

The Effect of Victims' Attitudes Towards Restorative Justice on the Willingness to Participate in (A)Synchronous Victim-Offender Mediation

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Abstract

Victim-Offender Mediation (VOM) is one of the most effective practices to restore justice after a crime. Online video chat poses a new form of VOM and could potentially be a suitable alternative to traditional face-to-face mediation. Due to its recent emergence, limited empirical investigations have been conducted regarding computer-based communication in VOM. Attitudes towards restorative justice could influence the victims' willingness to participate in VOM. Individuals who see the rehabilitation of the offender and restoration of the victim's sense of justice as primary concerns of punishment should, therefore be more willing to participate in VOM practices, namely face-to-face, online video chat, video exchange and letter exchange. Due to some possible drawbacks of using new emerging technologies, it was expected that the willingness to participate in face-to-face VOM is higher than in online video chat. Additionally, synchronous communication forms can provide more cues, including tone of voice or body language. Consequently, it was hypothesised that the willingness to participate in synchronous VOM (face-to-face and online video chat) is higher than for asynchronous VOM (video and letter exchange). Therefore, this mixed-factor study examined the relationship between the attitude towards restorative justice and the willingness to participate in different VOM programmes. For this, the participants were randomly allocated to either a victim or offender condition (between-factor design). Independent of the allocation, the participants then answered several questionnaires. The current study used statistical analyses and controlled for possible age and gender effects. A total of N = 43 individuals participated in this research. The current study did not find evidence to support the supposition that attitude towards restorative justice influences the willingness to participate in VOM. Additionally, there was no significant difference between the willingness to participate in face-to-face and online video chat VOM. There were, however, significant differences between the willingness to participate in (a)synchronous forms, with higher willingness to participate in synchronous forms. Potential limitations are connected to the small sample size and low variability in the sample characteristics. These might have impacted the validity and generalisability. Future research is needed to replicate these findings in a larger more variable sample. Thereby some adjustments to the used scales should be made. Moreover, the standardised procedure could be a suitable starting point for implementing immersive virtual reality technologies. These could be implemented to ensure a higher reliability to the situation and the role of the victim.

Keywords: restorative justice, victim-offender mediation, attitude, willingness to participate, media richness, synchronicity

The Effect of Victims' Attitudes Towards Restorative Justice on the Willingness to Participate in (A)Synchronous Victim-Offender Mediation

Crime often has detrimental, unresolved consequences, that impact all affected parties, but especially the victims. Independent of the specific characteristics of the crime, a set standard, such as a law, norm or rule has been broken (Wenzel et al., 2008). The victims of these transgressions have usually been denied something they rightfully owned (such as their life, dignity, or property). Regularly, it is not sufficient or even possible to substitute for the losses. Therefore, the handling of these transgressions is a frequent issue in the adequacy of punishment debate (Norton, 1967). Over the years there have been frequent changes in what has been seen as an appropriate response to restoring justice. Nowadays, in most Western societies the primary aim of avenging wrongdoings is punishment (Wenzel et al., 2008). Thereby evidence exists that determines justice restoration rather than the offender's behavioural control as one of the main backgrounds of society's perceived need for punishment (Carlsmith et al., 2002; Darley et al., 2000). In other words, society seems to perceive punishment as an end to itself and not as a possible way to reduce or even prevent future harm (Darley et al., 2000). Therefore, the offenders' rehabilitation seems to be the less predominant focus in society's call for the restoration of justice.

Retributive Justice

Retributive justice represents one of the traditional approaches to restoring justice. The main focus is set less on the victim or community and more on the adequacy of punishment of the offender (Wenzel et al., 2008). In this regard, the punishment applied should be kept in proportion to the transgression for justice to be served. Specifically, methods like deterrence, incapacitation or rehabilitation are used to prevent reoffending by ensuring that the criminal changes their behaviour (Vidmar & Miller, 1980; Wenzel et al., 2008). In essence, this predominantly involves disincentives, penal sentences and resettlement programmes in prisons or psychiatric wards ("Introduction to Criminal Law", 2012; Vidmar & Miller, 1980). Additionally, restitution can be implemented by giving the offender a fine to repay the victim for the harm they have caused ("Introduction to Criminal Law", 2012). Evidently, most of the attention is paid to punishment to deter from committing crimes. This predominant focus on the offender's punishment has led to concerns and critique (Wenzel et al., 2008).

Primarily it has been criticised that the party affected most severely by a crime, namely the victims, is overlooked and left out in the repair process (Umbreit et al., 2001). Instead of the victims representing themselves in front of the court, the state often acts in their place. Due to this, the victims are hindered from asking questions and are left contemplating

their thoughts and feelings. Therefore, it is common for victims to have a lot of questions which leads them to form specific stereotypes of the offender to reconstruct and comprehend what has happened. Similarly, the offender does not experience the real-life consequences and magnitude of their actions (Umbreit et al., 2001).

Restorative Justice

A new notion of punishment could challenge the limitations that are found within the retributive justice system. Restorative justice approaches commonly perceive transgressions as conflicts that require reparation by returning them to the appropriate stakeholders, namely the offenders, victims and community at large (Christie, 1977). In practical terms, this signifies the direct involvement of the affected parties in the justice process (Wenzel et al., 2008). One of the main objectives of restorative justice is the rehabilitation of the offender and restoration of the damage done to the community and the victim. For this purpose, methods for rehabilitation are applied and focus on influencing the offender's behaviour and attitude (Wenzel et al., 2008). These methods are usually incorporated into different treatments or educational programmes to get the offender's life back on track ("Introduction to Criminal Law", 2012). Essential to the effective implementation of restorative justice is a deliberative process that prioritises healing over punitive measures. This process focuses on multiple aspects of healing: repairing the harm caused to the victim and alleviating their suffering, facilitating the restoration of the offender's moral and social identity, and fostering healing within communities while repairing damaged social relationships (Braithwaite, 1998, 2002). Thereby, restorative justice questions the proposition that the application of punishment is needed to re-establish justice (Wenzel et al., 2008). Consequently, restorative justice poses an alternative approach by challenging the traditional notion of punishment.

As a result, restorative justice is one way to engage the affected parties of a crime in the process of restoring justice. What makes these programmes special is that they focalise the consequences of the crime by including the victim and offender in the process equally (Umbreit & Armour, 2011). Generally, this is accomplished by jointly determining and recognising the detriment and damage done, as well as the responsibility and necessities needed to put things back in order (Zehr, 1990). Thereby it is possible to reintroduce justice and strengthen the victims while focusing on their demands and needs, whereas offenders are assisted in comprehending, embracing, and fulfilling their responsibilities. The programmes provide an appropriate place for exchange between the victim and offender which supports both parties in resolving the consequences of the crime. Consequently, the special focus on

the resolution of a crime's consequences, the inclusion of the victim and the attempt to rehabilitate the offender render restorative justice a successful way of reconstituting order.

Victim-Offender Mediation

Within the restorative justice domain, there are different initiatives designed to assist in the restoration of misdeeds. Victim-Offender Mediation (VOM) is one of several alternatives to choose from within the restorative justice domain and is mostly used in the juvenile justice system or with minor crimes (Umbreit, 2002). However, it can also be used with more serious crimes. VOM is more strongly empirically grounded than many other criminal justice interventions since there are decades of research and a long past of applications (Umbreit et al., 2001). VOM programmes in their original form describe a face-to-face meeting between a consenting victim, offender, and a trained mediator (Umbreit, 1985). Other widely implemented methods are shuttle mediation, video, and letter exchange (Choi & Severson, 2009; Hansen & Umbreit, 2018). The exchange of videos and letters comprises the recording of videos or writing of letters which are then send to the other party. Shuttle mediation describes a mediation programme in which the mediator delivers the victim's and offender's messages to the other party respectively. Hence, the victim and offender do not meet personally.

The goals of VOM have been determined to include offering an alternative to confinement, resolving a dispute, rehabilitating the offender, enhancing the offender's responsibility, improving victim services, and preventing reoffending (Umbreit, 1985). The main goal, however, is focused on the mediation of the conflict. By using techniques designed for conflict resolution as well as restitution, the involved parties can encounter each other and answer unresolved questions. In mediation a neutral mediator is involved to support the conflicting parties by helping them resolve their conflict and negotiate a restitution agreement both parties feel comfortable with (Marshall & Merry, 1990). During the meeting, the parties can discuss their thoughts and feelings regarding the incident and arrange a settlement (Umbreit, 1985). As a result, VOM offers a compelling platform for promoting reconciliation and resolving conflicts within the restorative justice system. It allows the involved parties to engage in an open dialogue, express their emotions and ultimately work towards a mutually acceptable resolution.

Motivations to Participate

Offender Motivation. Overall, the VOM process allows offenders to better themselves by acknowledging their mistakes, being provided with a fair and safe room for discussion in direct contact with the victim, circumventing jail time and court processes,

regaining a sense of self-control and empowerment as well as having an opportunity to apologise (Umbreit et al., 1994). Since offenders can tell their narrative of the crime, they are held accountable whereby they show that they take responsibility for their actions (Choi et al., 2010). In comparison to offenders who go through the ordinary juridical process, offenders participating in VOM experience more satisfaction, are less likely to re-offend, and are more likely to follow the amends made (Latimer et al., 2005; Nugent et al., 2004). Therefore, many offenders that participate in VOM are either less likely to go to prison or more often sent to correctional facilities of lower levels (Coates & Gehm, 1985). Moreover, offenders who participated in VOM reported higher levels of satisfaction with the process and showed more empathetic feelings towards the victims than those offenders who did not participate (Umbreit, 1999; Umbreit et al., 1994). This shows that VOM has, next to justice for the victim, various benefits for the offender.

Victim Motivation. Similarly, victims frequently report being grateful for having the opportunity to tell their stories and share their feelings with the offender (Umbreit, 1989). One driving force to participate in VOM is often the need to re-establish restitution, to make sure that the offender is being held responsible or to get an apology (Choi et al., 2010). In addition, victims state they wish to circumvent a lengthy trial and ensure that the offender gets a suitable punishment. Many victims also wish to receive answers to their open questions and hear the offender's narrative (Umbreit & Coates, 1992; Umbreit et al., 2002). Thereby, some victims report hopes about being able to support the offender to change their behaviour. A meta-analysis by Hansen and Umbreit (2018) revealed that more than 80% of victims were satisfied with the VOM procedure after participation. Furthermore, both the victims and offenders perceived the justice process as fairer in comparison to those who did not participate (Umbreit, 1999). Similarly, victims who participated developed less fear of being re-victimised and remained less upset than those who did not.

The Impact of the Victims' Attitude

However, because of their hopes and expectations, victims are vulnerable to disappointment if these are not met (Hansen & Umbreit, 2018). Certain victims, for instance, experience dissatisfaction with the way the mediators set limits and restrict the time to talk, other victims even reject to participate in VOM (Choi et al., 2010; Coates & Gehm, 1985). Some common reasons why victims refused to participate are that they (a) believe that the crime was not significant enough, (b) fear meeting the offender, or (c) demand graver punishments for the offender (Coates & Gehm, 1985, Zebel et al., 2017). The call for graver

punishments raises the question of whether victims who refuse to participate may believe in the notion of punishment as an end to itself.

Generally, the Theory of Planned Behaviour (TPB) states that behaviour intentions are influenced by attitudes towards this behaviour (Ajzen, 1985 as cited in Ajzen, 1991). The term attitude can be defined as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour” (Eagly & Chaiken, 1993, p. 1, as cited in Eagly & Chaiken, 2007). Godin and Kok (1996) conducted a review study that found that the theory effectively explains intention, with a high level of reliability. Attitude toward the behaviour and perceived behavioural control consistently emerged as the most important variables responsible for explaining the variation in behavioural intention. Thereby, it is less important whether the attitude closely corresponds with the behaviour or constitutes a more general attitude (Smith et al., 2014). Significant here, is that they are accessible in the individuals’ minds. Hence, attitudes are found to be strong predictors of behavioural intentions.

In line with the aim of restorative justice, a motivating factor of victims that influences their participation in VOM seems to be the wish to contribute to the rehabilitation of the offender (Bolívar, 2013). Similarly, Paul (2015) found that the motivation to help the offender in the restoration of the harm done positively predicts the victim's willingness to participate. Thereby, a positive attitude towards the punishment of the offender negatively predicted participation. In other words, restorative justice goals such as rehabilitation more positively predicted participation and punitive goals including the wish for punishment negatively predicted participation in VOM. Here, individuals are likely to differ in their attitude towards the restorative justice system (Maruna & King, 2009). In line with this, Coates and Gehm (1985) determined that individuals who demand graver punishments are less likely to participate in VOM. Similarly, Maruna and King (2009) made use of the term *punitive attitudes* which are connected to harsher criminal punishments independent of the goal of these punishments. Consequently, it is necessary to conduct further research in an attempt to evaluate how a victim’s attitude may influence the willingness to participate in VOM. In contrast to Maruna and King's (2009) use of *punitive attitudes*, the current study aims at assessing the willingness to participate in VOM programmes by assessing its connection to the *attitude towards restorative justice*. The term is adapted from Bonensteffen et al.’s (2022) variable *attitude towards rehabilitation programmes* and includes the different facets of the restorative justice goals. Consequently, the attitude towards restorative justice describes the belief that offenders can be rehabilitated and redeem their transgression by collaboratively

working on a solution to restore justice. By assessing how this factor might influence the victims' motivation to participate in VOM, it can significantly impact the adaption of intervention programmes and methods used within the restorative justice domain.

COVID-19, Digitalisation and Victim-Offender-Mediation

Due to the progressing digitalisation which has been further advanced by the COVID-19 pandemic, new potential online platforms emerged (Kamal et al., 2020). These can also potentially pose valuable alternatives to the more traditional forms of VOM. One such instance is online video chat VOM which constitutes a digital form of VOM. During an online video chat VOM, the victim, offender and mediator can meet on an online platform (Bollen & Euwema, 2013) such as Zoom or Microsoft Teams. The benefits of digital infrastructures have especially been demonstrated during the COVID-19 pandemic. During the pandemic, the fast-progressing digitalisation has only been amplified by the further development of communication networks and technologies that support working and studying remotely (Bowen & Pennaforte, 2017; Çiftçi, 2016; Kamal et al., 2020). To stay connected to close others and maintain social networks, platforms and services have been developed further and have become increasingly important to communicate auditorily as well as visually (Banskota et al., 2020). One example of a digital infrastructure that has been implemented during the COVID-19 pandemic is the online learning system. Lestari and Gunawan (2020) found that using this system led to positive effects regarding efficiency and creativity in the learning environment. In a study by Ritonga et al. (2022), lecturers and students became increasingly more comfortable with the use of the new technologies with more extensive use and the combination of different platforms. Additionally, there are first attempts to assess the possibility to connect incarcerated parents with their offspring to stay in contact via digital platforms (Horgan & Poehlmann-Tynan, 2020). Horgan and Poehlmann-Tynan (2020) predicted that online platforms can have a positive impact, especially on the development of young children. Thus, there are many opportunities for digital infrastructures to provide new and amplify existing communication strategies.

Consequently, digital infrastructures may also have the potential to be used in restorative justice practices, such as victim-offender mediation programmes (Bonesteffer et al., 2022). In their qualitative study, Bonesteffer et al. (2022) asked victims and offenders how they feel about computer-based communication (CBC) in VOM and stated possible advantages and disadvantages. They found that face-to-face VOM has been rated as the form with the most potential and effectiveness by most participants. The advantages of CBC are concentrated on well-being and efficiency (Bonesteffer et al., 2022). It can therefore be used

in cases in which VOM may not be possible or unwanted. Victims who experience fear or are hindered from participating in face-to-face VOM because of their job, time or geographical constraints could be offered digital alternatives. Therefore, economically, CBC VOM is time and cost-efficient, for example, because travelling times and the arrangement of mediation locations are no longer required. Furthermore, the participants in the study by Bonensteffen et al. (2022) stated that online video chat VOM is less confrontational because of the symbolic distance between the parties. Thereby, they reported that the parties have more control over the situation, for instance, by being able to show less vulnerability. However, it should also be mentioned that CBC may not be able to convey the atmosphere to the same extent as face-to-face mediation (Bonensteffen et al., 2022). In the study by Bonensteffen et al. (2022) a participant mentioned that while they participated in face-to-face VOM, they could feel the emotions, tension and anger. This may not be possible to the same extent in an online environment. Regarding the lack of control, it has also been stated that it may be hard to maintain privacy, to make sure that no one is illegally recording the meeting and that an unstable internet connection could disturb the flow of the session (Bonensteffen et al., 2022).

Synchronicity and Its Impact on Communication Quality

Research conducted to evaluate digital communication often distinguishes between richer and leaner mediums. The richness approach, for instance, evaluates the richness of communication strategies based on whether they are (a)synchronous and whether they can provide the communicator with different kinds of cues (Daft & Lengel, 1986). Thereby, rich mediums are described as synchronous, as they can provide instant feedback and many cues. Synchronicity describes the live, real-time exchange of information and communication.

Face-to-face communication has been determined to be one of the richest strategies there is. It can operate well since indicators like verbal cues and information delivered can convey the communication partner's emotions accurately (Scherer et al., 1991). As the communicator can give and receive immediate feedback and draw on cues like facial expressions, body language or gestures, face-to-face VOM constitutes the richest form of mediation programmes. A study by Chao et al. (2020) assessed creative thinking and how it was influenced by a media's richness. They found that computer-mediated communication did not take an inferior position in terms of richness (including language variety, multiple auditory and visual cues, etc.). Consequently, online video chat VOM could potentially pose as an effective alternative to face-to-face mediation. Due to the novelty of many technological inventions, fear or lack of trust is often connected to the inhibited use of such technologies (Poncette et al., 2019). Therefore, victims may be more inclined to participate in face-to-face

mediation but could consider online video chat as less attractive because of unfamiliarity with such technologies. A more significant difference could however exist between the preferences towards synchronous forms such as online video chat and face-to-face and asynchronous forms of VOM such as video or letter exchange. In the latter programmes, cues (e.g., immediate response, language cues, facial expressions) of the communication partner are not available due to missing synchronicity (Daft & Lengel, 1986; Swaab et al., 2012). As a result, victims may be less inclined to participate in video exchange and letter exchange or more generally in asynchronous VOM programmes.

The Current Study

Due to the fact that digital VOM is still a relatively new alternative to conducting mediation, there is little research on the topic of CBC VOM. Therefore, this research aims to explore whether online video chat VOM can provide a new inventive way to engage more victims in mediation programmes. Previous studies already established some important factors that influence the willingness to participate in VOM more generally. The importance of attitude on behaviour change and behavioural intentions has already been established several times (see Godin & Kok, 1996). Additional studies also found a positive correlation between the victim's motivation to help the offender and the willingness to participate in VOM (see Bolívar, 2013; Paul, 2015). Consequently, the attitude towards restorative justice could influence the willingness to participate in VOM practices positively. Therefore, the effect of attitude towards restorative justice on the willingness to participate is going to be analysed. Specifically, this research assesses the questions: *To what extent does the victims' attitude towards restorative justice influence the willingness to participate in Victim-Offender Mediation?* It is hypothesised that victims with a positive attitude towards restorative justice are more likely to participate in VOM programmes because they see the influence of an offender's behaviour and attitude as most important in the punishment or rather rehabilitation process. More specifically it is proposed that:

H1: The victims' attitude towards restorative justice positively predicts the willingness to participate in face-to-face VOM.

H2: The victims' attitude towards restorative justice positively predicts the willingness to participate in online video chat VOM.

H3: The victims' attitude towards restorative justice positively predicts the willingness to participate in video exchange VOM.

H4: The victims' attitude towards restorative justice positively predicts the willingness to participate in letter exchange VOM.

Furthermore, the synchronicity of communication channels seems to be connected to the communication quality and ability to exchange information. To compare synchronous forms and asynchronous VOM forms, the study will only make use of face-to-face mediation, online video chat, video exchange and letter exchange. It should be mentioned again that shuttle mediation is excluded from the assessment since it cannot clearly be determined to be a synchronous and asynchronous form of VOM. Hereby, face-to-face mediation and online video chat will pose as the synchronous forms and video and letter exchange as the asynchronous forms. Therefore, this research also focuses on the role of synchronicity in communication on the willingness to participate: *What role does the synchronicity of the VOM programmes play in the willingness to participate?*

The potential advantages of online video chat VOM are predominantly connected to the efficiency and perceived distance (physical and emotional) to the offender. Thereby, victims who experience face-to-face VOM as too personal or participation as too challenging could resort to digital forms. Consequently, digital VOM can be a valuable alternative to existing forms of VOM practices. However, there are still concerns about the possible interpersonal distance and privacy issues resulting from the online environment. This may make online video chat VOM less attractive for victims. Therefore, it is hypothesised that:

H5: The victims' willingness to participate in face-to-face VOM is higher than the willingness to participate in online video chat VOM.

Furthermore, personal forms of communication, such as face-to-face meetings are richer mediums (Swaab et al., 2012) and are most suitable to convey one's thoughts and feelings. Based on the characteristics of online video chat such as the synchronicity of information exchange and availability of visual information, it is comparable to face-to-face communication. Therefore, online video chat can pose a good alternative to face-to-face mediation. Based on the assumption that less synchronous forms of VOM such as video or letter exchange provide fewer cues (Swaab et al., 2012) thereby missing important contextual information, it is hypothesised that:

H6: The victims' willingness to participate in synchronous VOM forms is higher than the willingness to participate in asynchronous VOM forms.

Methods

Design

The current study used a quantitative, 2 x 2 mixed factors design whereby participants were randomly allocated to either the victim or the offender condition (between-participant design). Within the conditions, the participants answered several questionnaires connected to Victim-Offender Mediation (VOM; within-participant design). This study was conducted as a collaborative project therefore only the victim condition was used in this study. Additionally, variables and questionnaires that were deemed irrelevant to this research were excluded from this research assessment.

In the current study, the attitude towards restorative justice acted as the independent variable. The willingness to participate in VOM programmes was measured by four dependent variables namely the willingness to participate in face-to-face VOM, online video chat, video exchange and letter exchange respectively. The study controlled for possible gender and age effects by including them as independent variables.

Participants

The participants have been recruited via the SONA System, Pollpool and the researchers' networks. The web-based application SONA System is used by the University of Twente and provides researchers with the opportunity to publish online as well as offline studies for students or other researchers to participate in. For their participation via the SONA system, the participants received a total of 0.5 SONA points. PollPool is a website on which researchers can collect responses in exchange for their participation in other studies. The sampling strategy used was convenience sampling. For participation, the subjects had to indicate their age (>18) and had to have sufficient English proficiency in reading and comprehension. Inclusion criteria of this study were that they a) completed all required scales, b) gave consent, c) were 18 years or older, d) answered the questions seriously, e) read the questions thoughtfully, and f) were allocated to the victim condition. Whether the participants took the participation seriously and read the questions thoughtfully was determined through the use of control questions.

Overall, consent has been given by 216 (95.58 %) of the initial 226 participants. Of these, some participants had to be removed because they did not meet the remaining inclusion criteria. Specifically, 132 participants were excluded because they were allocated to the offender condition, 2 as they were underage, 48 respondents did not complete all required questionnaires and 1 participant did not answer the questions seriously. The final sample consisted of 43 (20 %) participants with a total of 28 (65%) females and 15 (35%) males. The

age ranged from 18 to 67 years ($M_{\text{age}} = 27.4$, $SD_{\text{age}} = 11.6$). Overall, 34 (79%) were Germans and 4 (9%) were Dutch. In addition, 22 (51%) of the subjects received a secondary degree and 28 (65%) were students at the time of the study. For further information, please resort to Table 1.

Approval for this study has been granted by the Ethics Committee of the Faculty of Behavioural, Management and Social Sciences (BMS) of the University of Twente (request number: 230363).

Table 1*Descriptive Statistics (N = 43)*

Variable	Sub-Category	N	%
Gender	Female	28	65.12
	Male	15	34.88
Nationality	German	34	79.09
	Dutch	4	9.30
	French	1	2.33
	Hungarian	1	2.33
	Pakistani	1	2.33
	Ukrainian	1	2.33
	American	1	2.33
Education	Primary	2	4.55
	Secondary	22	51.16
	Bachelor	8	18.60
	Master	8	18.60
	State Examination	3	6.98
Employment	Student	28	65.12
	Employed	11	25.58
	Unemployed	1	2.33
	Retired	1	2.33
	Self-employed	1	2.33
	Other	1	2.33

Note. Percentages (%) and frequencies (N) of the demographical data of all participants included in the current study.

Procedure

To receive access to the study, participants were required to access a hyperlink to the questionnaire on the Qualtrics platform (www.qualtrics.com). The link was either provided on the SONA system, Pollpool, distributed on Instagram or personally sent to them. At the initiation of the Qualtrics study, the subjects were presented with the essential information pertaining to the study including the informed consent form and details about the study's objectives (see Appendix A). Moreover, they were informed about the potential risks involved and provided with the possibility to withdraw at any given point. The risks included possible distress in response to the topics of crime and punishment. In case of queries or concerns, the researchers' contact details were displayed. In order to indicate consent, the participants were supposed to be at least 18 years old and explicitly acknowledge that they read and comprehended the provided information. Indicating consent, marked the start of the study.

In the beginning, the participants were asked to give indications about their demographical data including their age, gender, nationality, education and employment status. Subsequently, they were randomly assigned to either the victim or offender condition.

Description Victim Condition

Participants allocated to the *Victim Condition* had to read a comprehensive explanation outlining the fundamental characteristics of VOM (see Appendix B). Afterwards, they were asked to mentally immerse in a provided crime scenario, thereby taking the view of the victim. The situation depicted a burglary in the participant's residence during their absence attending a family funeral. The burglars stole items of sentimental value, namely jewellery. Next, the participants were presented with a series of diverse questionnaires while contemplating the situation presented. The questionnaires covered various domains including cooperative behaviour, attitudes towards restorative justice, as well as their willingness to engage in different forms of VOM. Specifically, the respondents were asked to indicate their attitude towards restorative justice on a 4-point Likert scale with items such as "More effort needs to be made to expand and improve programs that would give this offender the chance to change his life" (see Appendix C). The questions pertaining to the willingness to participate read, for instance, "I would like to participate in face-to-face VOM.". The steps that followed in the procedure were not relevant to this research.¹ Following the completion of the

¹ After completing the questionnaires, the participants read a brief introduction outlining the content of the video they were supposed to watch. The videos displayed a face-to-face VOM and an online video chat VOM. The order in which the videos were presented was randomised. Subsequently, participants were required to complete multiple questionnaires about the outcome satisfaction and cooperative tendencies.

questionnaires, the participants were presented with control items. They had to indicate whether acquaintances or themselves were involved or engaged in criminal offences in order to determine their familiarity with the justice system. In addition, they were asked whether they were able to empathise with different facets of the displayed situation and whether they took the participation seriously. Subsequently, they reviewed the debrief which provided them with comprehensive information about the purpose and nature of the study (Appendix D). Lastly, the participants were thanked for their participation in the research.

Materials

In the following section, materials that hold significance for this study will be elaborated on in more detail.

The Victims' Attitude Toward Restorative Justice

The Treatment and Punishment Attitude Scale by McCorkle (1993) consists of eight items and has been used to assess the participant's attitudes towards restorative justice. The original scale consists of two subscales with four items each. One subscale measured the attitude towards treatment, namely the overall rehabilitative support. The other subscale measures the overall punitive attitudes thereby assessing the facets of retribution and incapacitation (see Appendix C). Both subscales were scored on a 4-point Likert Scale (1 = strongly disagree, 4 = strongly agree). Before combining the mean scores to an overall mean attitude score indicating the attitude towards restorative justice, the punitive attitudes subscale and the first item of the rehabilitative support subscale were reverse-coded. Hereby, the scores were summed and divided by the number of items with higher mean scores on the overall attitude towards restorative justice scale indicating stronger positive attitudes towards restorative justice. The current study was able to determine an acceptable alpha of $\alpha = .78$ for the overall scale.

The Victim's Willingness to Participate in Victim-Offender Mediation

In order to determine the subjects' willingness to participate in VOM programmes, the scale by Meeners (2020) was adopted. The original scale consists of four items assessing the general willingness to participate as well as the willingness to participate in letter exchange, video exchange and face-to-face mediation. An item assessing the willingness to participate in online video chat VOM replaced the item "I do not want to continue communication". Since the items were phrased from the offender's point-of-view the phrasing was adapted to match the victims' point of view. In the end, the measure consisted of four individual items ("I would like to participate in...") assessing the willingness to participate in a face-to-face mediation, online video chat, video exchange and letter exchange (see Appendix C). The

items were assessed using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). In this study, Cronbach's alpha showed scores of $\alpha = .34$ for the willingness to participate in synchronous VOM forms (a combination of the item measuring willingness to participate in face-to-face VOM and the item measuring willingness to participate in online video chat VOM) and $\alpha = .78$ for the willingness to participate in asynchronous VOM forms (a combination of the item measuring willingness to participate in video exchange VOM and the item measuring willingness to participate in letter exchange VOM).

Data Analysis

The data gathered were subjected to analysis using RStudio (version 2023.06.0+421) and the packages tidyverse, dplyr, janitor, psych, CTT, openxlsx, gvlma, modelr, moments, car, and broom. During the data preparation, incomplete data and responses with missing consent were eliminated from the dataset.

Before a Factor Analysis (FA) was performed, the suitability of the data for conducting a FA was assessed by using the Kaiser-Meyer Olkin (KMO) measure of sampling adequacy. The overall KMO value was .73 indicating acceptable adequacy for FA. The scatterplot was consulted to assess whether a one- or two-factor solution fits the data better. According to the Kaiser criterion, a two-factor solution would be a better fit for the data. However, the elbow criterion yielded a one-factor solution. Since the scale is meant to measure one underlying factor, namely the attitude towards restorative justice, the fit of a one-factor analysis was assessed further.

The exploratory FA found factor loading ranging from .28 to .84 for the one-factor solution. Two items of the scale scored rather low with a score of .28 (item two of the rehabilitative support subscale) and .31 (item three of the rehabilitative support subscale). In order to stick to the validated original scale, they were not excluded from the scale. A test of the hypothesis that a one-factor solution is sufficient yielded a chi-square statistic of 24.63 on 20 degrees of freedom, resulting in a non-significant p-value of $p = .22$. A non-significant p-value reveals that a one-factor solution suits the data.

Afterwards, assumptions for the linear regression model analyses (linearity, normality, independence, and homoscedasticity) were checked. Subsequently, histograms were designed (see Appendix E), and the corresponding skewness coefficients were calculated to test for normality². The multicollinearity of the predictors was assessed using Variance Inflation

² The assumption of normality was not met. Therefore, additional analyses were conducted in form of generalised linear model analyses. However, the results did not differ from the outcomes of the linear regression model indicating that the distribution did not differ too strongly from the normal distribution (see Appendix F).

Factors (VIF). The VIF scores were calculated for each predictor and all scores were within the range of 1.17 to 1.04. In other words, all scores were below the critical threshold of 5 thereby indicating no significant multicollinearity issue.

Subsequently, the bivariate Pearson coefficients and descriptive data for the attitude towards restorative justice and the individual measures of the willingness to participate were assessed. The interpretation of the correlations was conducted as follows: a strong correlation existed once the coefficient was higher than .50, a moderate one if the scores were between .30 and .49 and a weak one if the coefficient was smaller than .29 (Statistics Solutions, 2021).

Hypothesis Testing

Afterwards, the analysis to assess the first four hypotheses was carried out by conducting linear regression analyses. The attitude towards restorative justice, age and gender have been used as the independent variables and willingness to participate as the dependent variable resulting in four linear models. Depending on which form of VOM was assessed the linear regression model included the corresponding measure of the willingness to participate in the specific programme (face-to-face, online video chat, video exchange or letter exchange VOM). The effect was determined by assessing the estimation coefficients while considering the significance of the p-value. A p-value was found significant if it displayed values of $p < .05$. Additionally, R^2 and the F-statistic were considered for appraising the model's fit.

To analyse the last two hypotheses, the Shapiro-Wilk test was used to test for normality. The distribution differed from normality. Hence, to assess whether there is a significant difference between the mean scores on the willingness to participate in face-to-face VOM and the willingness to participate in online video chat VOM, a Wilcoxon signed-rank test was performed. To assess the significance of the difference between the willingness to participate in synchronous VOM and asynchronous VOM, a new variable needed to be constructed first. For this purpose, the willingness to participate in face-to-face VOM and the willingness to participate in online video chat VOM have been combined by taking the mean score of the two items. The resulting variable assessed the willingness to participate in synchronous VOM. The second variable was constructed in the same manner and used the willingness to participate in a video exchange and the willingness to participate in a letter exchange. This variable was used to assess the willingness to participate in asynchronous VOM forms. Following, the mean scores were compared, and the significance of the difference between them was appraised by using the Wilcoxon signed-rank test.

Results

Overview of the Data

To give an overview of the data, Table 2 summarises the mean scores, standard deviations, and correlations of the variables.

In the correlation analysis, no significant relationships between attitude towards restorative justice and the different willingness to participate in VOM measures were found. For the different measures of willingness to participate, willingness to participate in face-to-face VOM was moderately negatively correlated with willingness to participate in letter exchange ($r(41) = -.42, p = .005$). Additionally, willingness to participate in video exchange was strongly positively correlated with willingness to participate in letter exchange ($r(41) = .64, p < .001$). However, willingness to participate in face-to-face VOM did not correlate with willingness to participate in online video chat VOM. Gender and attitude were found to be moderately positively correlated ($r(41) = .34, p = .03$).

It should be mentioned here that the mean score for the attitude towards restorative justice was 2.96 (measured on a 4-point Likert Scale). Further analysis revealed noteworthy findings regarding the range which ranged from 2.12 to 3.75. These imply a prevailing presence of high mean scores.

The control questions that were posed at the end of the study, revealed that 26 (60%) of the 43 participants were able to at least emphasise moderately to the scenario presented (see Appendix G). The same counts for the participants' indication of being able to imagine being the victim in the given situation. In addition, 36 (84%) were able to empathise moderately with the feelings the victim might have felt. Similarly, 33 (77%) were able to empathise with the thoughts the victim might have had. Overall, 34 (79%) perceived the situation as natural and 40 (93%) were at least somewhat motivated to participate in the current study.

Table 2*Descriptive Statistics of the Variables Included in the Linear Regression Models.*

	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Age	27.37	11.60	-								
2. Gender	-	-	.07	-							
3. Attitude towards restorative justice	2.96	.43	-.15	.34*	-						
4. Willingness to participate in face-to-face VOM	3.28	1.05	0.09	.20	.10	-					
5. Willingness to participate online video chat VOM	3.23	1.02	-.11	.12	.08	.20	-				
6. Willingness to participate in video exchange VOM	2.56	1.12	-.02	.02	-.01	-.12	.28	-			
7. Willingness to participate in letter exchange VOM	2.70	1.27	-.10	.06	.08	-.42**	.13	.64***	-		
8. Willingness to participate in synchronous VOM forms	3.26	.81	-.01	.20	.12	.78***	.77***	.10	-.19	-	
9. Willingness to participate in asynchronous VOM forms	2.63	1.08	-0.07	.04	.04	-.30*	.22	.89***	.92***	-.06	-

Note. Mean scores, standard deviations and bivariate correlations between the variables included in the analyses of the hypotheses. Attitude towards restorative justice was measured on a 4-point Likert Scale. The willingness to participate in face-to-face, online video chat, video exchange and letter exchange VOM were measured on a 5-point Likert Scale. The variables gender included male = 1 and female = 2.

* $p < .05$; ** $p < .01$; *** $p < .001$

Linear Regression Analyses

Hypothesis 1

First, the hypothesis: *the victims' attitude towards restorative justice positively predicts the willingness to participate in face-to-face VOM*, has been analysed. The willingness to participate in face-to-face VOM has been used as the dependent variable.

The model only explained about 4.62% of the variance and did not show statistical significance ($F(3, 39) = .63, p = .601, R^2 = .07$; Table 2). The results show that attitude has no significant effect on willingness to participate in face-to-face VOM ($b = .13, SE = .41, p = .757$). Additionally, neither gender ($b = .38, SE = .37, p = .310$) nor age ($b = .01, SE = .01, p = .609$) show a significant effect. Hence, the hypothesis that *the victims' attitude towards restorative justice positively predicts the willingness to participate in face-to-face VOM*, could be rejected.

Hypothesis 2

The second hypothesis is: *the victims' attitude towards restorative justice positively predicts the willingness to participate in online video chat VOM*. Here, the willingness to participate in online video chat VOM posed as the dependent variable.

The model did not show statistical significance and could only explain 2.83% of the variance ($F(3, 39) = .38, p = .768, R^2 = .03$). The results showed no significant relationship between attitude towards restorative justice and willingness to participate in online video chat ($b = .06, SE = .4, p = .871$). Furthermore, gender ($b = .25, SE = .36, p = .487$) and age also displayed a non-significant effect ($b = -.01, SE = .01, p = .497$). Therefore, the hypothesis *the victims' attitude towards restorative justice positively predicts the willingness to participate in online video chat VOM*, could be rejected.

Hypothesis 3

The third hypothesis reads: *the victims' attitude towards restorative justice positively predicts the willingness to participate in video exchange VOM*. Willingness to participate in video exchange VOM was used as the dependent variable.

The overall statistical significance was low, and the model could only account for 0.14% of the variance ($F(3, 39) = .02, p = .997, R^2 = .001$). The linear regression model displayed a non-significant effect of attitude towards restorative justice on willingness to participate in video exchange VOM ($b = -.06, SE = .45, p = .894$). Furthermore, gender ($b = .06, SE = .4, p = .878$) and age also showed a non-significant effect ($b = -.003, SE = .02, p = .860$). Therefore, the hypothesis that *the victims' attitude towards restorative justice positively predicts the willingness to participate in video exchange VOM*, could be rejected.

Hypothesis 4

The fourth hypothesis assesses whether *the victims' attitude towards restorative justice positively predicts the willingness to participate in letter exchange VOM*. Willingness to participate in letter exchange VOM posed as the dependent variable.

The model did not show statistical significance and explained 1.69% of the model's variance ($F(3, 39) = .22, p = .88, R^2 = .017$). The results showed that attitude has a non-significant effect on willingness to participate in letter exchange VOM ($b = .16, SE = .50, p = .75$). Neither gender ($b = .12, SE = .45, p = .80$) nor age ($b = -.01, SE = .02, p = .56$) showed a significant effect. Consequently, the hypothesis that *the victims' attitude towards restorative justice positively predicts the willingness to participate in letter exchange VOM* could be rejected.

Hypothesis 5

The fifth hypothesis states that *the victims' willingness to participate in face-to-face VOM is higher than the willingness to participate in online video chat VOM*. The mean scores displayed in Table 2 show a score of $M = 3.28$ for willingness to participate in face-to-face VOM and $M = 3.23$ for willingness to participate in online video chat. The output of the Wilcoxon signed-rank test shows that the two means do not differ significantly ($T^+ = 942.5, p = .87$). Therefore, the hypothesis that *the victims' willingness to participate in face-to-face VOM is higher than the willingness to participate in online video chat VOM*, could be rejected.

Hypothesis 6

The last hypothesis states that *the victims' willingness to participate in synchronous VOM forms is higher than the willingness to participate in asynchronous VOM forms*. By looking at the mean scores of the variables, it can be determined that willingness to participate in synchronous VOM ($M = 3.26$) and willingness to participate in asynchronous VOM ($M = 2.63$) seem to differ. The Wilcoxon signed-rank test showed a significant difference between the two means ($T^+ = 1251, p = .004$). Consequently, the hypothesis that *the victim's willingness to participate in synchronous VOM forms is higher than the willingness to participate in asynchronous VOM forms*, could not be rejected.

Discussion

Principle Findings

The current study aimed at gaining a better understanding of victims' willingness to participate and whether online video chat could pose a suitable alternative to traditional forms of victim-offender mediation (VOM). Therefore, the study examined the potential influence of the victims' attitude towards restorative justice on the willingness to participate in different VOM programmes. Thereby the focus was on synchronous forms, namely face-to-face mediation and online video chat VOM as well as asynchronous forms such as video exchange and letter exchange VOM. It was assessed whether a difference in the willingness to participate in these forms exists. This assessment was based on the effect of the predictor variable attitude towards restorative justice while controlling for possible gender and age effects.

It was hypothesised that the victim's attitude towards restorative justice positively predicts the willingness to participate in face-to-face, online video chat, video exchange and letter exchange VOM respectively. This was not supported in the current study. Furthermore, it was expected that the victims' willingness to participate in face-to-face VOM is higher than the willingness to participate in online video chat VOM. This hypothesis was not supported by the data. Henceforth, it was anticipated that the victim's willingness to participate in synchronous VOM forms is higher than the willingness to participate in asynchronous forms. The current study detected a significant difference between the two, with a higher willingness to participate in synchronous VOM forms. Therefore, the hypothesis was supported by the data.

Hypotheses 1 to 4

In line with the first four hypotheses, previous studies found that individuals who do not believe in the redeemability of a transgression are more likely to support the incarceration of offenders (Maruna & King, 2009; Strossner & Green, 1990). Since they think that there is nothing that can be done, rehabilitation seems to be unnecessary (Maruna & King, 2009). Contrarily, a strong positive belief in the redeemability of a crime, can be seen as one of the best justifications for disagreeing with the need for incarceration. This has been found as a possible factor to participate in VOM: Paul (2015) determined that a motivating factor to participate in VOM is the wish to support the offender in restoring the harm he has caused. Therefore, an overall positive attitude towards restorative justice has been hypothesised to influence the willingness to participate.

Contrary to the hypotheses, the attitude-behaviour gap refers to a situation where an individual's attitudes are not aligned with their behaviour (Wintschnig, 2021). This phenomenon has been often observed in marketing research, indicating that attitudes towards a specific behaviour can be incongruent with the actual action. Hence, the attitudes are not in line with the behaviour the individuals display in real life. Possible reasons for the inconsistency can be attributed to other intervening variables that can negatively influence and predict the behaviour (Wintschnig, 2021). A possibility could be that the participants did not see a link between attitudes towards restorative justice and whether they intend to participate. Instead, they may predominantly focused on their personal interest or the expectation of feeling better when deciding whether to participate. Consequently, they may make up their mind based on self-interest and not on the wish to help the offender.

Similarly, it is also possible, that the attitude itself is not pivotal in the likelihood of the occurrence of a behaviour. There are also occurrences in which attitude does not seem to play a big role in the prediction of behaviour. A study by Nugroho et al. (2018), for instance, used the TPB and determined that subjective norms and perceived behavioural control have a higher impact on behavioural intentions than the attitude towards the said behaviour. If individuals perceive participating as too bothersome or ineffective in dealing with their emotional healing, their willingness to participate may decline. Similarly, the attitude towards restorative justice may not have correlated significantly with the willingness to participate in VOM since the variables do not correspond too strongly (Davidson & Jaccard, 1979). The attitude towards participating in VOM, for instance, would correlate more closely to the willingness to participate in VOM. This could yield stronger correlations.

Due to the complexity of VOM, other factors may have influenced the subjects' decision to engage in different VOM forms as well. Based on the standardisation of the situation the respondents may have reacted differently regarding the perceived severity of the crime. Additionally, Bolívar (2013), for instance, determined that high levels of fear, scepticism and anger towards the offender negatively influence the victim's willingness to participate. Thereby, the victims' emotions may evoke the fear of lacking the necessary ability to participate in VOM.

In real-life crime situations, the level of prior knowledge about the background and motives of the offender can differ. Victims who have a prior relationship with the offender may know more than victims who never stood in contact with the offender. If the victim would like to know more about the offender's circumstances, the mediator has to get the offender's consent to share this kind of information (Umbreit & Greenwood, 2000). To

control for the effects of prior knowledge, the situation was described as neutral as possible. Thereby, the participants were not informed about the possible reasons for the offender to conduct this crime. Consequently, the provided standardised situation may have featured elements that the participants of this study found distressing. This might have been the base for the victims to build their own fixed picture of what the offender might be like. In this regard, Bolívar (2013) assessed that a fixed picture of the offender generally heightens the chance of declining to participate in the available VOM programmes. Overall, there is a complex interplay between many underlying factors revolving around the crime that could have influenced the outcome of this study.

Hypothesis 5 and 6

The last two hypotheses have been posed based on research on the effectiveness of digital environments, thereby considering possible drawbacks. According to several studies about digital communications, CBC should not differ significantly from face-to-face communication (see Chao et al., 2020). This is due to the ability to exchange information auditorily and visually as well as the synchronicity. Since video and letter exchange both at least miss the element of synchronicity, they should fare worse regarding the willingness to participate. This research shows to be in line with the results of this study since the willingness to participate in synchronous VOM forms was higher than the willingness to participate in asynchronous VOM. It, however, was also expected that the willingness to participate in face-to-face VOM is higher than the willingness to participate in online video chat VOM since there are possible drawbacks. In a study by Bonensteffen et al. (2022), real victims were asked about which advantages and disadvantages they can think of in regard to CBC VOM such as online video chat. They stated that tension and emotions like anger may not be conveyed as well as in face-to-face VOM. Additional drawbacks were connected to the control of the mediator. In an online environment, it may not be possible for the mediator to manage and calm down the emotions of the parties. There may also be some issues with privacy, such as illegal recording of the session or unstable connections which disturb the flow. These drawbacks, however, do not show themselves in the results of the assessment of the fifth hypothesis. The willingness to participate in face-to-face VOM did not differ significantly from the willingness to participate in online video chat VOM. Partly, this could be attributed to the characteristics of the sample. The mean age of the sample was rather young which also had to do with the fact that most of the participants were university students. Generally, younger adults are more likely to adopt technology (Heinz, 2013). Thereby, they also use a wider variety of technologies compared to older adults and do this

with more ease (Bradley et al., 2013; Olson et al., 2011). Consequently, it has to be considered that the non-significant difference between the willingness to participate in face-to-face VOM and online video chat VOM may be attributable to the low mean age in this sample. The generalisability to other age groups may therefore be limited.

In addition to possible age effects, other confounding variables could be considered here. To determine whether the relationship between the synchronicity of the communication strategy and the willingness to participate in VOM, as well as the effect of attitude towards restorative justice, is not confounded by other variables, an additional more extensive scale could be used. For this, the scales that were constructed by Reichert (2020) could be suitable. The scales were originally designed to assess the need to share information, the need for information and additional needs. They include items such as: "I want to see how the offender reacts when he receives my message" (Reichert, 2020, p. 12). These scales could give insights into possible background factors that could facilitate participation and determine whether their participation might be motivated by other means. If they, for instance, provide a clear indication of prioritising the confrontation of the offender, the victims' may be motivated to participate based on their own self-interest.

One interesting finding that can be mentioned is the correlation between gender and the attitude towards restorative justice. Thereby, females scored higher on the attitudes towards restorative justice scale than males. In this regard, Toussaint and Webb (2005) made use of self-report measures and found that even though gender was not connected to forgiveness, women generally showed more empathy than men. Based on neurocognitive assessments, there could also be a biological basis for the feeling of empathy in women (Rueckert & Naybar, 2008). Rueckert and Naybar (2008) found that the activation of the right cerebral hemisphere was connected to empathy but only in women. Consequently, women may generally experience higher empathic concern. Since restorative justice aims at empathy (Restorative Justice Council, n.d.), empathy could be one of the factors that influenced the females' higher mean score on the attitude towards restorative justice scale. However, the overall proportion of the females in this study has been determined to be approximately two-thirds. Hence, there was only a small proportion of men included in this study. Consequently, this correlation has to be assessed in line with this disproportion.

Strengths and Limitations

Concerning the outcomes of this study, some notable limitations that may impact the reliability of the results should be stated here. Part of the limitations can be traced back to the response rate which needs to be assessed critically. Due to the length of the study (approx. 30

minutes) and the resulting high drop-out rate, a lot of participants needed to be excluded from the study. Another factor that impacted the sample size was that some participants did not take the participation or rather the answering of the questions seriously. In the end, only 43 participants were included in the study. Overall, a study with a small sample is less likely to find statistically significant results (Button et al., 2013). Additionally, the results and generalisability can be impacted (Murad et al., 2018). Generally, the smaller the sample, the lower the reliability and generalisability of the results. Therefore, the results of this study should be handled with caution.

Furthermore, the variability within the sample was limited. Even though the study included participants with a relatively wide age range, the majority of the sample were female, German and students who received a secondary degree. This can partly be attributed to the convenience sampling method that has been utilised. Convenience sampling can, for instance, introduce biases into a study since the demographics of the participants are more homogenous (Etikan et al., 2016). Consequently, the generalisability is limited. Similarly, nationality impacts the way individuals perceive crime-related content (Soto-Sanfiel & Montoya-Bermudez, 2022). The perception of crimes is thereby often related to the reality that they experience every day in their country. As a result, the sample may be unrepresentable of the true population.

Furthermore, the current study included some respondents who indicated that they were experiencing difficulties in imagining themselves in the given situation and empathising with the feelings and thoughts displayed from the victim's point of view. Additionally, a mere half of the respondents included in the study indicated that they could at least moderately imagine being the victim. Many also indicated that they have never been involved in a crime (as a victim or offender) before and some also do not know anyone involved in a crime. This may have had an impact on the strength of one's attitude towards issues revolving around the justice system. Individuals who were in contact with the justice system or accompanied others through, for instance, a juridical process may have stronger attitudes towards the justice system. Similarly, the mean score on the attitude towards restorative justice scale only ranged from moderate mean scores to highly positive mean scores. Therefore, the lowest scores on this measure indicated rather neutral attitudes towards restorative justice than negative ones. Hence, this study could not compare strong positive and strong negative attitudes towards restorative justice. Even though it cannot be determined indubitably, stronger attitudes may have had a higher impact on willingness to participate in VOM.

One last limitation that should be mentioned here is that the dependent variables, willingness to participate in different VOM forms, have been measured using a single-item scale per VOM programme. Generally, single-item measures have been found to often score low on measures of validity and reliability (Allen et al, 2022). This is due to the lack of comprehensive coverage of the complexity of the concept under investigation. Similarly in the FA of the attitude towards restorative justice scale, two items have been found to possess low factor loadings. These two items may not have measured the underlying factor reliably. The current study used a one-factor solution for the scale, however, a two-factor solution (as assessed by the Kaisers criterion) may have yielded a different result. All in all, however, Cronbach's alpha showed an acceptable internal consistency which also did not differ much while exploring the internal consistency without the inclusion of two factors with low loadings.

Positively, the study also exhibits strengths within the study design and conduction. Firstly, the situation the respondents were immersed in was standardised. For the participants, it could have been easier to relate to and project their thoughts and feelings into the situation if they would have thought about the situation themselves. This, however, would have resulted in high variability regarding the severity of the crime and the participants' state of processing regarding the consequences of such an incident.

Secondly, all participants underwent the same procedure. Thereby, they got the same instructions and background information about VOM. The procedure of the current study also did not differ in the structure and sequence of the questionnaires displayed. A high standardisation hereby leads to a higher reliability of the results which in turn can lead to higher validity (Fischer, 2010). As a result, the study should exhibit a high level of standardisation.

Future Research and Implications

Future research could build on the strengths and limitations of this study thereby facilitating an effective investigation, replication, verification, or falsification of the findings. A suitable starting point would be the assessment and possible adjustment of the attitude towards restorative justice scale, namely the Treatment and Punishment Scale by McCorkle (1995). Here, for instance, it would be possible to assess the scale without the two items that displayed low factor loadings. Another option could be to adjust the questions to measure restorative justice more closely. With these adjustments, the validity of the scale could be enhanced.

Generally, the standardisation of the procedure and situation that was displayed to the participants supported a consistent assessment of the attitude. Using a standardised design, the study should be replicated with a bigger sample. Through this, it is possible to collect responses with a higher variety, especially on the scores of the attitude towards restorative justice scale. Another approach to the enhancement of immersion in the situation could be the use of virtual reality or other immersive technologies (Han et al., 2022; Servotte et al., 2020). Servotte et al. (2020) found that the use of immersive technologies can influence the sense of presence the respondent experiences while being in an artificial situation. This outcome has also been replicated in a study by Han et al. (2022). The study used immersive technology and found that the immersive experience of embodiment had a positive influence on empathy which in turn influenced the quality of their perspective-taking. These studies show that immersion into the situation (by using virtual reality) can have a strong impact on how likely someone is to feel empathy towards or take the perspective of the victim in a given situation. This could ensure that the respondents can more closely relate to and imagine themselves as a victim in the provided situation.

The current study adds to the existing research on VOM and the sparse exploration of the online video chat VOM as an alternative to traditional VOM programmes. The study showed that the relationship between the attitude towards restorative justice and willingness to participate may not be as straightforward as one might expect. Partly due to the complex interplay of variables that could influence one's willingness to participate, no relationship was found between attitude towards restorative justice and willingness to participate in VOM programmes. However, in the current study, no significant difference was found between the willingness to participate in an online video chat VOM and the willingness to participate in face-to-face VOM. Consequently, the participants did not discriminate too much regarding the synchronous forms of VOM. This supports the proposition that online forms of VOM could be a valuable addition to existing VOM forms. Consequently, online video chat could be implemented if the victim or offender is unable to or reluctant to participate in face-to-face VOM. Therefore, victims who fear meeting the offender or feel unable to control their emotions in a face-to-face meeting could resort to online forms which can provide a symbolic distance between the victim and offender (Bonensteffen et al., 2022). Due to its cost and time efficiency, participants who are constrained by time, job or geographical distance are still provided with an opportunity to meet the offender. Additionally, the synchronicity of the communication strategy seems to be of importance to the participants. This may be due to the fact, that synchronous communication channels can convey more cues such as language

variability, tone of voice and gestures (Daft & Lengel, 1986; Swaab et al., 2012). Through this, the victims can comprehend and convince themselves of the offender's credibility and authenticity. However, it is important to control for privacy and connection issues if it is to be implemented.

Overall, the generally rather high mean scores on the attitude towards restorative justice scale showed that the attitude of the participants is overall positive towards restorative justice. Therefore, the majority of the sample perceived rehabilitation and the redemption of the transgression (in a cooperative manner) as most important in the process of restoring justice.

Conclusion

The present study provides some valuable insights into individuals' attitudes towards restorative justice. Overall, this study shows that online video chat could pose a valuable alternative to traditional face-to-face mediation. Especially when face-to-face VOM is not feasible due to geographical or time constraints. If the victims experience fear or strong emotional responses, the online environment can thus create symbolic distance. Special importance can be attributed to the richness of the communication channel, especially the synchronicity. Since synchronicity, rather than the digital nature of online video chat VOM, seemed to influence the willingness rates, it is important to control for its drawbacks. If online video chat VOM is supposed to be implemented, it is important to protect the parties' privacy and make sure that the connection is stable.

All in all, the current study contributed to the limited research on digital VOM programmes and appraised possible factors that could influence the willingness to participate in VOM.

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Appendix A

Introduction to the Study

INFORMED CONSENT

"Start the Meeting – The Effects of Victim-Offender Mediation"

Purpose

Welcome and thank you for participating in this study which is part of my Bachelor thesis at the University of Twente. This study is about victim-offender Mediation (VOM). VOM gives victims and offenders of crimes the chance to communicate about the crime that has been committed. The goal of this study is to learn more about the effects of VOM and the likelihood of participation based on different factors of the individual.

Procedure

In the following study, you are going to be presented with several questions and a video of a victim-offender mediation session. The participation will take approximately 20 minutes and your participation is voluntary. If there are questions that you feel are too sensitive or you feel uncomfortable answering, you do not have to do so. There are no consequences for refusing to answer or withdrawing from the study at any time. If you would like to withdraw from the study after your responses have already been recorded, feel free to contact the researcher within 10 days after participation.

The study is going to contain some sensitive topics that may be distressing for some participants. There is going to be mentioning of the topic of crime and offences as well as issues about the punishment of offenders. Individuals that were involved in a crime, either as a victim or an offender may find the following study distressing.

Confidentiality

The conduction of this study, collection of responses and analysis of the data is only going to be used for educational purposes. The data given will be handled anonymously and stored on the personal devices of the researchers. The data will be deleted one year after the conduction of the study.

Participant Rights

Your participation is voluntary. You may choose not to take part in the study or to stop participating at any time, for any reason, without any consequences. You will receive the full compensation also if you stop participating. To withdraw participation at a later time, please inform the principal investigator via email within 10 days of your participation.

If you have questions about your rights as a research participant, wish to obtain information, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee, ethicscommittee-bms@utwente.nl.

For further information about this study, contact one of the investigators.

The study advisors: studyadvisor-psy@utwente.nl

Appendix B

Explanation of the Procedure and Objective of Victim-Offender Mediation Given to the Participants

The following part contains an explanation for a Victim-Offender Mediation (VOM). Please read it thoroughly to grasp what the idea of a VOM is.

VOM is part of the restorative justice system, which aims to repair harm by providing an opportunity for those harmed and those who take responsibility for the harm to communicate about and address their needs in the aftermath of a crime. The procedure of VOM contains typically three different parties, which are the victims, offenders, and a neutral mediator who guides the mediation. VOM takes place in a secure environment, in which all actors have the opportunity to discuss openly about the crime, following criminal offences and approaches to restore misconduct and receive forgiveness.

In more detail, the process of a VOM starts with the mediator building contact to both the victim and offender of a crime case and makes sure that both tenants want to participate in the mediation by choice and all regulations for participation are adhered to. Following, the mediator establishes a relation to the victim and offender and becomes acquainted with both sides, their aspirations for the mediation and defines how the mediated session is going to proceed. In the mediation session, the victim and offender meet each other in the presence of a mediator. Here, the parties are given the possibility to present their side of the story, fill knowledge gaps, and establish arrangements to restore justice.

In the following you will be asked to recall a situation in which you were involved in a crime, either as a victim or an offender. With the situation in mind, you will be guided through an imaginary VOM, After this, we are interested in your perception of such a mediated contact.

Appendix C

Questionnaire Presentation of the Treatment and Punishment Attitude Scale by McCorkle (1993)

Punishment and Restorative Justice

Generally, there are different approaches to punishment, the best known may be restorative justice and retributive justice.

Restorative justice includes the rehabilitation of the offender and remedying the damage done to the community and the victim. Retributive justice focuses less on the victim and community and more on the offender by imposing adequate punishment.

Rehabilitation is one of the building blocks of restorative justice. It focuses on influencing the offender's behaviour and attitude. These can be tackled in different kinds of treatment or educational programmes in order to get the offender's life back on track.

Retribution soothes the victim and society by assuring that the offender has been punished effectively and adequately. This can, for instance, include incapacitation, which means to impose a prison sentence, curfew or electronic monitoring but also measures like restricting driving in response to driving under the influence.

Following, you will be presented with some statements about punishment. Please indicate to what extent you agree to these statements.

Please indicate how much you agree with the following items (1 = disagree strongly; 4 = strongly agree).

- 1. The primary concern with this criminal should be to make sure he is severely punished for his crime.**
 - 2. If the only way this criminal and others like him can be locked up is to build more prisons, then so be it.**
 - 3. The only way to prevent this criminal from committing future crimes is to keep him locked up.**
 - 4. The courts are generally too easy on people who commit this sort of crime.**
-

Please indicate how much you agree with the following items (1 = strongly disagree; 4 = strongly agree).

1. **Trying to rehabilitate this person would probably be a waste of time.**
2. This offender would probably benefit from the psychological counseling programs offered in the prison.
3. If this offender received educational and vocational training in prison, he probably would not commit crimes in the future.
4. More effort needs to be made to expand and improve programs that would give this offender the chance to change his life.

Note. Bold-faced Items have been reverse-coded.

Questionnaire Presentation of the Willingness to Participate in VOM Scale

There are different ways of conducting Victim-Offender Mediation (VOM). The traditional way is **face-to-face mediation** in which a victim, offender and mediator meet physically. The digital equivalence would be **computer-based VOM** which takes place in an online environment (online video chat). These forms constitute a synchronous form of mediation.

Asynchronous forms of VOM also exist. One would be the exchange of **video messages** that have been recorded beforehand and sent to the other party. Similarly, the affected parties can send each other written **letters** and share their narrative.

While having the situation in mind, please indicate how likely you, as the victim, are to participate in the following forms of Victim-Offender Mediation (1 = strongly disagree; 5 = strongly agree):

1. I would like to participate in face-to-face VOM.
2. I would like to participate in an online video chat.
3. I would like to exchange video messages.
4. I would like to exchange letters.

Appendix D

Debrief Displayed at the End of the Study

Debrief

"Start the meeting" - The effects of victim-offender mediation

Study objective

In the past two years the pandemic enormously accelerated the global, digital transformation of our communication infrastructure and people in all societal domains needed to identify new ways to communicate with each other amid the pandemic; online connectivity increased substantially. Similarly, mediation agencies had to find alternative solutions for conflicting parties to communicate, since face-to-face meetings could not be held. Yet, there is not much known about the effects of online communication in victim-offender mediation in the long term. Will it even be a better, more efficient and cost saving way for victims and offenders to communicate, for example, if both parties live far away or are too afraid to meet in person, but still have high needs to receive information from or about the other party? This research will contribute to the question if digital communication might be a necessary addition that deserves systematic implementation in practice. The research assesses different factors that might determine the willingness to participate in (digital) VOM and which differences exist between the different forms.

How did it work?

As a participant in this study you observed a victim-offender mediation either in form of a face-to-face mediation or an online mediation. In the presented scene you observed three human actors engage in a victim-offender mediation. The variable we manipulated was your role in the victim-offender mediation, where at random you have been assigned to either of the two options of being an offender or a victim. After observing each scene in a random order you answered questions about four different types of variables:

Empathy Offender: Offenders who attend online victim-offender mediation feel less empathic toward the victim than offenders who attend a face to face victim offender mediation.

Attitudes Victims: To what extent does the victim's attitude influence the willingness to participate in (digital) Victim-Offender Mediation?

Guilt/Shame Offender: To what extent do offender's feelings of guilt/shame affect their willingness to participate in digital VOM/video messages?

Cooperation Participants: The study observes how cooperation of a participant towards the other negotiation Partner influences Outcome satisfaction and whether the form of VOM has effects on the cooperation Level of the participants.

Why is this important?

By participating in this study, you contributed your part to research online victim offender mediation. This research adds to the existing pool of knowledge on victim-offender mediation by examining the methodology used when conducting research in this field.

Withdrawing Policy.

If you decide that you want to withdraw from this research, please contact us (researchers) within 10 days and quote your participation number to allow us to locate your data and withdraw it.

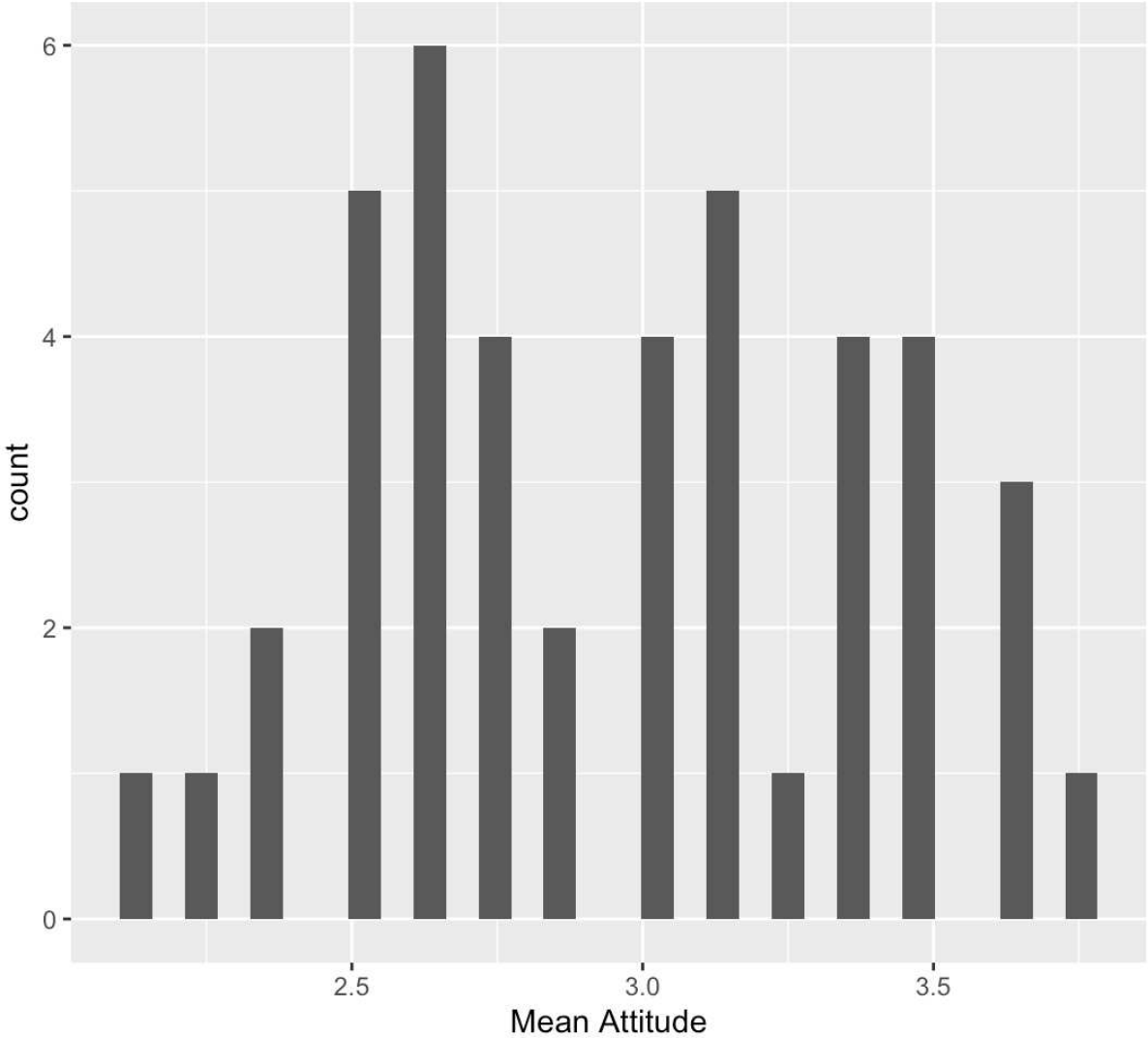
If you have questions about your rights as a research participant, wish to obtain information, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee, ethicscommittee-bms@utwente.nl

For further information about this study, contact one of the investigators.

Appendix E

Figure E1

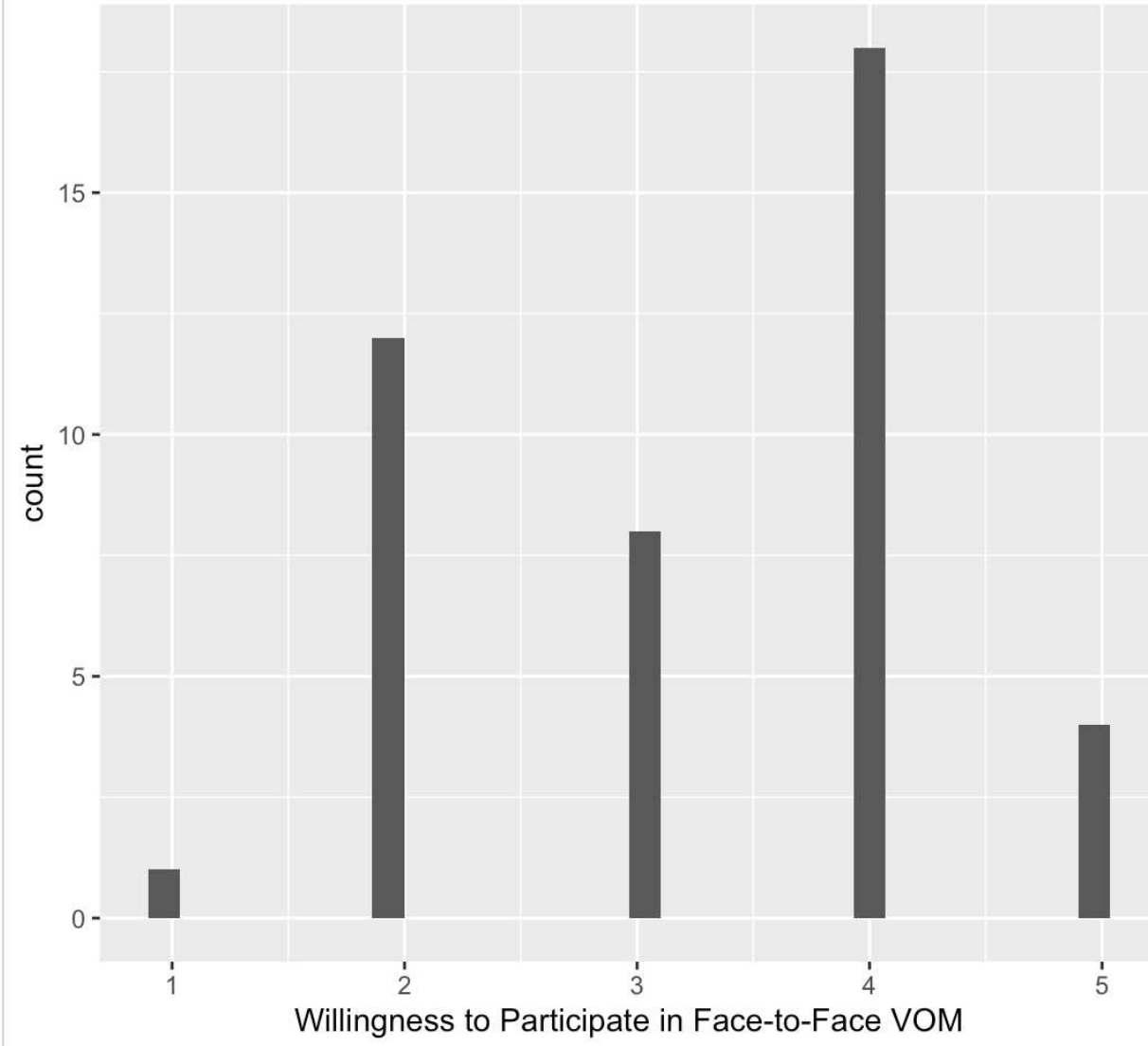
Histogram of the Attitude Towards Restorative Justice Scale.



Note. Distribution of the Mean Scores on the Attitude Towards Restorative Justice Scale.

Figure E2

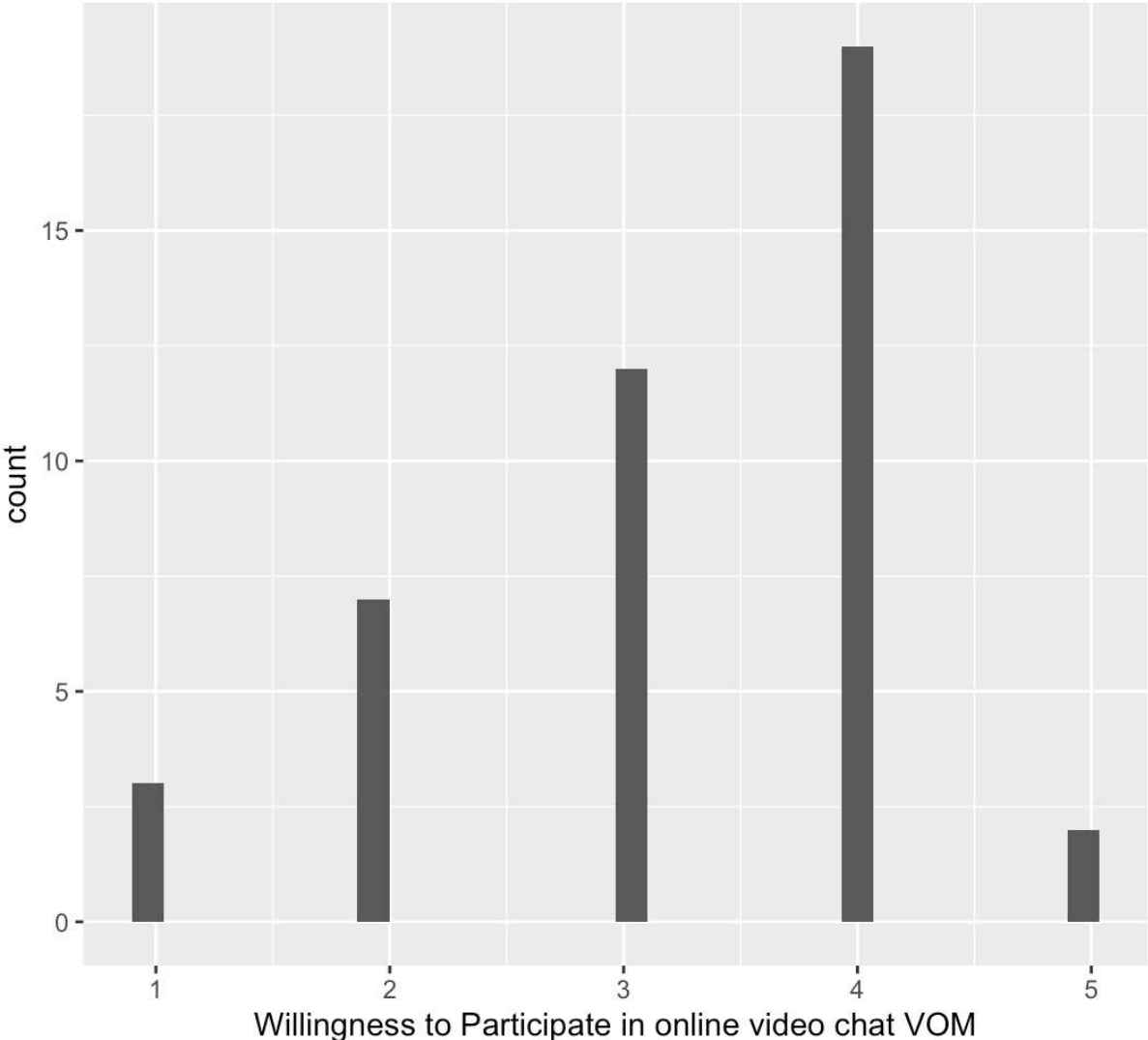
Histogram of the Willingness to Participate in Face-to-Face VOM Scores.



Note. Distribution of the Scores on the Willingness to Participate in Face-to-Face VOM Scale.

Figure E3

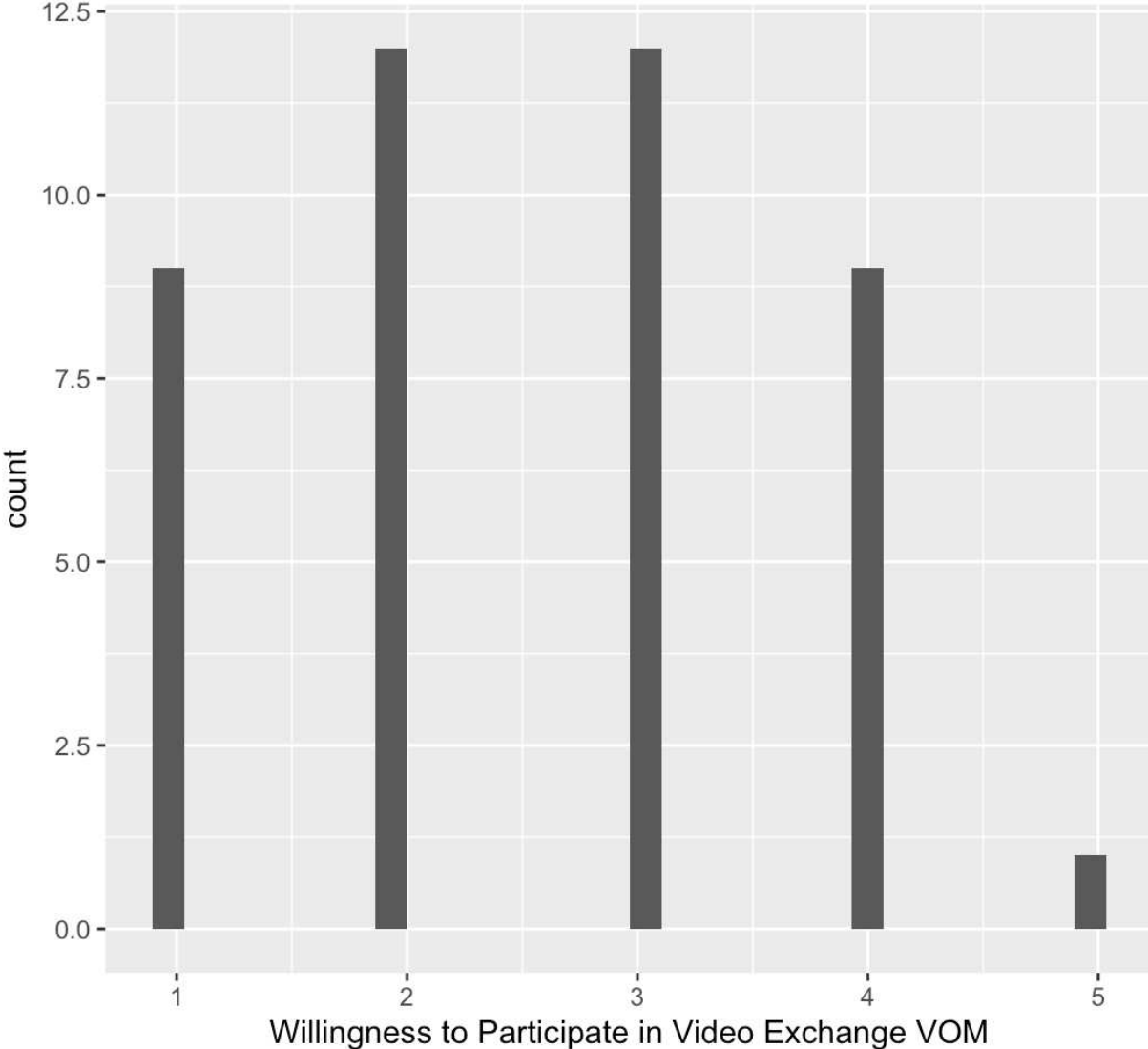
Histogram of the Willingness to Participate in Online Video Chat VOM Scores.



Note. Distribution of the Scores on the Willingness to Participate in Online Video Chat VOM Scale.

Figure E4

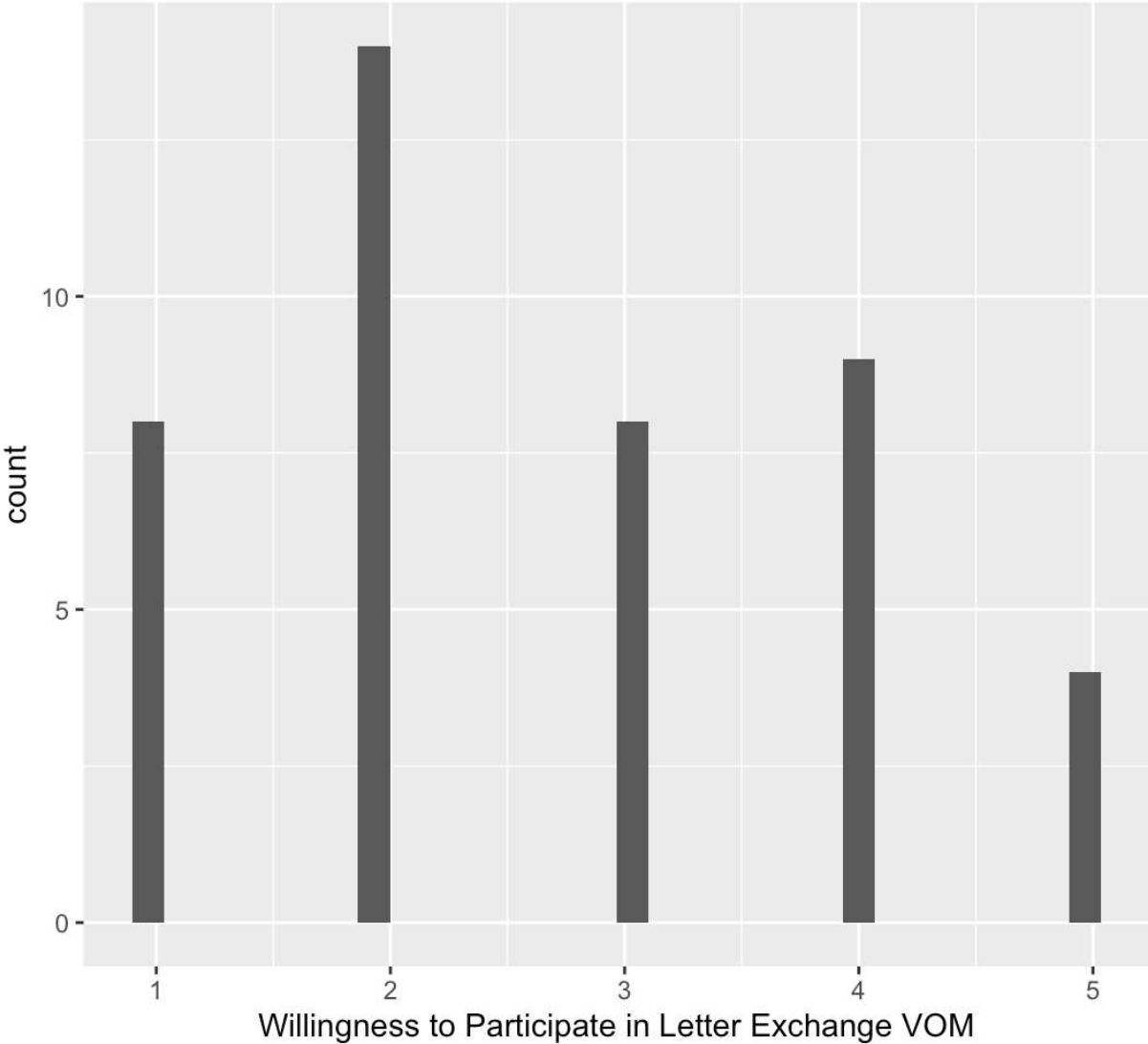
Histogram of the Willingness to Participate in Video Exchange VOM Scores.



Note. Distribution of the Scores on the Willingness to Participate in Video Exchange VOM Scale.

Figure E5

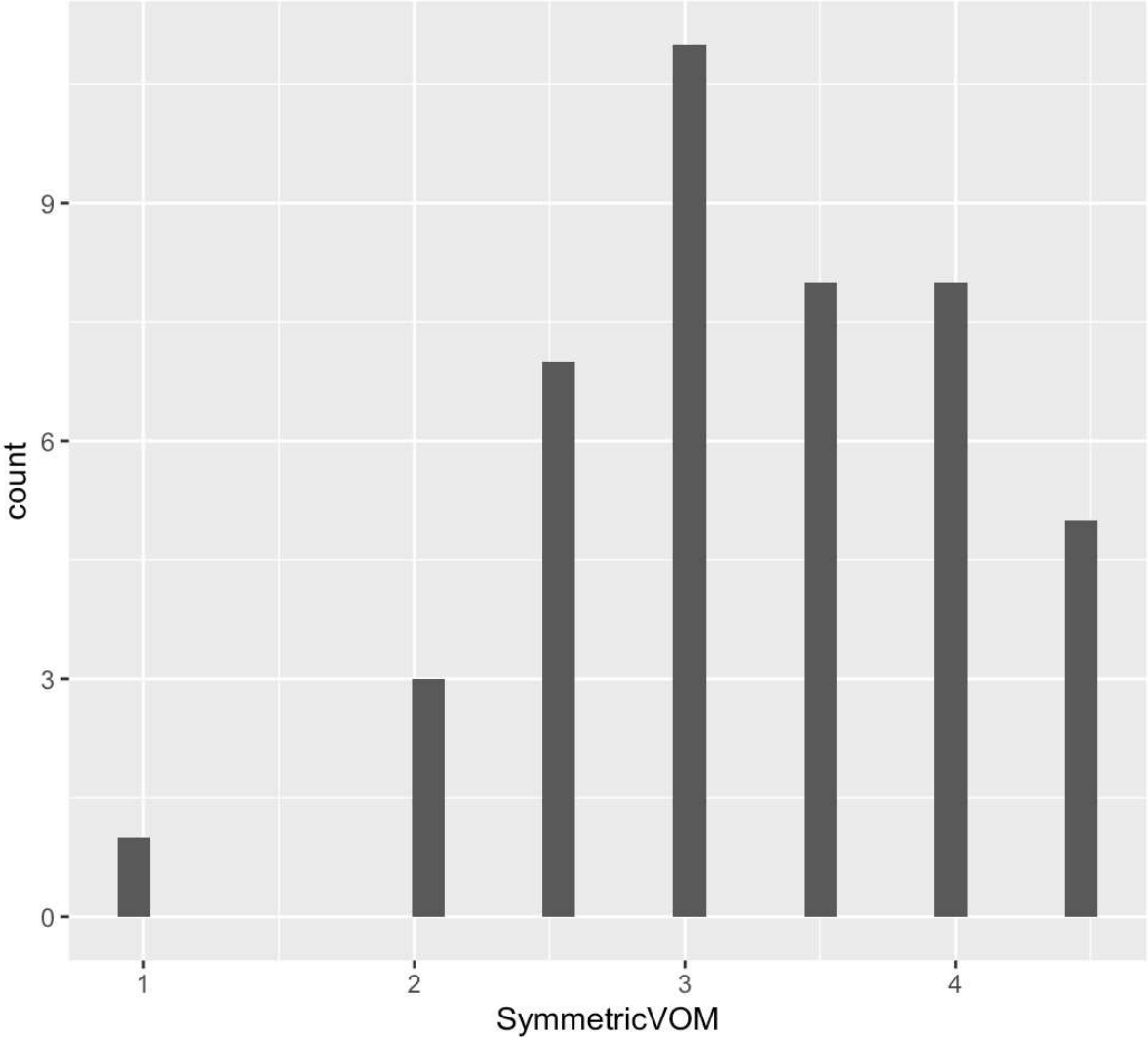
Histogram of the Willingness to Participate in Letter Exchange VOM.



Note. Distribution of the Scores on The Willingness to Participate in Letter Exchange VOM Scale.

Figure E6

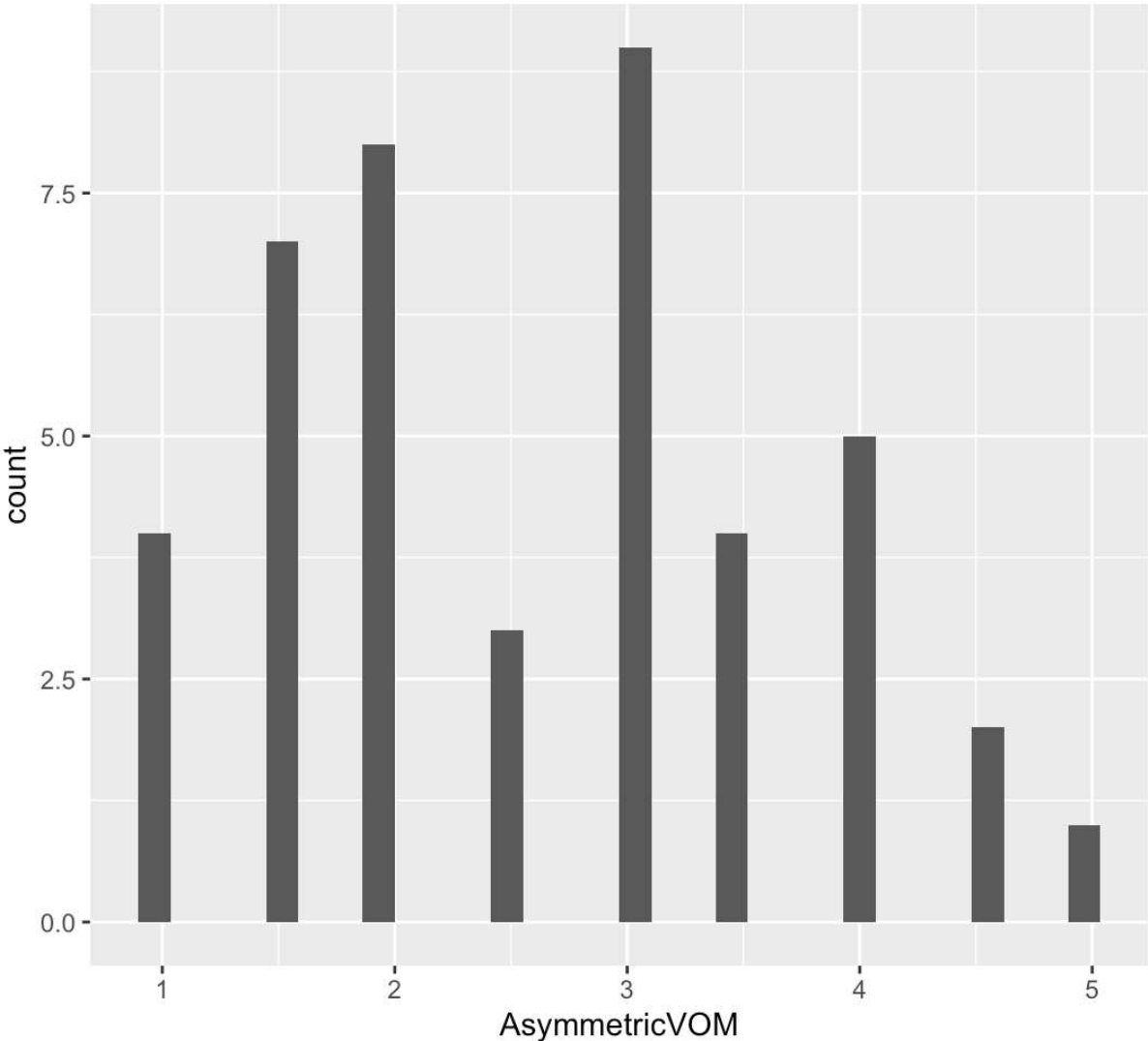
Histogram of the Willingness to Participate in Synchronous VOM Forms Scores.



Note. Distribution of the Scores on Willingness to Participate in Synchronous VOM Forms Scale.

Figure E7

Histogram of the Willingness to Participate in Asynchronous VOM Forms Scores.



Note. Distribution of the Scores on Willingness to Participate in Asynchronous VOM Forms Scale.

Appendix F**Table F1**

Generalised Linear Model for the Effect of Attitude Towards the Restorative Justice System, Age and Gender on the Willingness to Participate in face-to-face VOM.

Effect	Estimate	SE	95% CI		<i>t</i>	<i>p</i>
			<i>LL</i>	<i>UL</i>		
Intercept	2.07	1.28	-.43	4.57	1.63	.112
Attitude	.13	.41	-.68	.94	.31	.757
Age	.01	.01	-.02	.04	.52	.609
Gender	.38	.37	-.34	1.09	1.03	.310

Note. CI = confidence interval; LL = lower limit; UL = upper limit

Table F2

Linear Regression Model for the Effect of Attitude Towards the Restorative Justice System, Age and Gender on the Willingness to Participate in online video chat VOM.

Effect	Estimate	SE	95% CI		t	p
			LL	UL		
Intercept	2.89	1.25	.45	5.33	2.32	.026*
Attitude	.07	.40	-.72	.86	.16	.871
Age	-.01	.01	-.04	.02	-.69	.497
Gender	.25	.36	-.45	.95	.70	.487

Note. CI = confidence interval; LL = lower limit; UL = upper limit

* < .05

Table F3

Linear Regression Model for the Effect of Attitude Towards the Restorative Justice System, Age and Gender on the Willingness to Participate in video exchange VOM.

Effect	Estimate	SE	95% CI		<i>t</i>	<i>p</i>
			<i>LL</i>	<i>UL</i>		
Intercept	2.71	1.39	-.01	5.43	1.96	.058
Attitude	-.06	.45	-.94	.82	-.13	.894
Age	-.00	.02	-.03	.03	-.18	.860
Gender	.06	.40	-.72	.84	.15	.879

Note. CI = confidence interval; LL = lower limit; UL = upper limit

Table F4

Linear Regression Model for the Effect of Attitude Towards the Restorative Justice System, Age and Gender on the Willingness to Participate in letter exchange VOM.

Effect	Estimate	SE	95% CI		<i>t</i>	<i>p</i>
			<i>LL</i>	<i>UL</i>		
Intercept	2.31	1.55	-.73	5.35	1.49	.144
Attitude	.16	.50	-.82	1.14	.32	.751
Age	-.01	.02	-.04	.02	-.59	.556
Gender	.12	.45	-.76	.99	.28	.791

Note. CI = confidence interval; LL = lower limit; UL = upper limit

Appendix G

Table G*Frequency Table of the Control Questions.*

Variable	Sub-Category	N	%
Empathise with scenario	Not at all	2	4.65
	Slightly	10	23.26
	Neutral	5	11.63
	Moderately	15	34.88
	Very much so	11	25.58
Empathise with victim's feelings	Not at all	1	2.33
	Slightly	1	2.33
	Neutral	5	11.63
	Moderately	18	41.86
	Very much so	18	41.86
Empathise with victim's thoughts	Not at all	1	2.33
	Slightly	5	11.63
	Neutral	4	9.30
	Moderately	19	44.19
	Very much so	14	32.56
Imagine being the victim	Not at all	2	4.65
	Slightly	11	25.58
	Neutral	4	9.30
	Moderately	12	27.91
	Very much so	14	32.56
Perceived situation as natural	Not at all	-	-
	Slightly	2	4.56
	Neutral	7	16.28
	Moderately	20	46.51

Motivated to participate in study	Very much so	14	32.56
	Not at all	-	-
	Slightly	3	6.98
	Neutral	6	13.95
	Moderately	21	48.84
	Very much so	13	30.23

Note. Percentages (%) and frequencies (N) of the participants' answers to the control questions. The control questions were measured on a 5-point Likert Scale.