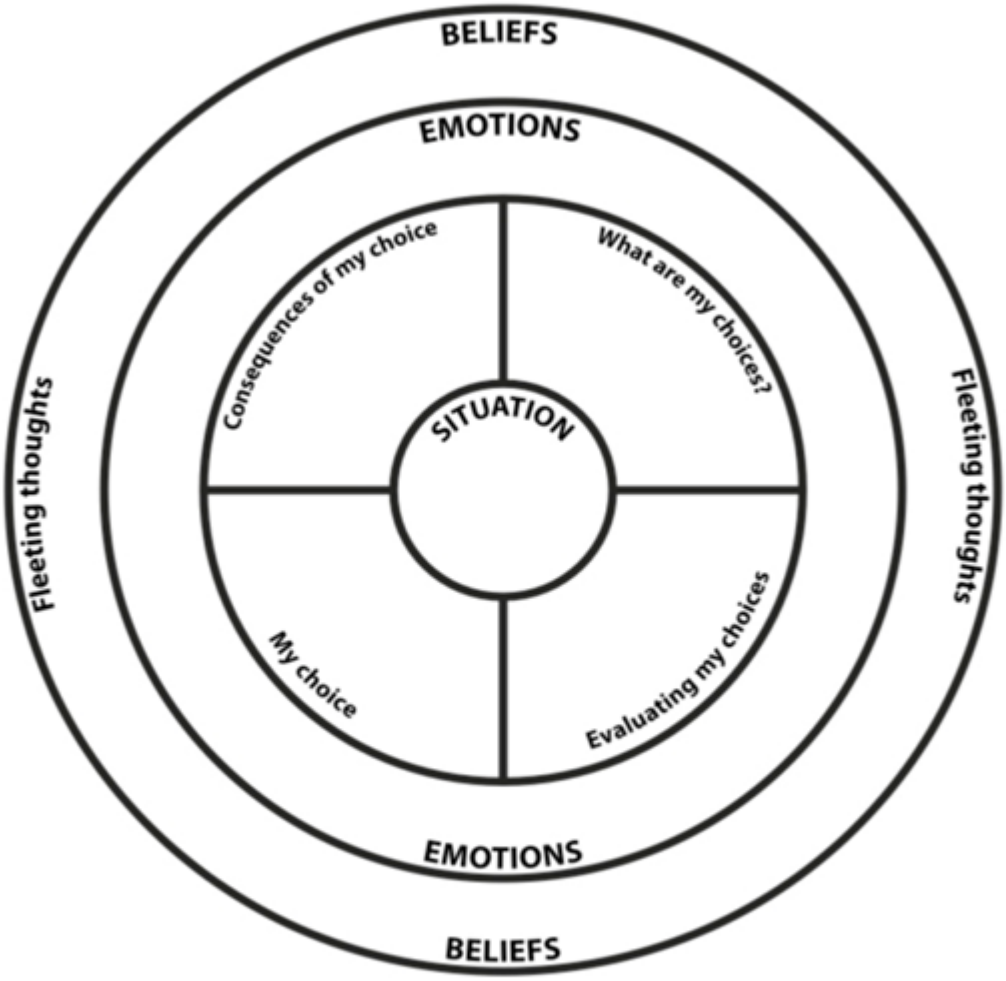

Figure 1 *Blank Aggression Choice Chain*

Source: Life Minus Violence – Enhanced (LMV-E)

Table 1 *Superordinate themes and subthemes*

Superordinate Theme	**Subtheme**
1. Rules for Aggressive Behaviour	1.1 Maintaining Masculinity 1.2. Sparing the Vulnerable 1.3. Distrust Authority
2. Use Violence to Obtain Revenge	-
3. Processing Emotions with Violence	3.1 Relieving Negative Emotions Through Violence 3.2. Attaining Positive Emotions Through Violence
4. Surviving in a Threatening World	4.1 Treat Authority Figures as Hostile 4.2. Always be Vigilant 4.3. Distrust Others 4.4. Always be Prepared for Aggression
5. Do Not Become a Victim	-
6. Employing Violence to Maintains Status	-
7. Prosocial Beliefs	7.1 Consider the Consequences 7.2. Do not Carry Weapons 7.3. Maintain Self-control 7.4. Attain Positive Emotions Through Desistance from Aggression