

Blocking or Bridging? Restorative Responses to Online and Offline Harm

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Abstract

Victim-Offender Mediation (VOM) is increasingly applied to deal with the aftermath of a crime. At the same time, prevalence of cybercrime is on the rise, leading to a changing victimization landscape. Despite these two developments, the literature on victim's willingness to participate in VOM lacks depth, in that research into cybercrime victims' willingness to participate in VOM is scarce. For this study, it was hypothesized that victims of a cyber-threat would be less willing to participate in VOM than victims of an offline threat. It was further proposed that this relationship was mediated by fear towards the offender, perceived seriousness, and/or self-blame. Participants were asked to imagine themselves as victims of either a cyber-threat or an offline-threat, before measuring the proposed mediator variables as well as willingness to participate in VOM. Although willingness to participate in VOM did not significantly differ between the two conditions, it was relatively high overall in our sample. The proposed mediation pathways were not supported by the data. Qualitative data revealed nuanced motivations to participate or not participate between the cyber- and offline conditions. Limitations, practical implications and future research directions are considered.

Introduction

Restorative Justice (RJ) is a philosophy on how to deal with the aftermath of a crime that has become increasingly prominent over the last several decades (Van Ness & Strong, 1997). RJ is often defined as a ‘process to involve, to the extent possible, those who have a stake in a specific offence and to collectively identify and address harms, needs, and obligations, in order to heal and put things as right as possible’ (Zehr, 2002, p.37). One prime goal of RJ is to encourage victims and offenders of both minor and more serious offences to participate in the conflict solving process (Gromet & Darley, 2006). Furthermore, RJ practices can give victims, offenders, and communities the opportunity to repair some of the (im)material damage that the crime has caused (Joudo-Larsen, 2014). This process is usually facilitated by a neutral, third-party, who guide the different parties toward reconciliation (Adi, 2021).

RJ differs from a retributive approach to justice. In retributive justice, after an offender has committed a crime, it is the responsibility of the state to cast judgement and inflict some form of retribution or punishment on the offender. The responsibility to punish offenders lies with the state in order to prevent citizens from taking matters into their own hands and resorting to vigilantism (Kronenberg & Wilde, 2024). Retributive justice is often seen as a more traditional approach to dealing with crime, which puts the focus on the crime committed, and on assigning blame and punishing the offender. Inclusion of the victim in the criminal proceedings is mostly limited to providing evidence and aiding in the conviction of the offender (Wenzel et al., 2007).

This approach contrasts with RJ where, ideally, the victim is more prominently involved in the process. Instead of casting judgement on the offender, the RJ processes are focussed on repairing the harm that the offender has caused the victim, and sometimes the wider community as well (Daly, 2017). Additionally, research increasingly recognizes the

potential that restorative practices have for better meeting the needs of both the victim and the offender, when compared to a retributive approach (Kuo et al., 2010).

Over the past decades, RJ practices have become integrated in judicial systems all over the world (Hansen & Umbreit, 2018). One of the most common forms of RJ is Victim-Offender Mediation (VOM). In VOM the victim and the offender voluntarily engage in a constructive dialogue in the presence of a trained mediator (Umbreit et al., 2004). This dialogue can take several forms, ranging from direct, face-to-face contact between the victim and the offender, video-conference calling and more indirect forms which include letter exchanges, shuttle mediation and video messages (Bonensteffen et al., 2022; Choi & Severson, 2009). VOM is usually, but not always concluded with a written agreement between victim and offender (Umbreit et al., 2004).

With the growing implementation of RJ practices worldwide, the potential benefits of RJ and more specifically VOM for both victims and offenders are increasingly being recognized. Despite the promising benefits, statistics indicate that when it comes to victims specifically, participation in VOM is often limited. Meanwhile, alongside the growing prominence of RJ, another trend has been developing over the past decades, which is the increase in cybercrime and thereby cybercrime victimization (Gangwar & Narang, 2022). Despite this, research into how cybercrime victimization relates to VOM participation appears to still be in its infancy. In order to ensure RJ remains relevant in our digital age, it is imperative to investigate whether, and how cybercrime victims relate differently to RJ practices such as VOM. This study aims to investigate potential differences in victims' willingness to participate in VOM between specifically a cyber-threat and its offline equivalent.

VOM from the Victims' perspective

From the victims' perspective several motivations for wanting to participate in VOM have been identified. These include with regards to the offender, wanting to communicate to the offender the impact of the crime (Umbreit, 2000, as cited in Bolivar, 2013), wanting the offender to take responsibility for the crime (Morris et al., 1993), doing something positive for the offender (Aertsen & Peters, 1998; Umbreit, 2000, as cited in Bolivar, 2013), and preventing further offences (Shapland et al., 2006). Furthermore, with regards to themselves, victims are motivated to participate in VOM because they have a desire to get more information about the case (Shapland et al., 2006; Strang, 2003), to understand better 'why' they were targeted, to achieve a degree of restoration (such as an apology), and desiring restitution and reparation (Bolívar, 2013).

Participation in VOM does often lead to positive outcomes for victims. It was for example found that victims who participated in VOM experienced a reduced fear of being victimized in the future (Umbreit et al., 2000). Furthermore, Sherman et al., (2005) found that victims who participated in VOM were less resentful towards the offender than victims who did not participate. Additionally, participation in VOM led to victims feeling both less angry and fearful towards the offender (Strang et al., 2006). Research also indicates that VOM can cause victims to change their attitude towards the offender which may aid them in emotionally processing the offence and their victimization (Kirkwood, 2010).

Despite the well-documented and overall positive potential outcomes of VOM participation for victims, the literature also indicates potentially adverse outcomes, as well as reasons for victims to not participate in VOM. Reasons not to participate include a lack of value attributed to attending a mediation-session ('not worth the trouble') (Hill, 2002; Morris et al., 1993) or worrying they might not be able to cope with attending the meeting (Wyrick & Costanzo, 1999). Furthermore, victims also report feeling too afraid or too angry at the

offender to meet with them. There are also reports of victims rejecting the idea of constructing a ‘relationship’ with the offender through meeting them (Bolívar, 2013; Morris et al., 1993; Umbreit et al., 2004).

Potentially negative outcomes of VOM for victims are also documented. These include victims feeling pressured to participate in VOM as opposed to it being fully voluntary (Bazemore & Schiff, 2013), and feeling very fearful with regards to having to meet the offender (Daly, 2002). Furthermore, some victims report a lack of information on the procedure and on what to expect beforehand (Choi et al., 2012; Wemmers, 2002). Additionally, some victims also report ‘re-victimization’ which manifests itself in increased feelings of fear, depression, and anger after the VOM-session (Bazemore & Schiff, 2013; Wemmers, 2002). It is clear that despite the predominantly positive outcomes of VOM, there are also potentially negative outcomes of the practice which need to be considered.

As discussed, VOM can offer several, well-documented benefits for victims. Despite this, victims do not always wish to participate for reasons also described. Although statistics vary, Umbreit et al. (2004) found that somewhere in between 40% to 60% of victims are willing to participate in VOM. This 40 – 60% range was reaffirmed in a more recent publication, indicating that participation rates have remained largely consistent (Hansen & Umbreit, 2018). This means that large portions of crime victims do not wish to partake in VOM when offered for reasons previously discussed.

VOM and Violent Crimes

When analysing the literature on RJ and VOM, we can observe an on-going discussion on the suitability of VOM for victims of violent crimes. Authors have for example argued that VOM is better suited for victims of property crimes than for victims of violent crimes. This is because property crime tends to have less of an impact on the victim than violent crime, which can make the prospect of participating in VOM less daunting (Bolívar, 2013).

Conversely, other authors support the notion that VOM is suitable for victims of violent crimes since they would feel a stronger need for restoration (Rugge & Cormier, 2013).

Furthermore, Strang (2003) argues that VOM for victims of violent crime can be beneficial, but at the same time carries an increased risk for re-victimization. It is argued that this is because the strong impact of the violent crime can potentially trigger stronger feelings of anxiety and anger in a VOM-setting. Additionally, it has been observed that RJ practices such as VOM were considered significantly more useful by victims of more serious offences, such as violent crime (Shapland et al., 2007). Even though VOM may carry more risk for victims of violent crimes, it also has the potential to be very useful and positive for these victims.

One offence that is generally categorized as a violent crime, and that can have a potentially severe impact on the victim is a (*death*) *threat*. A threat can be defined as a ‘statement of an intention to inflict pain, injury, damage, or other hostile action on someone in retribution for something done or not done’ (Oxford Learners Dictionary: threat, n.d.). According to the Dutch Bureau of Statistics (CBS), 4,6% of people in the Netherlands became the victim of threats of physical violence in the offline world in 2023, and 0,9% of people became the victim of threats of physical violence within a cyber-context, in that same year (Centraal Bureau voor de Statistiek, 2024). Although these numbers may seem limited relative to other crimes, when put into absolute numbers, this translates to a total of around 850.000 being threatened in the Netherlands in 2023. Furthermore, the potential impact of threats on these victims can be substantial.

Research into the effects of threats made on public figures indicates that being threatened can have a severe impact on the victim. Research shows that being threatened can cause victims to experience a stronger generalized sense of anxiety and stress (James et al., 2016; Van Hoof et al., 2020), have trouble sleeping at night (Adams et al., 2009), and

increased vigilance (Betsos & Marchesi, 2014; Van Hoof et al., 2020). Although research into the impact of threats on victims largely focuses on individuals with a higher public profile, such as politicians, lawyers, and journalists, it may still offer insights into the potentially strong impact threats can have on all victims of this offence. It is for precisely for these potentially strong consequences of receiving threats that VOM may have a positive effect on the victim.

Cyber-Threats vs. Offline Threats

Alongside the previously discussed rise of RJ and VOM over the past decades, another trend when it comes to crime has been developing. Hand in hand with the increasing usage of, and reliance on technology is the prevalence of cybercrime (Gangwar & Narang, 2022). Over the years, western countries have seen a steady decrease in traditional (or offline) crime but at the same time, cybercrimes are increasing at a faster rate than traditional crimes are decreasing (Caneppele & Aebi, 2017).

A threat is an offence that is not just limited to the offline world, but that can also take place in cyberspace. In 2023, 0,9% of people in the Netherlands became the victim of a cyber-threat (Centraal Bureau voor de Statistiek, 2024). A threat made online is generally categorized as cyber-violence. Furthermore, an online threat usually carries an offline component, especially when it concerns a threat of physical violence. This is because a threat made in cyberspace can be acted out in the offline world (Leukfeldt et al., 2018).

Although research has up to now been limited, it may be argued that receiving a cyber-threat can have a stronger impact on its victim than receiving an offline threat. According to statistics from the Dutch Central Bureau of Statistics (CBS) (2022), victims of interpersonal-cybercrimes which include online threats, suffer from more emotional and psychological problems as a consequence of their victimization, when compared to victims of the traditional equivalent of these offences (Bluhm et al., 2022). Additionally, Leukfeldt et al. (2018) found

that victims of cyber-threats developed anxiety and (severe) stress symptoms. Although no direct comparison was made between the consequences of an online threat and its offline equivalent, it appears that these issues reported by victims were exacerbated due to the fact that the offender can seemingly always contact the victim online.

Leukfeldt et al. (2018) indicated there are additional reasons for victims of online threats to develop strong feelings of fear. Because the offender can seemingly always contact the victim, this can give the victim the feeling that they are never safe from their offender, and have no place to hide. Due to the online aspect of the offence and the fact that the online and offline world are becoming increasingly intertwined, victims feel that they can never create distance from the offender, making the impact of the crime even greater. Further increasing the impact on the victim is the apparent ease with which the offender can reach them, as well as get away with their crime. Victims report that this gives them a feeling of helplessness (Leukfeldt et al., 2018). These findings provide us with insights into the impact threats made in cyberspace can have on victims. Although a direct comparison between online and offline threats is lacking, these findings point in the direction that cyber-threats may potentially have a stronger emotional impact on victims than its offline equivalent.

Potential Factors Influencing Willingness to Participate in VOM

Perceived Seriousness of the Crime

One factor influencing a victim's decision to take part in VOM is the degree to which a crime is perceived to be serious (Hansen & Umbreit, 2018). According to Warr (1989), crime seriousness can be divided into two dimensions which are *harmfulness* and *wrongfulness* of the crime. Harmfulness is the perceived damage or harm the crime has caused the victim. This perceived damage is not limited to material damage, but can also include immaterial damage and emotional impact. Wrongfulness is the degree to which the

offence is perceived as morally reprehensible, and the extent to which the offender bears moral responsibility for the offence (O'connell & Whelan, 1996; Warr, 1989).

Research indicates that the seriousness of a crime can influence the degree to which both victims and offenders are willing to participate in VOM. According to Hansen and Umbreit (2018) the parties involved do not always have the same level of concern when it comes to the crime committed, which can mean that participating in VOM is not always perceived as worth the effort.

Conversely, as discussed in the introduction, the offence may have left a deep impact on the victim, who perceives the offence as very serious and harmful. This may then make them feel that they are unable to cope with meeting the offender, or are unwilling to participate because the offence has made them feel too afraid or angered them too much (Bolívar, 2013). The offence may in some cases be perceived as so serious that the victim may worry about their own physical safety, and hence does not wish to meet with the offender in a VOM setting (Orth, 2003).

Another factor that seems to influence and at the same time complicate the relationship between perceived seriousness and willingness to participate in VOM for victims is the amount of time passed since the offence. Research has for example shown that for interpersonal offences, the chance that VOM takes place increases with time, while for property offences the likelihood of VOM actually decreases over time (Wyrick & Costanzo, 1999). Further research by Zebel et al. (2017) seems to confirm the findings by Wyrick and Costanzo (1999). They found that the willingness of a victim to participate in VOM increased over time when the offence was perceived to be more harmful, and that willingness decreased over time when the offence was seen as less harmful. The dimension wrongfulness did not seem to influence this relationship (Zebel et al., 2017).

Given the previously discussed literature, it can be argued that receiving a threat in cyberspace is perceived as more serious, both in terms of harmfulness and wrongfulness, by the victim than receiving a threat in the offline world. Given the research into crime seriousness and willingness to participate in VOM, this may lead to the victim being less willing to participate in VOM shortly after receiving a cyber-threat, when compared to a similar threat made offline.

Fear towards the Offender

As a result of their victimization, victims often experience fear, which can range from mild anxiety to severe psychological issues such as Post Traumatic Stress Disorder (Lens et al., 2010), and this applies to both cyber- and traditional crimes (Curtis & Oxburgh, 2022; Jansen & Leukfeldt, 2017). Strong fear or anxiety toward the offender is a common reason victims avoid participating in VOM (Bolívar, 2013), particularly in cases involving threats of physical violence, which are known to cause severe emotional distress (Van Hoof et al., 2020).

Similarly to perceived seriousness of the crime, we can argue that given the specific characteristics of a cyber-threat when compared to its offline equivalent, fear towards the offender may be stronger in victims of cyber-threats. This higher level of fear after being threatened in cyberspace can then decrease the victims' willingness to participate in VOM when compared to in the offline world.

Self-Blame

Another way in which crime victims respond to victimisation is by blaming themselves. Self-blame is usually a coping mechanism that helps victims control their emotional responses towards the offence (Green et al., 2010). According to Curtis and Oxburgh (2022) self-blame occurs in victims of both offline- and cybercrime, however there are possible differences in the degree to which victims blame themselves between offline- and

cybercrime. Research indicates that it is common for victims of cybercrimes to receive blame for their victimization (Conway & Hadlington, 2018). Additionally, there appears to be a significant degree of stigmatization surrounding cybercrime victimization (Leukfeldt et al., 2018). This stigma as well as the increased tendency for victim-blaming to occur towards victims of cybercrime can potentially lead to victims of cybercrime experiencing increased self-blame, when compared to victims of an offline crime.

Given that victims who blame themselves do so as a means of coping with their victimization, this can potentially lead to them showing less willingness to participate in VOM, when compared to victims who do not blame themselves as much. We may therefore assume that a higher level of self-blame is related to a decreased willingness to participate in VOM from the perspective of the victim. Furthermore, with the potentially higher levels of self-blame in cybercrime victims in general, it is possible that this decreases willingness to participate among victims of a cyber-threat, when compared to victims of an offline threat.

Neuroticism

While much of the previously discussed literature focuses on more crime-specific variables, personality differences in victims may also account for their willingness to participate in VOM. Investigating personality factors can give valuable insights into how a person's disposition might shape their willingness to participate in VOM. One such personality factors which may be particularly relevant is character trait *neuroticism*.

Neuroticism is one of the dimensions identified within the five factor-model of personality and conveys the degree to which a person is sensitive to negative emotions (McCrae & John, 1992). People who score higher on trait neuroticism generally tend to experience higher levels of anxiety, sadness, irritability, and exhibit a tendency to respond negatively to stressors (Clark & Watson, 2008). Additionally, individuals high in neuroticism tend to have an overall perception of the world as dangerous and threatening (Barlow et al.,

2013). Perhaps unsurprisingly, neuroticism has proven to be a reliable predictor for certain forms of psychopathology, including depression and anxiety disorders (Weinstock & Whisman, 2006).

A person's level of neuroticism can potentially influence their willingness to participate in VOM. As mentioned before, one major reason victims give for not wanting to participate in VOM is because they experience high levels of anxiety toward the offender (Wyrick & Costanzo, 1999). Given that people high in neuroticism tend to experience elevated levels of anxiety, this can potentially lead them to feel especially fearful with regards to their offender, and thus be too afraid to participate in VOM. Furthermore, because people high in neuroticism tend to be more sensitive to negative emotion in general, this can potentially mean that they are more likely to blame themselves for their victimization, as well as perceive the crime committed as more serious.

Present Research

As discussed, a vast number of crime victims do not wish to participate in VOM after being victimized, despite the possible positive outcomes VOM may provide them with. Furthermore, the increase in cybercrime victimization means that there are an ever increasing number of cybercrime victims and these may potentially benefit from VOM. Although initial strides have been made into researching cybercrime victims' willingness to participate in VOM, mainly in the form of bachelor- and master theses, this research has been limited and the findings largely inconclusive (Fricke, 2024). Additionally, to the knowledge of the author, up to now, no study has been conducted which directly compares willingness to participate in VOM between victims of a cybercrime and the traditional equivalent of this crime.

Given the aforementioned differences in characteristics between cyber-threats and offline threats, and the possible differences in impact on victims, we may assume that this can cause a difference in willingness to participate in VOM. Identifying potential differences

between victims of a cyber-threat and an offline threat in their willingness to participate in VOM, may help us to better cater to the needs of victims when it comes to VOM, and potentially optimize participation rates for victims of cyber and online threats. Hereby, more crime victims can benefit from the potential positive outcomes that VOM can have on their wellbeing after victimization.

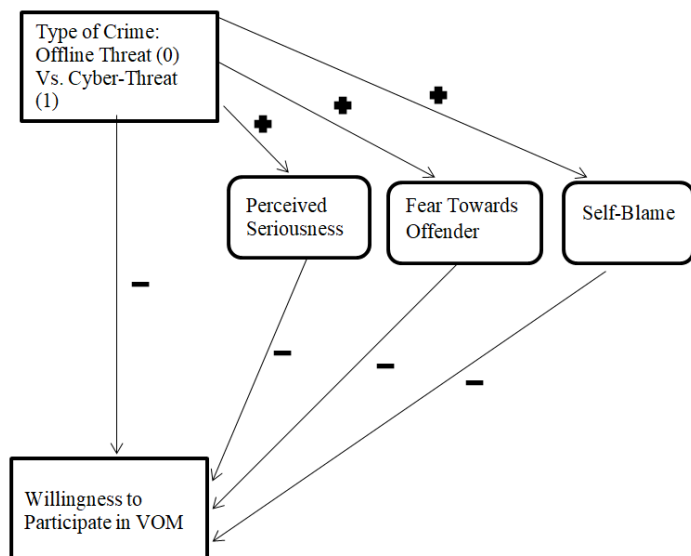
In addition to researching willingness to participate in VOM, this study aims to investigate whether *perceived seriousness of the crime*, *fear towards the offender*, and *level of self-blame* mediate the proposed effect of cyber- versus offline threat on willingness to participate in VOM. Finally, this study will measure the effect of personality trait neuroticism on the willingness to participate in VOM, and the potentially mediating effect of the aforementioned three variables on this relationship. This brings us to the following two hypotheses, conceptually depicted in figures 1 and 2:

H1: Willingness to participate in VOM is lower among victims of a cyber-threat when compared to victims of an offline threat. We expect that higher levels of 'perceived seriousness of the crime', 'fear towards the offender', and 'self-blame' mediate this relationship.

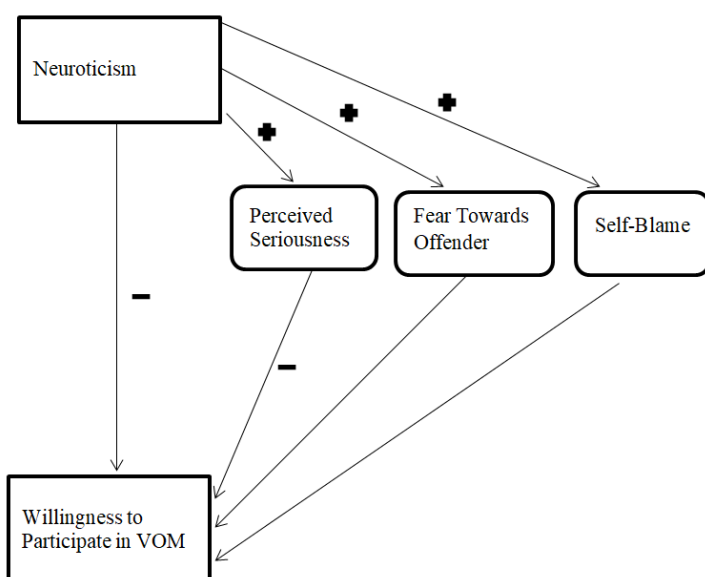
H2: Neuroticism is negatively correlated with a victim's willingness to participate in VOM. We expect that higher levels of 'perceived seriousness of the crime', 'fear towards the offender', and 'self-blame' mediate this relationship.

Figure 1

Conceptual Model of Relationship between Type of Crime and Willingness to Participate in VOM (Hypothesis 1)

**Figure 2**

Conceptual Model of Relationship between Neuroticism and Willingness to Participate in VOM (Hypothesis 2)



Method

This study employed a between-groups experimental design, whereby participants were randomly assigned to either the cyber-threat condition or the offline-threat condition. Depending on their assigned condition, participants were asked to imagine themselves as becoming the victim of a death-threat through either social media, or in the real world. The study aimed to study the relationship between the independent variable *type of crime (cyber or offline)* and the dependent variable *willingness to participate in VOM*. Additionally, this study separately aimed to study the relationship between the independent variable *Level of Neuroticism* and the dependent variable *Willingness to Participate in VOM*. Furthermore, this study aimed to study the potential impact of the mediator variables of *Perceived Seriousness of the Crime*, *Fear towards the Offender*, and *Self-Blame* on the aforementioned relationships.

Participants

This study comprised a convenience sample of people over the age of 18, who consented to participate and have their data used in the study. A total of 154 individuals participated in this study by filling out the survey. Thirty-three participants were eventually excluded from the research. Major reasons for removing participants were answering the control question incorrectly ($N = 14$) as well as spending less than 20 seconds reading and envisioning the scenario ($N = 14$). Other, minor reasons for exclusion were participants not providing consent for their data to be used ($N = 3$) and participants' failure to complete the survey ($N = 2$). For the analysis, a total of 121 participants were included for this study.

Of these 121 participants, 58 were randomly assigned to the offline-threat condition, whilst 63 were randomly assigned to the cyber-threat condition. Age ranged between 18 and 65 ($M = 24.8$, $SD = 8.18$), with the sample consisting of 62, 8% ($N = 76$) females, 34, 7% ($N = 42$) males, and 2, 5% ($N = 3$) identifying as 'other'. Nationality wise, the sample consisted for 44, 6% ($N = 54$) of participants from the Netherlands. Furthermore, 16, 5% ($N = 20$) of the

participants came from Germany, 8, 2% ($N = 10$) from the United Kingdom and 8, 2% ($N = 10$) from the United States. The final 30, 5% ($N = 37$) of the participants came from a wide variety of countries in Europe, Latin-America and Asia.

When looking at the personal history of the participants with regards to threats of violence we see that almost a quarter ($N = 30$) indicated that they had been threatened with severe physical violence at some point in their lives, whilst close to 7% of participants ($N = 8$) indicated they had themselves threatened another person with severe physical violence at some point in their lives. Additionally, 84 participants or close to 70% answered that they personally knew someone who had ever been threatened with severe physical violence. Furthermore, 45 participants or 37% answered that they personally knew someone who had ever threatened another person with severe physical violence. Finally, 32% of the participants ($N = 39$) indicated that they were already familiar with the concept of VOM before participating in this research.

Independent, Mediator, and Dependent Variables

Independent Variables

The first independent variable, *level of neuroticism*, was measured using 8 items taken from Thompson and Smith (2002) who created a shortened version of the neuroticism-subscale of the NEO-PI-R (Costa & McCrae, 1992). As with all the scales measuring our variables participants had to indicate to what extent they agreed with statements on a 7-Point Likert-Scale (1 = Strongly Disagree; 7 = Strongly Agree). An example statement is: "I get nervous easily." An exploratory factor analysis using varimax rotation was performed using one factor. Factor 1 had an eigenvalue of 3.89 explaining 49% of the variance. All scale-items displayed high factor loadings (FL's $> .30$) leading to no items being reconsidered. The scale had a Cronbach's α of .85, indicating good internal consistency.

The second independent variable was *type of crime*, which was either an offline threat (coded as 0) or a cyber-threat (coded as 1). Depending on which condition participants were assigned to, they had to envision themselves either becoming victims of a threat in cyberspace or a threat in the real world. Participants were randomly assigned to one of these two categories and therefore had no influence on this variable themselves.

The participants in this study were randomly assigned to either a cyber-threat condition (see Appendix B) or an offline-threat condition (see Appendix A). In both conditions, participants were asked to read a scenario in which they had to envision themselves becoming the victim of an explicit death threat. Both scenarios were roughly similar in length. The wording used to deliver the threat was also similar in both scenarios. Furthermore, the scenarios were written in the ‘You-form’ in order to get participants as involved as possible. Finally, in both scenarios it was implied that the threat was made because of the political preference of the victim.

In both scenarios, participants started off by envisioning that they were on the train home from a day of handing out flyers for their preferred political party. In the cybercrime-scenario, the participants and their friends from the party all decide to take a picture together and upload this to social media. As soon as they leave the train station they receive a private message through social media, in which an anonymous account threatens to find and kill them. In the offline scenario however, the participants envisioned leaving the train station whilst still wearing the jacket of their political party. A person then came up to them on the street and also threatened to kill them. In both scenarios, the victim arrives home, shaken from the experience, and after some hesitation decides to inform the police.

The second scenario (see Appendix C), in which participants had to envision themselves receiving the news that the person who threatened them had been arrested and that

they had been invited to participate in a VOM-session, was similar for both the cyber-threat and the offline-threat conditions.

At the end of the survey, participants were asked to rate how realistic they considered the scenarios to be on a 7-point Likert-Scale. Ratings ranged from 3 to 7 ($M = 6.15$, $SD = 0.76$). A quick correlation-analysis showed that ratings of realism did not differ significantly between the offline-condition and the cyber-condition. This is a strong indication that participants considered the scenarios they had to read and envision to be particularly realistic, regardless of the condition they were assigned to.

Mediator Variables

The first mediator variable to be measured was *perceived seriousness of a crime*, which was measured using four items taken from the study by Zebel et al. (2017). This variable can be further divided into two separate dimensions. The dimension *perceived harmfulness* is measured by two of these items, while the other two items measure the dimension *perceived wrongfulness*. An example statement is: “This threat has caused me emotional damage.”

An exploratory factor analysis using varimax rotation was performed using two factors. Factor 1 had an eigenvalue of 1.76, explaining almost 44% of the variance. The scale items intended to measure *harmfulness* displayed strong factor loadings (FL's $> .30$) leading to no items being reconsidered. Factor 2, however, had an eigenvalue of 1.01 which indicates that it edges on being a meaningful factor. Further analysis showed however, that the two items intended to measure the dimension *wrongfulness* displayed very poor factor loadings (FL's $< .30$). Furthermore, both items displayed very strong uniqueness values, giving a further strong indication that the items do not measure the intended construct. Finally, a correlation analysis showed that the correlation between the two items was insignificant and very weak.

Based on the aforementioned analyses, it was decided to remove the *perceived wrongfulness* dimension from this research and only include the *perceived harmfulness* dimension in the final analysis. Henceforth this variable will be referred to as *perceived harmfulness* as opposed to *perceived seriousness*. The scale measuring *perceived harmfulness* had a Cronbach's α of 0.74, indicating solid internal consistency¹.

The second mediator variable to be measured was *self-blame*, which was measured using four items taken from a scale intended to measure self-blame for cardio-vascular problems in patients (Harry et al., 2018). For this research the original items were modified in such a manner as to measure self-blame within the context of crime victimization (example: 'How much do you think your past behaviours contributed to you becoming a victim of the crime?').

An exploratory factor analysis using varimax rotation was performed using one factor. Factor 1 had an eigenvalue of 2.42, explaining 61% of the variance. All scale items displayed high factor loadings (FL's > .30) leading to no items being reconsidered. The scale had Cronbach's α of .76, indicating solid internal consistency.

The third mediator variable to be measured was *fear towards the offender*, which was measured using four items taken from a scale developed by Ahorsu et al. (2020) that was originally created to measure fear towards the Covid-19 virus in individuals. The items used were modified as to fit the context of crime victimization (example: 'I am very afraid of the person who threatened me').

An exploratory factor analysis using varimax rotation was performed using one factor. Factor 1 had an eigenvalue of 2.96, explaining 74% of the variance. All scale items displayed

¹ As an additional exploratory step, it was tested whether the two removed items could still act as mediators in the relationship between Type of Crime and Willingness to Participate in VOM. A parallel mediation model was ran and showed that the indirect effects for both items were insignificant, as well as that the total indirect effect was not significant (all p 's > .80). These results further supported the decision to remove the perceived wrongfulness scale from the final analysis.

high factor loadings (FL's > .30) leading to no items being reconsidered. The scale had a Cronbach's α of .84, indicating good internal consistency.

Dependent Variable

The dependent variable to be measured for this research was *willingness to participate in VOM*, which was measured using a total of 6 items taken from studies by Großkopf (2015) and Gröbe (2013). This overall construct consists of two separate dimensions. The first dimension is *willingness for contact* which refers to a victim's willingness for contact with the offender, whilst the second dimension is *willingness for participation*, which refers to the actual participation in VOM. Both dimensions were measured using 3 items. Example statements of both *willingness for contact* and *willingness for participation* are: "I would like the offender to answer questions I have with regards to the offence" and "I would register myself for a Victim-Offender Mediation session", respectively.

An exploratory factor analysis using varimax rotation was performed using one factor. Factor 1 had an eigenvalue of 4.1, explaining 59% of the variance. All scale items displayed high factor loadings (FL's > .30) leading to no scale items being reconsidered. The scale had a Cronbach's α of 0.91 indicating strong internal consistency. These analyses led to this variable being used as one variable in the final analysis, as opposed to it being divided in the two aforementioned dimensions.

Qualitative Component

Finally, respondents were asked to explain in one or two sentences their reasoning for wanting to participate or not wanting to participate in VOM. This final, qualitative component was added to gain some degree of insight into participants' motivations to participate or not participate in VOM.

Procedure

After clicking the link to the survey, participants were first provided with information on the study and an informed consent form. After consenting, participants were first asked to fill out their gender, age, and nationality. After providing these demographic details, participants filled out the questionnaire which measured their *level of neuroticism*.

Next, participants were asked four questions on their personal history with regards to being threatened and threatening other people. After this, participants were randomly assigned to read and vividly imagine either a cybercrime scenario or an offline-crime scenario. Before reading this however, participants were warned that this scenario contained threats of severe physical harm, and that they could abort the study at any time if they found the content of the scenario to be too upsetting.

After reading and immersing themselves into one of the two scenarios, participants were then asked to fill out the items which measured their levels of *perceived harmfulness of the crime, fear towards the offender, and self-blame*. Following this, participants were asked to fill out four more items, with statements regarding the offender, as well as the degree to which they felt that they could fall victim to a threat again. After filling out these items, participants were again asked to read and imagine themselves in a brief scenario in which they are approached to participate in VOM with the offender from the first scenario. Participants were then asked to indicate their willingness to participate in VOM. Furthermore, participants were asked to explain in one or two sentences why they were more or less willing to participate in VOM.

After this, participants were asked several questions with regards to the survey, including how seriously they participated, whether they understood all the contents of the survey, and how realistic they considered the scenarios to be. Finally, participants were taken to a screen that gave them a short debriefing on the study they just participated and were

thanked for their participation (see Appendix D). The entire survey was in English and conducted via the ‘Qualtrics’ online platform.

Data Analysis

RStudio version 2024. 12.0+467 was used to analyse the gathered data. In order to prepare the data, the exclusion criteria were applied (see Participants). Next, descriptive statistics with regards to the demographic variables were calculated, as well as the previous experiences of participants with regards to being threatened and perceived realism of the scenario. Additionally, it was computed what number of participants were already familiar with the concept of VOM. This was done in order to gain some degree of insight into the build-up of the dataset. Furthermore, mean scores and standard deviations were calculated for the measured variables. Finally, Parametric assumptions were tested, with the normality assumption being tested using the Shapiro-Wilk test, whilst Levene’s test was used to assess the homogeneity of variance.

After this, mean scores and standard deviations were calculated for the measured variables. In addition, correlations between all the measured variables were calculated and a correlation matrix was created. In the correlation matrix, a further divide was made between the offline and cyber-conditions.

In order to test the two hypotheses, mediation analyses were conducted through linear regression models. To test H1, a linear model was built with *type of crime* as independent variable, *perceived harmfulness of the crime*, *fear towards the offender*, and *self-blame* as mediator variables and *willingness to participate in VOM* as dependent variable. To test H2, a linear model was built, which was similar to the first linear model, however for H2, *type of crime* was replaced with *neuroticism* as independent variable.

Results

Descriptive Statistics

The mean scores and standard deviations were calculated for all variables measured for this research. In Table 1, the mean scores and standard deviations for all variables are displayed and also divided along the offline-condition and cyber-condition.

Table 1

Mean Scores for Study Variables

	Offline Condition		Cyber Condition		Total	
Variable	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Neuroticism	3.86	0.91	4.01	1.13	3.94	1.03
Perceived Harmfulness	4.61	1.22	4.31	1.55	4.45	1.40
Fear Towards the Offender	4.78	1.15	4.22	1.50	4.49	1.37
Self-Blame	2.45	1.19	2.82	1.23	2.64	1.22
Willingness to Participate in VOM	4.71	1.41	4.63	1.65	4.67	1.53

We can see differences in mean scores between the two conditions on several of the variables. Firstly, there is a relatively large difference between the two groups on the variables *perceived harmfulness* and *fear towards the offender*, with mean scores being higher for the offline condition for both these variables. Furthermore, the mean score for *self-blame* is almost 0.4 points higher in the cyber-condition when compared to the offline-condition. Finally, when looking at the dependent variable *willingness to participate in VOM* there are two noteworthy observations. Firstly, we see an almost negligible difference in means

between the two conditions. Secondly, when considering that this variable was measured on a 7-point Likert-Scale, we see that willingness to participate was overall relatively high for this sample.

Correlations

In order to find potential relationships between the different variables a correlation matrix was computed (see Table 2).

Table 2

Correlations for Variables

Variable	1.	2.	3.	4.	5.
Offline \ Cyber					
1. Neuroticism	-	.31**	.33**	-.001	.09
2. Perceived Harmfulness	.39**	-	.56***	.09	.06
3. Fear Towards the Offender	.55***	.65***	-	-.11	.25*
4. Self-Blame	.13	.05	.08	-	.07
5. Willingness to Participate in VOM	.005	.21	.12	.09	-

* $p < .05$.

$**p < .01$.

$***p < .001$.

Please note that the correlations between the variables are further divided between the offline condition and the cyber condition. Correlations for the offline condition appear above the diagonal, whilst correlations for the cyber condition appear below the diagonal.

When looking at the matrix, we can observe several correlations between the variables, as well as similarities between the two conditions. Firstly, we can observe in both conditions a highly significant, positive correlation of medium strength between *neuroticism* and *perceived harmfulness*. This indicates that participants who are more neurotic tend to perceive the crime as more harmful. Secondly, we can observe in both conditions a significant positive correlation between *neuroticism* and *fear towards the offender*, which indicates that participants who are more neurotic tend to be more fearful of the offender. However, the degree of significance as well as the strength of the correlation differs between the two conditions, with the offline condition showing a highly significant correlation of medium strength, whilst the cyber condition shows a very highly significant correlation that is large.

Thirdly, we can observe in both conditions a large, robust correlation between the variables *fear towards the offender* and *perceived harmfulness*. This is a strong indication that participants who experience more fear with regards to the offender also tend to view the crime as more harmful and vice versa, regardless of which condition they belonged to.

Finally, we observe a significant, small correlation between *fear towards the offender* and *willingness to participate in VOM* which is positive in nature. Interestingly, however, this correlation is robust only in the offline condition. This indicates that participants who are more fearful of the offender also tend to be more willing to participate in a VOM-session, however this is only the case if they fall victim to a death threat in the real world, as opposed to a threat in cyberspace.

Hypothesis Testing

Type of Crime and Willingness to Participate in VOM

In order to test Hypothesis 1, a mediation analysis was conducted taking into account *type of crime* (offline: 0, cyber: 1) as independent variable, *willingness to participate in VOM* as dependent variable, and *fear towards the offender*, *perceived harmfulness*, and *self-blame* as mediator variables.

Firstly, the direct effect of *type of crime* on *willingness to participate in VOM* was found to be not significant ($B = -0.003$, $t(119) = -0.01$, $p = .992$), indicating that there is no direct relationship between the independent and dependent variable. This finding was not in line with predictions formulated in the hypothesis.

Further analysis showed that *type of crime* significantly predicted *fear towards the offender* ($B = -0.562$, $t(119) = -2.31$, $p = .021$). Although significant, the results indicate that as opposed to our expectations *fear towards the offender* is lower in the cyber-crime condition when compared to the offline-crime condition. Furthermore, *perceived harmfulness* ($B = -0.303$, $t(119) = -1.20$, $p = .229$) and *self-blame* ($B = .373$, $t(119) = 1.72$, $p = .085$) were not significantly predicted by *type of crime*, with the results indicating only moderate or fully absent relationships. These findings are counter to our expectations.

The results further show that, in opposition to our expectations, none of the mediator variables significantly predicted *willingness to participate in VOM*. More precisely, *perceived harmfulness* ($B = .070$, $t(119) = .53$, $p = .594$), *fear towards the offender* ($B = .149$, $t(119) = 1.13$, $p = .245$), and *self-blame* ($B = .096$, $t(119) = .81$, $p = .992$) did not show a significant relationship with the dependent variable. Furthermore, the indirect effects were insignificant, which indicates that the effect of *type of crime* on *willingness to participate in VOM* is not transmitted by any of the mediator variables.

Although the results indicate that *type of crime* significantly predicts *fear towards the offender*, no further support for a mediation effect was found, since the indirect effect was found to be insignificant. Based on these results, there appears to be no evidence to support Hypothesis 1, which is therefore rejected.

Neuroticism and Willingness to Participate in VOM

In order to test Hypothesis 2, a mediation analysis was conducted taking into account *neuroticism* as independent variable, *willingness to participate in VOM* as dependent variable, and *fear towards the offender*, *perceived harmfulness*, and *self-blame* as mediator variables.

As opposed to our expectations, the direct effect of *neuroticism* on *willingness to participate in VOM* was found to be not significant ($B = -0.10$, $t(119) = -0.65$, $p = .513$), suggesting that a person's level of neuroticism does not directly predict their willingness to participate in a VOM-session.

Analysis showed that, in line with our expectations, *neuroticism* significantly predicted both *fear towards the offender* ($B = .59$, $t(119) = 5.70$, $p < .001$) and *perceived harmfulness* ($B = .47$, $t(119) = 4.06$, $p < .001$). These results strongly suggest that people who score higher in neuroticism tend to experience more fear with regards to an offender, as well as perceive a crime as more harmful. Then again, analysis showed no significant relationship between *neuroticism* and *self-blame* ($B = .10$, $t(119) = .97$, $p = .333$), which went against our expectations. Similarly to previously discussed results, none of the mediator variables significantly predicted *willingness to participate in VOM* (*Harmfulness*: $B = .08$, $t(119) = .58$, $p = .56$; *Fear*: $B = 0.18$, $t(119) = 1.38$, $p = .16$; *Blame*: $B = .10$, $t(119) = .87$, $p = .39$), which also went against our expectations.

Although the results indicate that, in line with the formulated hypothesis, *neuroticism* significantly predicts *perceived harmfulness* and *fear towards the offender*, no further support for a mediation effect was found, because the indirect effect was found to be not statistically

significant. Based on these results, there appears to be no evidence to support Hypothesis 2, which is therefore rejected.

Exploratory Results

Moderation Analysis – Type of Crime

In the correlation matrix (see Table 2) we observed a small, positive correlation between *fear towards the offender* and *willingness to participate in VOM* in the offline condition. Interestingly, this correlation did not occur in the cyber-condition. It was therefore decided to further explore these findings by conducting a moderation analysis. This moderation analysis was conducted to assess whether type of crime (offline: 0, cyber: 1) moderated the relationship between the independent variables *fear towards the offender*, *perceived harmfulness*, and *self-blame*, and the dependent variable *willingness to participate in VOM*. The overall model included the main effects and the interaction terms.

The main effect of *fear towards the offender* on *willingness to participate in VOM* was found to be statistically significant ($B = 0.44$, $t(114) = 2.01$, $p = .046$), which indicates that higher feelings of fear towards the offender are associated with a higher willingness to participate in a VOM-session. Conversely, *perceived harmfulness* ($B = -0.17$, $t(114) = -0.85$, $p = .400$) and *self-blame* ($B = 0.14$, $t(114) = 0.82$, $p = .416$) were found to not significantly predict *willingness to participate in VOM*.

With regards to the interaction effects, we see that the interaction effect of *type of crime* on the relationship between *fear towards the offender* and *willingness to participate in VOM* approaches significance ($B = -0.47$, $t(114) = -1.72$, $p = .088$). These findings point in the direction of the effect of fear on willingness to be higher in the offline-condition when compared to the cyber-condition. Conversely, the interaction effects on the relations of *perceived harmfulness* ($B = 0.41$, $t(114) = 1.56$, $p = .122$) and *self-blame* ($B = -0.03$, $t(114) = -0.14$, $p = .891$) on the dependent variable were both found to be insignificant.

Qualitative Results

The total number of 105 replies was analysed using a deductive approach, whereby codes were based on the work of Bolívar (2013), who identified several reasons for victims to either participate or not participate in VOM. Because some participants provided multiple reasons in their answer the total number of codes came to 137. In Table 3 we can see an overview of these different reasons, as well as their prevalence. Results are divided for the two separate conditions.

Table 3

Prevalence of Reasons Given

	Offline-Condition	Cyber-Condition
Willing to Participate	63, 5%	62, 1%
<i>Communicate Impact</i>	12,7%	9, 5 %
<i>Positive for Offender</i>		2, 7%
<i>Preventing Further Offences</i>	4, 8%	9, 5%
<i>Desire Information</i>		1, 4%
<i>Motive of the Offender</i>	31, 7%	24, 3%
<i>Restoration/Reparation</i>	14, 3%	14, 9%
Unwilling to Participate	36, 5%	37, 9%
<i>Lack of Value</i>	15, 9%	21,6 %
<i>Inability to Cope</i>		2, 7%
<i>Afraid of Offender</i>	7, 9%	6, 8%
<i>Rejecting Relationship</i>	12, 7%	8, 1%

Reasons to Participate in VOM

The most common motivation participants gave for wanting to participate in VOM was a desire to understand the motive of the offender. This motivation was especially prevalent among participants in the offline-condition (31, 7%) when compared to those in the cyber-condition (24, 3%). Communicating the impact of the offence was also mentioned often, with some participants additionally pointing out that doing so could also help prevent the offender from repeating their crime. Furthermore, it was found that these two motivations often overlapped, as victims expressed both a need to convey to the offender the harm they caused, and at the same time a desire to contribute to the offender's rehabilitation. Additionally, some participants sought out emotional restoration and reparation in the form of an apology, which was also roughly similar in prevalence between the two conditions. In combination with the expressed desire for restoration and reparation, a minority of respondents also expressed they wanted to inflict some measure of retaliation on the offender by demonstrating strength and a degree of moral superiority.

Reasons Not to Participate in VOM

The most cited reason for not wanting to participate was a lack of perceived value in the process, particularly among those in the cyber-condition (21, 6% vs. 15, 9% offline). These respondents generally considered the offence not important enough, doubted the effectiveness or benefits of VOM, or simply had no interest in what the offender had to say. Emotional barriers also seemed to play an important role, with participants indicating that feelings of fear and anger made them unwilling to participate in dialogue. Finally, several participants rejected the idea of any form of interaction with the offender. This was not out of indifference, but due to a fundamental unwillingness to relate to or acknowledge the offender. We found that this reason was more common in the offline-condition (12, 7%) than in the cyber-condition (8, 1%).

Discussion

The aim of this study was to directly compare the willingness of victims to participate in VOM between an offline-crime and a comparable cyber-crime. More specifically, a comparison in willingness was made between (imagined) victims of a cyber-threat and (imagined) victims of a threat made in an offline-setting. Furthermore, the potentially mediating roles of *fear towards the offender*, *perceived harmfulness*, and *self-blame* were also considered. To the knowledge of the author, this was the first study to directly compare willingness to participate in VOM between an offline-crime and a cyber-crime. Given this research gap, the present study makes a unique addition to the literature on Restorative Justice. In addition to type of crime, the effect of character trait *neuroticism* on *willingness to participate in VOM* was also included in this research as part of a separate hypothesis and model.

Hypotheses Testing

A first, major finding is that *willingness to participate in VOM* did not significantly differ between the participants that read the cyber-scenario and those who read the offline-scenario. This finding went against our prediction that willingness would be lower for victims of a cyber-threat, than for victims of an offline-threat. Despite this, when looking at the mean scores for *willingness to participate in VOM*, we can observe that willingness to participate in our sample is relatively high for both conditions. This is an indication that, regardless of type of crime, victims of a death-threat would be open to participate in a VOM-session, as well as view it as a viable way to deal with the aftermath of their victimization.

Hypothesis1 proposed that (imagined) victims of a cyber-threat would be less willing to participate in a VOM-session when compared to (imagined) victims of an offline-threat. Additionally it was hypothesised that this relationship was mediated by the aforementioned three mediator variables. In opposition to our expectations, no evidence was found for the

formulated hypothesis and analysis of the results found no significant difference in willingness to participate between victims of a cyber-threat and an offline-threat.

Hypothesis 2 proposed that (imagined) victims of a death-threat higher in character trait *neuroticism* would be less willing to participate in a VOM-session, with this relationship being mediated by *perceived harmfulness*, *fear towards the offender*, and *self-blame*. In opposition to our expectations, no evidence was found for the formulated hypothesis and analysis of the results found no significant effect of *neuroticism* on *willingness to participate in VOM*. Our results corresponded with those found by Brox (2020) who similarly found no evidence for an effect of character trait neuroticism on willingness to participate.

Key Insights & Interpretation

When interpreting the results with regards to Hypothesis 1, we firstly see that *perceived harmfulness* did not significantly predict willingness to participate. These findings are in opposition to previous research that showed *perceived harmfulness* can predict a victim's willingness to participate in VOM (Zebel et al., 2017). A possible explanation for this discrepancy may be found in the fact that *perceived harmfulness* can be viewed as a more cognitive appraisal of the crime. Research indicates that although cognitive assessments may be helpful for victims, the decision to participate in VOM is ultimately an emotional one (Latimer et al., 2005; Shapland et al., 2007). Within the context of this study, participants may have acknowledged the harmfulness of the imagined death-threat, but did so without feeling a strong emotional push to engage in VOM (see Limitations).

For *self-blame* too, we find no evidence for a mediation effect between *type of crime* and *willingness to participate in VOM*. When interpreting this result, it must be noted that *self-blame* had an overall low mean score in our research. This is an indication that victims in our sample did not view the threat they were subjected to as something they actively contributed to, but rather as something that happened to them. Given this low prevalence of

self-blame it can be argued that victims in our sample focussed more on other coping mechanisms such as trying to manage their fear with regards to the offender.

When looking at the variable *fear towards the offender* we again find no evidence for a mediation effect. Despite this, analysis did find a significant effect of *type of crime* on *fear towards the offender*; however this finding was in contradiction to our hypothesis in that fear was lower for victims of a cyber-threat when compared to an offline-threat. In the introduction it was argued that cyber-threats would induce more fear due to them being more elusive and potentially far-reaching (Agustina, 2015; Borwell et al., 2021; Leukfeldt et al., 2018).

Our current findings are in opposition to the above line of reasoning however. A potential explanation may lie in the sense of detachment often experienced by victims of cybercrime. Authors have argued that the lack of physical presence, as well as the potential anonymity of the offender, can create a psychological distance between victim and offender, leading the crime to be perceived as less significant and the offender as less threatening (Hemamali, 2016). Furthermore, although still harmful, receiving threats in cyberspace allows victims to implement certain countermeasures not possible in the real world such as blocking the offender. This can provide a sense of control and safety, which in turn may reduce fear towards the offender (Worsley et al., 2017). Taken together, this detachment and the ability to exert some degree of control over the situation could explain why victims of a cyber-threat experience less fear than victims of an offline-threat.

Qualitative findings offer support for the above line of reasoning. Offline victims more often cited the need to understand the offender's motive and to communicate the impact of the crime, which may potentially be rooted in higher levels of fear and emotional disturbance (Jackson & Gouseti, 2015). Conversely, cyber-threat victims more often felt VOM lacked value, aligning with their lower reported *fear towards the offender*. Together, these findings

suggest that fear, and its emotional consequences, play a greater role in motivating VOM participation for offline victims than for those threatened in cyberspace.

Although results indicated no effect of any of the proposed mediator variables on *willingness to participate in VOM*, an exploratory moderation analysis did find a significant effect of *fear towards the offender* on *willingness to participate in VOM*. The findings again were in contradiction to our initially formulated hypotheses, in that higher *fear towards the offender* predicted a higher *willingness to participate in VOM*. In the introduction we argued that often times, a major reason victims were unwilling to participate in VOM was a high degree of anxiety with regards to the offender (Bolívar, 2013). Our results indicate the opposite however.

An explanation for these findings may be that, although victims feel fearful towards their offender, they view participation in VOM as a way to confront and process that fear. Prior research supports this notion, showing that one of the main benefits of VOM is a reduced sense of fear towards the offender (Strang et al., 2006), alongside a reduction in fear of future victimization in a broader sense (Umbreit et al., 2000). Victims also often report that VOM participation aids emotional recovery and provides a sense of closure (Nascimento et al., 2022), which may explain why those who are more fearful are also more willing to participate. Conversely, when fear is low, victims may assign less value to VOM, particularly if the offence did not have a significant emotional impact (Bolívar, 2013). Taken together, these findings suggest that the relationship between fear and willingness to participate in VOM might be parabolic in nature. Research indicates that moderate levels of fear are often most effective in motivating behavioural engagement (Dillard et al., 2016), which implies that victims with moderate fear may be most inclined to participate. Those with little fear may not feel the need, while those experiencing intense fear may be too overwhelmed to engage.

Limitations

When interpreting the results of this study, several limitations need to be considered. Firstly, because the majority of participants were from countries that do not have English as a first language, this may have impacted the degree to which participants understood the scenarios and questions. By extension, this may have had an impact on the reliability of the results. It was anticipated that the partial language barrier could potentially influence the results, and in order to circumvent this, participants were asked to indicate to what extent they fully understood the contents of the survey. It was intended to remove any participants that indicated they did not understand most of the contents, however in practice no participants had to be removed for this reason. Despite this, the fact that the majority of participants were not native English-speakers may still have impacted the results. A way to overcome this limitation in the future is by exclusively sampling native English-speakers for participation.

A second limitation was the low internal consistency, low factor loadings, and eventual removal of the *moral wrongfulness of the crime* subscale. This meant that as opposed to the overarching variable *perceived seriousness of the crime* only the dimension *perceived harmfulness of the crime* was included as a variable for the final analysis, which makes the results more reliable but at the same time less complete. A similar issue was encountered by Fricke (2024) who also found low internal consistency for the *moral wrongfulness* subscale, however decided to still include the scale in their analysis.

A potential explanation for these findings regarding the *wrongfulness* subscale may be found in the phrasing of the two items intended to measure this dimension. The first item intended to measure *wrongfulness* was ‘this threat expressed against me is morally reprehensible’, which can be considered as being a relatively advanced level of English. It is likely that this somewhat complicated way of phrasing may have confused participants that are non-native English speakers as to what was actually being asked of them. Additionally,

the second item of the *wrongfulness* subscale was ‘the offender intended to cause me harm by threatening me’, which may have been too ambiguously phrased for many participants to yield reliable results.

A third limitation is the usage of a written scenario in which participants had to envision themselves. Even though participants considered the scenario to be particularly realistic, the limitations regarding this methodology have to be acknowledged. Although research has shown that imagination and visualization activate the same areas in the brain as actual perception, the sensory strength of an imagined stimulus is usually lower than one that is actually happening in reality. This means that, perhaps unsurprisingly, a real-life situation tends to elicit stronger affective responses than an imagined situation, which could in turn lead to different decisions being made as a result of said event (Dijkstra & Fleming, 2023; Lacourse et al., 2003; Schubert et al., 2019).

A future study into this area should therefore include an instrument that is more realistic and has a stronger stimulus than written scenarios. One potential way this could be accomplished would be through utilising technology such as Virtual Reality (VR), to present participants with a more immersive experience, albeit in a controlled manner. Several authors have indicated that VR can offer a higher degree of presence and emotional engagement for participants. For example, Slater and Sanchez-Vives (2016) have argued that through VR, psychological states similar to real-world experiences can be induced. Further research has shown that stress inducing VR-environments can trigger physiological stress responses in participants (Martens et al., 2019), providing further proof of the realism that VR-technology can provide. These findings indicate that utilising a VR-scenario as opposed to a written one may give more emotionally authentic responses from participants.

A final limitation is related to the qualitative findings. Although the qualitative component in our research offers invaluable insights into victims’ motivations with regards to

VOM-participation, they are relatively limited since participants were only asked to provide a very brief description of their motivation. Future qualitative research should ideally be done in the form of in-depth interviews, which would provide us with a more insightful and nuanced perspective of victims' motivations to participate in VOM. Additionally, these more long-format interviews should ideally be held among actual victims of both offline-crime and cybercrime.

Future Research Directions

Based on the current findings, we can identify several directions for future research. Firstly, future research could potentially explore the distinction between cognitive and emotional predictors of VOM-participation. Our results contrastingly showed that *perceived harmfulness* played an insignificant role, whilst exploratory moderation analysis indicated that *fear towards the offender* was significant in predicting *willingness to participate in VOM*. Even though these two variables correlated strongly with each other, only the more emotionally charged *fear towards the offender* predicted willingness to participate. *Perceived harmfulness*, which can be considered a more cognitive appraisal of the offence did not predict willingness to participate. Examining how cognitive and emotional pathways may potentially influence decision-making in victims, can offer us a more nuanced view of what motivates VOM-participation.

Furthermore, future research can potentially place more emphasize on victims' needs, as opposed to appraisals of the crime (*perceived harmfulness* and *fear towards the offender*) or self-directed emotions (*self-blame*). The qualitative findings of this study indicate that victims of both cyber- and offline threats, experience several different needs as a result of their victimization. Qualitative data further indicates small but noticeable differences between the cyber-condition, and the offline condition. Victims in the offline-condition more often indicated a desire for more direct recognition and closure with regards to their own

victimization, whilst those in the cyber-condition were more focussed on the offender taking accountability and preventing future offences. These findings are an indication that the degree to which a victim views VOM-participation as relevant to addressing their personal needs after victimization is a potentially more relevant predictor of willingness to participate in VOM, than appraisals of the crime or offender.

Whilst future research should place more focus on the needs of victims as opposed to the victims' appraisals of the crime, this does come with a caveat. It is important to consider that needs of victims do not exist in vacuum and may still be the result of both cognitive and emotional appraisals of the offence committed against them. It is therefore important for future research into victims' needs between cybercrime and offline-crime to also take into account appraisals of the crime and offender, as well as the extent to which these potentially shape the needs of a victim.

Practical Implications

The findings of this study may offer some important practical implications when it comes to conducting VOM. Mainly, the finding that willingness to participate was relatively high for victims of both a cyber-threat and an offline-threat may indicate that most victims view VOM as a viable way of dealing with the aftermath of their victimization. By extension, this means that practitioners do not need to place too much of an emphasize on motivating or persuading victims to participate. The differences in qualitative responses as well as *fear towards the offender* between the cyber-condition and the offline-condition do indicate however that more importance may have to be placed on tailoring preparation and facilitation of VOM based on the nature of the offence.

Conclusion

This study set out to explore whether victims of cyber-threats and offline-threats differed in their willingness to participate in a VOM-session with their offender. It was also investigated to what extent this type of threat shaped victims' cognitive and emotional responses. Although the hypothesized mediation effects were largely unsupported, the findings reveal a more complex picture of how fear, perceived harmfulness, and self-blame shape willingness to participate in VOM. Crucially, our results show that even in imagined scenarios, a majority of the victims expressed being open to engage in a dialogue with the offender. This highlights the potential of restorative justice to support victims, regardless of whether they were harmed in the digital world or the offline world.

Our findings are a reminder that justice is not just about resolving the offence, but also about responding to experiences of harm, which are unique for each individual. Whether death-threats are delivered through a screen or in person, the potential damage they can do is very much real. What is also very much real is the victims' desire for recognition, closure, and understanding. What is needed for VOM and RJ to remain meaningful is to let go of rigid frameworks, and instead embrace the complexities of victims' experiences and psychological makeup. In this way, VOM is not just a response to wrongdoing, but also an opportunity for actual restoration.

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Appendix A

Offline Crime Scenario

Imagine this...

You have spent the day handing out flyers and campaigning for your preferred political party. You are currently on the train home with some of your friends whom you campaigned together with. You are all still wearing your jackets with the logo of your political party clearly recognizable. Because the day has been productive you are all in a very good mood.

After about an hour or so, the train arrives in your home town and you get off, still wearing the jacket of your political party. You exit the train station and seemingly from out of nowhere a young man aggressively approaches you. The young man takes a quick look at the logo on your jacket before he explodes at you: 'You bastard! I swear I'm going to cut your throat!' You feel a jolt of adrenaline going through your body and your heart begins to pound. Instead of responding to the young man, you decide to turn around and quickly walk away. 'I will find you and kill you!' you hear him proclaim loudly as you walk away. To your relief the young man doesn't follow you.

A little while later you arrive home, still shook from the experience and trying to comprehend what has just happened. After a few minutes of hesitation, you decide to pick up the phone and report the incident to the police.

Appendix B

Cybercrime Scenario

Imagine this...

You have spent the day handing out flyers and campaigning for your preferred political party. You are currently on the train home with some of your friends whom you campaigned together with. Because the day has been successful you decide to take a picture together that you upload to social media. In the picture, both your face and jacket with the logo of your political party are clearly visible. For the rest of the train journey home the mood is very good.

After about an hour or so, the train arrives in your home town and you get off. As you walk out of the train station you suddenly receive a notification on your phone. Someone has commented on the picture you have just uploaded, and sent you a private message. You expect the message to be from one of your friends but instead it is from an account with no profile picture and an unrecognizable name. The message reads: ‘You bastard! I am going to cut your throat!!!’ as well as a reference to the logo of your political party, visible in the picture. You feel a jolt of adrenaline going through your body and your heart begins to pound. Before you can put your phone back into your pocket, you receive another private message from this account: ‘I will find you and kill you!!!’.

A little while later you arrive home, still shook from the experience and trying to comprehend what has just happened. After a few minutes of hesitation, you decide to pick up the phone and report the incident to the police.

Appendix C

VOM Scenario

After you have reported the incident to the police, two weeks go by without any news. Although you have recovered from the initial shock, the incident is still on your mind a lot. You then receive a letter from the 'Perspective Restorative-Mediation' (Perspectief Herstelbemiddeling) organisation informing you that the person who threatened you has been arrested by the police. The letter also describes that the person who threatened you has expressed remorse for doing so, and would be willing to meet and speak with you. The letter contains an invite to participate in a mediation-session with them; a so called Victim-Offender Mediation session. This will give you a chance to meet with the offender, explain to them how their behaviour made you feel, ask them questions about why you were targeted and hear their side of the story. It will also give you a chance to make certain arrangements with the offender should the two of you cross paths again.

This mediation session is fully voluntary and you may choose to participate at your own desire. The session will take place under the supervision of a qualified and impartial mediator, who will also meet with you one-on-one before you meet the offender. The outcomes of the mediation session will in no way influence the outcome of the criminal case against the offender. If you do not wish to meet with the offender face-to-face but still want to engage in some form of dialogue with them, then there are also other forms through which mediation can take place.

Appendix D

Debriefing

Dear participant,

Thank you for your participation in this survey, your inputs are greatly valued. In this survey, you were randomly assigned to either a scenario in which you were threatened in an online setting, or an offline setting. This distinction was made in order for the researcher to measure possible differences in a person's willingness to participate in Victim-Offender Mediation after falling victim to a cyber-threat or its offline equivalent. You were not made aware of this randomization because this could have potentially influenced the way in which you answered the questions related to the scenarios.

If you have any questions or comments regarding this research, or wish to withdraw your consent to participate and have your answers removed from the data-set at some point in the future, you can do so by contacting the researcher at: t.j.g.leferink@student.utwente.nl

We hope your participation was an enjoyable and interesting experience for you. If you yourself know anyone interested in participating in this research, we encourage you to share this survey with them.