

Computer-based communication in imagined Victim-Offender Mediation: anticipated risks and opportunities

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Abstract

The current study examined the differences in the anticipated satisfaction with a victim-offender mediation (VOM) based on three computer-based communication technologies (CBC). Within this context, interpersonal aspects of communication were assumed to be influential factors. Richness of information, conversational flow, and emotion communication were expected to vary across CBC technologies resulting in different utility for VOM. Based on that it was expected that multi-party video conferencing would be anticipated more satisfactory than video messaging, and multi-party text interaction. The online experiment adopted a 2 (victim vs. offender) x 3 (CBC-technologies) mixed design and consisted of two blocks. In both blocks the participants were asked to recall and describe a severe conflict situation, one in which they hurt someone and one in which they got hurt. Subsequently, they took part in imaginary CBC-VOM's. Forty-eight participants took part in the study. Against the expectations no significant difference in the anticipated satisfaction with the mediation process across the three CBC technologies was found, $F(2,43) = 0.92$, $p = 0.41$, partial $\eta^2 = 0.07$. However, the inter-item correlations of the dependent variables prompted an explorative path analysis, in which two branches of interpersonal aspects of communication (implicit & explicit) led to the anticipated satisfaction with the mediation process, and subsequently to the anticipated satisfaction with the mediation outcome, $F(5,88) = 16.45$, $p < 0.001$. These findings indicate that against the expectations all three CBC technologies have their utility for VOM depending on the individuals perceived capability to establish a conversational flow, communicate emotions, and experience rich communication.

Keywords: Victim-Offender Mediation, VOM, restorative justice, computer-based communication, CBC, interpersonal aspects of communication, conversational flow, richness of information, emotion communication

Introduction

Traditional retributive justice systems in western societies rely heavily on court processes, which aim at the restitution of justice by the means of a unilateral imposition of punishment based on law constitutions (Wenzel, Okimoto, Feather & Platow, 2008). However, the composition and proceedings of court processes often lead to unsatisfactory results for directly affected parties (Bouffard, Cooper & Bergseth, 2017; Poulson, 2017; Dhimi, 2012). Both victims and offenders regularly reported perceived insufficient involvement during court processes ensuing in neglected needs and unachieved goals (Wenzel et al., 2008). In contrast, restorative justice aims at the reparation of “justice after the occurrence of an offence that is primarily oriented towards repairing the individual relational and social harm caused by that offence” (Walgrave, 2013, p.21). Hence, restorative justice emphasizes multiple dimensions of a wrongdoing in a bilateral process (Gerkin, Walsh, Kuilema & Borton, 2017; Wenzel et al., 2008). Over the past decades, restorative justice practices have been established as a supplement or even a substitution for traditional retributive justice systems and are implemented across countries worldwide (Hansen & Umbreit, 2018; Bolivar, 2013; Parsons & Bergin, 2010; Choi & Severson, 2009; Latimer, Dowden & Muise, 2005).

Among formal restorative justice practices victim offender-mediation (VOM) is an acknowledged and widely adopted form with a significant body of research (Hansen & Umbreit, 2018; Shapland et al., 2007; Nugent, Umbreit, Wiinamaki & Paddock, 2001). VOM encompasses the process of providing support to victims and offenders of a wrongdoing to discuss impacts and explore possibilities for reparation of justice through the means of mediated interaction (Umbreit & Hansen, 2017). Thereby, it draws on its humanistic roots to foster a dialogue-centered process, in which the affected parties can share their narratives and express both their needs and thoughts. Depending on the parties' preferences, this interaction can be either direct or indirect (Lewis & Umbreit, 2015). Direct formats of VOM comprises mediated face-to-face interaction between the victim and the offender, whereas popular indirect formats are for example based on shuttle mediation or letter exchanges (Freitas & Palermo, 2016). Research and implementation of VOM indicate that direct formats based on face-to-face mediation are far superior to indirect formats, considering the average satisfaction of the victim and the offender with the mediation outcome (Hansen & Umbreit, 2018). This difference stems from both the participants' uncertainty about the mediator's capability to convey crucial information during indirect mediation and that victims are less likely to accept an apology in indirect formats (Shapland et al., 2007). These factors are less prominent in direct formats due to additional verbal and non-verbal input that lowers the chance of miscommunication and in turn enhances the trustworthiness of the respective conversational partner (Choi & Severson, 2009). Contrary, indirect formats are less confrontational for participants. Hence, it lowers the anticipated uncertainty a physical encounter might induce and facilitates information exchange (Bouffard, Cooper & Bergseth, 2017).

Despite the critical gap of satisfaction between the outcome of direct and indirect VOM formats, the latter have their utility if both parties agree on the participation in VOM but either or both do not want to meet physically. The current study examines the anticipated satisfaction with alternative, computer-based, mediation formats to address this problem. Therein, underlying interpersonal aspects of communication are considered to be influential determinants.

The COVID-19 pandemic as a potential accelerator in the field of VOM

Additionally, as exemplified by the COVID-19 pandemic, there are circumstances that inhibit the possibility to meet physically. The pandemic itself and the regimentations taken to mitigate the spread of the virus shook the world's economy and have far-reaching societal implications (Donthu & Gustafsson, 2020; Ibn-Mohammed et al., 2021). COVID-19 altered how people are allowed or willing to interact (Cruwys et al., 2021). These effects on society will presumably prolong due to the occurrence of new mutations of the virus and are likely to outlast the regimentations as they restructured social interaction in every domain (Donthu & Gustafsson, 2020). These circumstances are also affecting how the implementation of VOM is currently possible. Opposing these negative impacts on the feasibility of face-to-face VOM, the current situation might also present a momentum to stimulate the exploration and research of alternative formats of VOM.

Videlicet, the COVID-19 pandemic has led to an immense digitalization of the local and global communication infrastructure. This happened not only at the technical but also at the socio-technical level of telecommunication technologies (Schiller, 2020). Research concerning technological development and its socio-technical adoption emphasizes that a predominant design can mitigate the exploration and implementation of alternatives, even if those might be beneficial under certain prerequisites (Unruh, 2000). A predominant design is defined by a preferred technology and its surrounding social practices, heuristics, and beliefs that create a path-dependency, which in turn sustains the existing system. Transferred to VOM direct face-to-face mediation is the predominant design, as it is consistently preferred over alternatives. However, the current situation might open the opportunity to challenge this heuristic. In this context, the possibilities of computer-based communication (CBC) technologies for VOM are of particular interest, because they provide qualities of not only direct mediation but also indirect mediation formats. Therefore, they could close the existing gap between face-to-face mediation and traditional indirect mediation formats. The current study attempts to clarify the utility of a set of CBC technologies for VOM concerning their respective qualities.

Due to their versatility and variety of featured communication channels multi-party video conferencing, video messages, and multi-party online text interaction are CBC technologies that are anticipated to provide added value for VOM practices (Bonensteffen et al., 2021). Swaab et al. (2012) utilized a two-dimensional model of communication channels to cluster communication forms

respective to their features of synchronicity and communication style. Hereby, the dimension of synchronicity refers to whether communication takes place asynchronously, relayed with a time delay, or synchronously, in real-time. The dimension of communication style corresponds to the extent in which a communication form operates on text-based communication or face-to-face communication, considering vocal and visual cues. Bonensteffen et al. (2021) conveyed this model of communication channels to cluster the CBC technologies of interest and traditional formats of VOM (Figure 1). This categorization is adopted for the current study for further implementation.

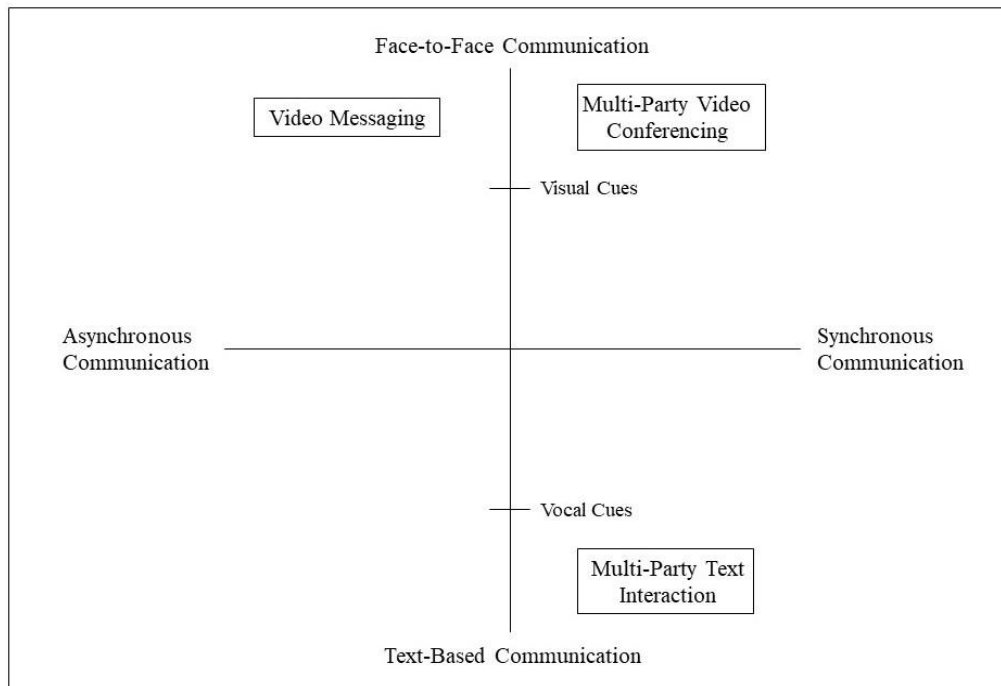


Figure 1. A two-dimensional model of communication channels.

Criteria to account for in VOM based on CBC

Insight into strengths and weaknesses of traditional VOM formats is a premise to establish criteria for the assessment of the three CBC technologies concerning their usability for VOM. VOM often has personal, interpersonal, and societal benefits, compared to traditional retributive justice systems (Poulson, 2017). In most cases, victims and offenders report higher levels of satisfaction with the overall process and derive psychosocial benefits from their participation (Bolivar, 2013; Hansen & Umbreit, 2018). Moreover, victims often receive a valuable apology and VOM reduces the probability of the offender to recidivate (Jonas-van Dijk et al., 2020; Hansen & Umbreit, 2018). Generally, restitution agreements are more probable to be completed, the overall costs of the process are lower compared to traditional court processes, and offenders are more likely to deflect the traditional justice system (Hansen & Umbreit, 2018).

Besides these positive effects, there are two frequently specified reasons VOM is rejected by victims or offenders. The first concerns the meeting itself and its association with the encounter of the opposing party (Bolívar, 2013). Influential factors for victims are the anxiety of being unable to manage the meeting, a negative attitude towards the meeting, the feeling of being pressured towards participation, and being afraid of or having negative feelings related to the opposing party (Bolívar, 2013). Reported feelings associated with these factors are fear, anger, and skepticism (Umbreit, Coates & Vos, 2004). The meeting is sometimes perceived as confronting and unsafe by the involved parties and therefore they rather want professionals to repair justice instead (Bolívar, 2013). The second reason for the rejection of participation is the attribution of a lack of value to the wrongdoing or the conference by either party (Umbreit, Coates & Vos, 2004). If participants must travel a big distance for the mediation or consider the process not worth the personal effort the likelihood of rejection increases (Umbreit & Hansen, 2018).

Interpersonal factors are crucial for satisfactory VOM. Thereby, the number of communication cues and channels, the possibility to express and understand emotions and behavior, the atmosphere that the encounter creates, the symbolic meaning, and the possibility to embed this information into a context is of importance (Bonensteffen et al, 2021; Rypi, 2016; Arrigo & Williams, 2003). These factors are also relevant related to experienced feelings of insecurity, anger, and fear due to the tension the mediated contact can evoke in either party (Hansen & Umbreit, 2018). Additionally, the possible physical proximity to the other party can be experienced as too stressful or confronting (Shapland et al., 2007). Thus, the same interpersonal factors leading to positive results in physical face-to-face mediation can result in the rejection of participation, despite initial interest (Bolívar, 2013). Indirect VOM formats are due to the absence of a physical meeting less confronting and less likely to evoke anxiety or distress in attendees, but they are not considered as beneficial as face-to-face meetings (Bouffard, Cooper & Bergseth, 2017). The gap of satisfaction between the outcomes of direct and indirect VOM on the one hand and the emotional states a physical meeting can evoke in some parties highlights that additional methods of VOM are necessary to create a methodology of sufficient scope for involved parties. CBC is a promising technology, suited to step in and enrich the methodology of VOM.

The need for research on VOM in a CBC environment

Currently, there exists a lack of information about CBC technologies and their application possibilities in restorative justice practices like VOM, not only in general but also specifically related to the discussed strengths and limitations, although literature perceives them as a promising means to overcome structural flaws of existing VOM formats in either direct or indirect mediation (Freitas & Palermo, 2016). Freitas and Palermo (2016) demonstrated that Online Dispute Resolution, a CBC technology for restorative justice purposes, holds several advantages for involved parties. First, it

generates savings due to reduced personal efforts and travel costs for parties. Second, a virtual environment is flexible and can be tailored to the exact needs of the parties. Third, it is assumed to avoid jurisdiction issues. However, other studies emphasize technical deficiencies, such as the inappropriate transmission of contextual information, of CBC technologies as a major obstacle towards successful VOM (Caneiro et al., 2012). Considering the developments in CBC technologies over the past decades both studies are a bit outdated, particularly because they mainly rely on theoretical reasoning and comparison.

The lack of theoretical and practical research on VOM conducted with CBC technologies contradicts the high expectations and mostly positive perception of it. Nonetheless, literature exists that merely associates negative impacts on VOM and CBC. However, independent of the assessment of the utility of CBC technologies, interpersonal aspects are considered as impactful within this context (Bonensteffen et al., 2020; Bouffard et al, 2017; Caneira et al., 2012; Hanses & Umbreit, 2018; Freitas & Palermo, 2016). Therefore, the current study aims at the clarification of the level of satisfaction victims and offenders anticipate in VOM based on multi-party video conferencing, video messages, and multi-party online text interaction. Therein, it examines the perception and influence of interpersonal aspects of communication, emphasizing anticipated richness of information, anticipated conversational flow, and anticipated emotion communication. These aims of the study lead to the following research question: Does the anticipated satisfaction of CBC-VOM differ as a function of the mediation format (i.e., multi-party video conferencing, video messages, and multi-party online text interaction)?

The ambiguity of Richness of Information in mediation scenarios

The concept of richness of information is defined as the communication channels' ability to provide communication synchronicity and visual or vocal information cues (Daft & Lengel, 1986). The CBC technologies of interest are categorized based on these characteristics (Figure 1). The communication orientation model states that the role of richness of information is ambiguous in mediation settings and its utility depends strongly on the commencing will of the actors to cooperate or not (Swaab, Galinsky, Medvec & Diermeier, 2012). Premised on this conception Swaab et al. (2012) developed three distinct scenarios. First, richness of information is important if one or both actors are uncertain whether they cooperate or not. In this case, the presence of para-verbal and nonverbal cues allows the interpretation and evaluation the stance of the opposing party. This supports the establishment of cooperative behavior resulting in trust and information sharing. Second, it is less important if the parties are willing to cooperate, trust between parties exists and information is shared. Thus, if parties' attitude towards the mediation is cooperative, it is likely that they share a history or identity. In this case, para-verbal and nonverbal cues are not relevant, because a relationship is already established. Third, richness of information restrains the mediation process if parties approach it uncooperatively. In this

scenario, para-verbal and nonverbal cues are implicitly displaying non-cooperative intentions ensuing in less information sharing and integration. Hence, less richness of information leads to better outcomes.

The role of richness of information in the context of VOM is particularly interesting in a CBC environment. Participation is always voluntary, and each party has separate preparation meetings with the mediator preceding the mediated contact. Hence, the expectations and aims of the mediated session should be established. The victim and the offender have most likely a neutral or negative attitude towards the opposing party, with a tendency to experience negative feelings because of the wrongdoing. Depending on whether the offender respectively the victim was foreign, scenario two can be of interest. Notably, in line with Swaab et al. (2012) richness of information is divided into two discrete qualities which will be defined as, the presence of (1) visual and/or vocal cues and (2) synchronicity. Thus, all the above-discussed scenarios are of interest for VOM and the properties of the CBC technologies in respect to richness of information vary (see figure 1). In most scenarios, richness of information should be beneficial for VOM but is counterproductive if opposing parties have a noncooperative orientation. For that reason, the following is hypothesized:

(H1) The anticipated satisfaction with the mediation process will be higher in multi-party video conferencing, in which the mediation is perceived to entail vocal and visual cues and is synchronous, than in video messaging, in which the mediation is perceived to entail vocal and visual cues but is asynchronous, and multi-party text messaging, in which mediation is perceived to have no visual and vocal cues but is synchronous.

Conversational form as means to construct social structures

The flow of conversation refers to traits like high-quality turn-taking, short response latency, and few interruptions. The flow of conversation is the subjective experience, whereas conversational form is objective (Koudenberg, Gordijn & Postmes, 2014). These traits surpass the function of pure informational exchange. They act both as an indicator of and a feedback loop for the relationship between communication partners (Dunbar, 2004). Therefore, every aspect of a conversation that is not content-related is defined as conversational form (Koudenberg, Postmes & Gordijn, 2017). A feeling of solidarity can emerge from either bottom-up, like defining common ground, or top-down processes, such as identifying shared characteristics (Koudenberg et al., 2017). Marginal alterations in the conversational form and its subjective experience cannot only have an impact on these processes but also on the regulation of social structure within a group or dyad. In this context, Koudenberg et al. (2017) identified three distinct structural factors respective to the flow of conversation: the regulation of social norms, the maintenance of hierarchy, and the maintenance of shared reality.

The flow of conversation is relevant at two distinct levels for VOM. First, the overall impact of the conversational flow on the emergence and maintenance of social structure should influence the atmosphere of the mediated session, independent from the content of the conversation. This could establish a kind of shared reality in which the offender could be humanized, and the victim is not threatened to be revictimized. This might be reflected by the relevance of equal participation in VOM (Gerkin, 2009). The second relevant level refers to its implications for CBC. As the conversational flow in CBC is highly receptive to latency delays CBC, more pauses and interruptions might occur, which could confuse turn-talking (Koudenberg et al., 2018). These disturbances are not controllable and might counteract the development of a social structure. This is particularly interesting if face-to-face mediation is compared to CBC mediation, but as it might harm the mediation outcome, differences within CBC technologies are equally important. Therefore, the following is hypothesized:

(H2) The anticipated satisfaction with the mediation process will be higher if participants of the mediation anticipate the experience of a conversational flow, and this will be the most in multi-party video conferencing, followed by multi-party text interaction, and the least in video messages.

Two types of satisfaction and their relevance for this study

Besides these anticipated effects on the satisfaction with the mediation process, the literature about VOM distinguishes between satisfaction with the mediation outcome and the mediation process (Hansen & Umbreit, 2018). The former refers to the satisfaction of the involved parties with the mediation result, whereby the needs of each faction vary. Hansen and Bradshaw (2003) identified three predictors for satisfaction with the outcome of a mediation that are relevant for victims. First, the victim had trust in the mediator. Second, the victim considers the restitution agreement as fair. Third, the victim had a strong desire to meet the offender. The possibility to express repentance and consequently being humanized by the victim are two predictors for satisfaction with the outcome for offenders (Latimer et al., 2005). Finally, the complete apology, an established term within the field of VOM, is a crucial aspect for both parties considering the outcome satisfaction and its perceived fairness (Choi & Severson, 2009; Hansen & Umbreit, 2018). It encompasses the acknowledgment of the wrongdoing, the expression of repentance for the victim's consequences, and the assurance to take responsibility for both the wrongdoing and the consequences, by the offender (Choi & Severson, 2009). Furthermore, the offender should offer restitution and promise not to recidivate (Bonensteffen et al, 2020).

The mediation process is standardized to ensure a coherent and satisfactory VOM. This process consists of four steps (Umbreit & Armour, 2011). Firstly, an intake, wherein the mediator contacts the offender and the victim separately before the mediated contact, to assure that all requirements are met. Secondly, separate meetings with the mediator and the victim or offender in

preparation for the mediated contact. Thirdly, the mediated contact itself. Fourthly, separate follow-up sessions to ensure prolonging effects. The overall process but especially the mediated contact should be victim-centered, with both parties being as well involved as able to take influence on the conversation and the process (Freitas & Palermo, 2016; Choi & Severson, 2009). It is assumed that the interpersonal aspects relate directly with the mediation process, but only indirectly with the mediation outcome. The integration of all information leads to the following hypothesis' concerning the overall satisfaction with the outcome and the process:

(H3) Multi-party video conferencing is anticipated to be more satisfactory than video messaging and multi-party text interaction regarding the mediation outcome.

(H4) Multi-party video conferencing is anticipated to be more satisfactory than video messaging and multi-party text interaction regarding the mediation process.

The model of emotion communication in CBC technologies

A topic linked to a certain goal of exchange is the broader context in which parties meet to communicate, in face-to-face scenarios and on virtual platforms alike (Derks, Agneta & Bos, 2008). According to the model of emotion communication in CBC a reciprocal process occurs in which a transmitter expresses an emotion while the receiver tries to recognize it. Hereby, the virtual environment results in reduced visibility and therefore reduced social presence (Derks et al., 2008). Social presence is divided into a physical and a pure social dimension of sociality (Manstead, Lea & Goh, 2011). The model of emotion communication in CBC identifies two explicit and implicit types of emotion communication (Derks et al, 2008). First, a dialogue in which either the content or the style of communication causes emotions to be implicitly or explicitly the subject of the exchange. Second, the expression of discrete emotions, and third, the recognition of discrete emotions.

According to the model of emotion communication, a couple of factors must be considered in VOM in a CBC environment. The overall degree of emotional expression lowers if the opposing party is foreign (Derks et al. (2008). This should be equally relevant and true for all CBC technologies. Additionally, a rectification towards the expression of rather positive emotions happens, due to reason of social acceptance. Although the model states that negative emotions are more probable to be expressed in an anonymous CBC environment, because less correction towards social norms takes place, it concludes that the tendency towards positive emotion expression should prevail in conversation. Furthermore, it states that CBC technologies are not impersonal mediums, nor imply difficulties in emotion communication (Derks et al. 2008). Contrary, Shapland et al. (2007) stated that participants of VOM reported a lower degree of expressed and experienced emotions in settings other than direct face-to-face mediation. This tension between theory-building and applied research calls for clarification. The vast technological development since the publication of these articles reinforces the

need to explore the role of emotion communication within CBC-VOM. The contradicting information does not allow to formulate a hypothesis regarding the differences in the capability to communicate emotions across CBC technologies used for VOM. Therefore, measures of the perceived capability to communicate emotions will be taken and used for the exploration of differences and relationships.

The current study

To answer the research question, the study adopted a mixed design. Each participant was asked to take the victims' and the offenders' perspective. They were randomly assigned to one of three experimental conditions, which remained the same for both scenarios. These conditions determined whether the imaginary VOM would be based on multi-party video conferencing, video messages, or multi-party text messaging. The whole study was autonomously conducted online and was based on the participant's imagination. Severe conflict situations from the participant's life were utilized to mimic the preconditions for a CBC-VOM. The participant was guided by open questions to sketch the situation. This set the mood for the subsequent imaginary VOM, in which a detailed description of the mediation process was given. This description was solely varied regarding information about the respective CBC technology. For each situation, the satisfaction with the outcome, satisfaction with the process, capability to communicate emotions, capability to establish a conversational flow, and the perceived richness of information of the mediation medium was measured. These measures were used to compare results for the different conditions.

Method

Research Design

This study adopted a 2 (perspective: victim vs. offender) x 3 (CBC technology: multi-party video conferencing vs. video messages vs. multi-party text interaction) mixed design, in which perspective was varied within-subjects and CBC technology between-subjects. Participants were asked to remember and describe two distinct situations, one in which they hurt someone severely (offender's perspective) and one in which they got hurt severely (victim's perspective). Successively, they took part in two imaginary VOM's through one of the three CBC technologies (multi-party video conferencing, video messages, multi-party text interaction), which remained the same. Both the order of the taken perspectives (within-subjects) and the CBC technology (between-subjects). The CBC technology, once assigned, remained the same across both perspectives. An identical set of questionnaires was administered after each imaginary VOM. The study was approved by the board of ethical commission of the faculty of Behavioral, Management, and Social Sciences of the University of Twente.

Participants

51 respondents took part in this study. Cases were screened based on participation time (less than 15 minutes), degree of completion (less than 50%), outliers (univariate and multivariate on dependent variables), and missing responses or reported problems (perceived authenticity of the study scale) on the study's approach as well as serious participation. A case was excluded if at least two criteria were met. Therefore, 4 cases were dismissed. The remaining sample of 47 participants (59.6%, $n = 28$ female; 38.3%, $n = 18$ male, 2.1%, $n = 1$, non-binary) was used for analysis. The participants were between 19 and 60 years old ($M = 30.43$, $SD = 11.48$). Respondents were mostly German (76.6%, $n = 36$), followed by Romanian (4.2%, $n = 2$), and Chinese, Dutch, French, Polish, Scottish, Slovenian, Swiss, Turkish and Vietnamese (respectively 2.1%, $n = 1$). 10 (21.3%) respondents finished primary education, 16 (34.0%) finished secondary education, 10 (21.3%) respondents had a bachelor's degree, 9 had a master's degree (19.1%) and 2 (4.3%) responses were missing. Of the 47 respondents were 23 (48.9%) students, 16 (34.1%) employed, 4 (8.5%) self-employed, 3 (6.4%) unemployed, and 1 (2.1%) on maternity leave. Three different kinds of convenience sampling methods were used to approach participants. They could either enroll via Sona-Systems (a university platform where undergraduate students earn credit points as part of their curriculum), were asked to participate and share the study via a personal e-mail or were attracted through social networks (Facebook & Reddit). Informed consent was given by all participants. There were no person-related exclusion or inclusion criteria. Participation required a technical device with an internet connection.

Procedure

The participants conducted an online survey designed with Qualtrics. First, they were welcomed and a short introduction to the topic was given. They were informed about the fact that they will be asked to recall and describe emotional situations from their past, that participation is voluntary, all information is anonymized, and that they can stop at any given moment. Informed consent was given. Demographic data regarding age, gender, nationality, education, and occupational status were collected. The participants received a description of the study's procedure, providing information about VOM and explaining that they will be asked to imagine two situations.

Secondly, dependent on their sub-condition the participants were asked to recall either a conflict situation in which they got hurt (victim's perspective) or one in which they hurt another person (offender's perspective). They were asked to describe the situation through five open questions. With this situation in mind, the participant was guided through an imaginary VOM. The participant was given the description of all four crucial steps in VOM: (1) the approach of the mediator, (2) briefing before the mediated contact, (3) the mediated contact, and (4) follow-up meeting with the mediator. The participant was invited to imagine this procedure as vividly as possible. The description of the process and the results were the same among all three conditions (multi-party video

conferencing, video messages, multi-party text interaction). The only differences were the description of the respective CBC technology and thereon dependent features (e.g., the mediator as the transmitter of the video messages). Thereafter, each participant was asked to fill in a questionnaire regarding respectively the satisfaction with the outcome, the satisfaction with the mediation process, the capacity of the communication technology, and the impact of interpersonal aspects of communication. The interpersonal aspects of interest were emotion communication, conversational flow, and richness of information. Thirdly, this procedure is repeated from the other role (victim or offender), but with the same experimental condition. Lastly, the participant is debriefed, thanked, and asked if he had questions, does want to make any suggestions, or wishes to receive the results of the research.

Materials

Questionnaire tool

Qualtrics was used to design the experiment and administer the data collection. The experiment was designed for desktop and mobile devices. Internet connection was a premise.

Recall and description of hurtful situations

The basis for the following imagined VOM set the recall and description of hurtful situations from the participant's past. Two distinct situations were recorded, one in which the participant hurt another person and one in which the participant got hurt by another person. The items were based on the survey "kwetsen in interacties" from dr. Sven Zebel (unpublished study, 2008).

The participant was asked to recall a situation in which they physically and/or emotionally got hurt, respectively hurt another person. The chosen situation should have met the following requirements: it should have been a severe situation, it should not have been resolved afterward, and it should have been a situation that left the participant with a desire to share and express his narrative (victim's perspective), or with the desire to apologize (offender's perspective). To explicate the situation and make it more feasible for the participant five open questions were given. These were related to the events preceding the situation, the description of the hurtful situation, the feelings of the participant within and after the situation, the anticipated feelings of the opposing person within and after the situation, and the description of consequences of the hurtful situation.

Independent variables

CBC technologies

The set of CBC technologies is the main independent variable in this study. Participants were randomly allocated to one of the following three conditions: (1) multi-party video conferences, (2) video messages, or (3) multi-party text interaction. As the study was based on anticipation, this manipulation took place via the alteration of the imaginary VOM. Examples were given to connect the CBC technologies to the respondent's prior knowledge. An example for the multi-party video conferencing conditions is: *The mediator proposes to use video conferencing for the mediated contact.*

You can think of Skype or Zoom, for example. The instructions for the imaginary VOM were adjusted to match the properties of the respective CBC technology. An example for the multi-party text interaction condition is: *Envision how, guided by the mediator, both the offender and you write text messages.* For the complete instructions see *Appendix A*.

Perceived authenticity of the study

The perceived authenticity of the study was measured with a scale encompassing four statements, one of which was formulated reversed. All items were measured with a five-point Likert scale (strongly disagree – strongly agree). An example for the perceived authenticity of the study is: *It was difficult for me to envision the imaginary Victim-Offender mediation.*

Dependent variables

Anticipated satisfaction with the mediation outcome

The participant's satisfaction with the mediation outcome was measured with a scale encompassing five statements, one of which was formulated reversed. All items were measured with a five-point Likert scale (strongly disagree – strongly agree). An example of the satisfaction with the mediation outcome is: *I am satisfied with the overall result of the imagined mediation.* Factor analysis showed 1 underlying factor with an eigenvalue greater than 1 ($\lambda = 2.81$) which explained 56.2% of the total variance. The reliability was good with $\alpha = 0.86$.

Anticipated satisfaction with the mediation process

The participant's satisfaction with the mediation process was measured with a scale encompassing six statements, one of which was formulated reversed. All items were measured with a five-point Likert scale (strongly disagree – strongly agree). An example of the satisfaction with the mediation process is: *I am satisfied with the form of digital communication I (imaginary) experienced.* Factor analysis showed 1 underlying factor with an eigenvalue of greater than 1 ($\lambda = 3.81$) which explained 63.5% of the total variance. The reliability was excellent with $\alpha = 0.91$.

Anticipated richness of information

The richness of information was measured with a scale encompassing five statements. All items were measured with a five-point Likert scale (strongly disagree – strongly agree). This scale contained two subscales corresponding to the two dichotomies of the concept (see *figure 1*). Items 1, 4, and 5 were concerning visual and/or vocal cues. Items 2 and 3 were concerning synchronicity. An example of richness of information is: *During the imagined communication with the other party, I felt that I could see gestures of the opposing party.* Factor analysis showed 2 underlying factors with an eigenvalue greater than 1 ($\lambda = 2.81$; $\lambda = 1.09$) which explained 78.0% of the total cumulative variance (56.2%; 21.8%). Principal component analysis and the direct oblimin rotation method revealed that items 1, 4, and 5 accounted for the stronger factor while items 3 and 4 accounted for the weaker. These

component extractions mirror exactly the two qualities of the construct. The reliability of richness of information (visual and/or vocal cues) was excellent with $\alpha = 0.93$. The two items related to richness of information (synchronicity) did not correlate with $r = -0.06$. Therefore, both items could not be computed into a scale and were individually treated as constructs for statistical analysis. They will be referred to as richness of information (synchronous) and richness of information (asynchronous). The item concerning richness of information (synchronous) was: *During the imagined communication with the other party, I felt that I could respond in real-time*. The item concerning richness of information (asynchronous) was: *During the imagined communication with the other party, I felt that I could have a pause between messages*.

Anticipated conversational flow

The conversational flow was measured with a scale encompassing five statements, one of which was formulated reversed. All items were measured with a five-point Likert scale (strongly disagree – strongly agree). An example of conversational flow is: *If I would have mediation with the other party, as described above, I would expect a fluent conversation*. Factor analysis showed 2 underlying factors with an eigenvalue greater than 1 ($\lambda = 2.11$; $\lambda = 1.06$) which explained 63.4% of the total cumulative variance (42.2%; 21.2%). The reliability was acceptable with $\alpha = 0.75$. Item five (*If I would have mediation with the other party, as described above, I would expect problems to decide when it is my turn to speak*) was deleted to improve the validity and the reliability of the scale. Possibly, the content or the negative formulation of the question was not distinct enough. Thereafter, factor analysis showed 1 underlying factor with an eigenvalue greater than 1 ($\lambda = 2.21$) which explained 55.1% of the total variance and the reliability was good with $\alpha = 0.83$.

Anticipated emotion communication

Emotion communication was measured with a scale encompassing five statements. All items were measured with a five-point Likert scale (strongly disagree – strongly agree). An example of emotion communication is: *I would be able to recognize how the opposing party was feeling, without it being verbalized*. Factor analysis showed 1 underlying factor with an eigenvalue greater than 1 ($\lambda = 3.26$) which explained 65.3% of the total variance. The reliability was excellent with $\alpha = 0.90$.

Data analysis

IBM SPSS Statistics 25 was used for data screening and statistical analysis. Descriptive statistics and frequencies were used for data screening and exploration. Pearson's r was used for inter-scale correlations. Chi-Square and one-way ANOVA's were used for randomization checks and other effects that must be accounted for during hypothesis testing. The Shapiro-Wilk Test, Pearson's r , Levene's Test of Equality of Error Variances, and Box' Tests of Equality were used for assumption testing. Repeated measures ANOVA's were used to test H1, H2, H3, and H4. If applicable, the Tukey

post hoc criterion for significance with a 95% confidence interval and the simple effects approach were conducted for discrimination of main and interaction effects. Linear regression analysis and multiple linear regression analysis was used to test H3 and H4. Path analysis was used for explorative follow-up analysis. The qualitative data concerning the description of the scenarios were clustered into social relationship, partner relationship, family relationship, and other. The content of the scenarios was examined related to their severity and information whether the conflict was already resolved to assess if the established requirements were met.

Results

Descriptive statistics and control testing

Table 1 contains the inter-scale correlations for scales and sub-scales of the study's variables using Pearson's r and displaying their respective descriptive statistics. The data displays neither a ceiling nor a floor effect, although the mean scores display a tendency to the upper end of the 5-Point Likert scales. Particularly, the satisfaction with the outcome has a high mean score. This was expected, due to the formulated result of the imaginary VOM. Ultimately, the standard deviations indicate good distribution of individual mean scores among the dependent variables.

Satisfaction with the outcome and satisfaction with the process strongly correlated without indicating multicollinearity. As expected, this relationship might indicate that the satisfaction with the mediation medium has a relation to the satisfaction with the mediation outcome albeit the outcome is described identical among all conditions. The richness of information (visual and/or vocal cues) correlated low with the satisfaction of the outcome. This could reflect that speech and vision are important properties of a technology concerning the overall satisfaction with the mediation process. The capacity of emotion communication correlates low to moderate with all dependent variables, indicating a relationship with all considered variables (see *table 1*). The richness of information (synchronous) has a mediation correlation with the conversational flow. This indicates an intuitive relationship between the synchronicity of a medium and the experienced degree of a conversational flow. Interestingly, the correlation between the conversational flow and the richness of information (visual and/or vocal cues) was less strong. This suggests that the experience of a conversational flow is rather associated with perceived synchronicity than with visual and vocal cues.

Table 1. Descriptive statistics and inter-scale correlations of dependent variables ($N = 7$).

	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Satisfaction with the Outcome	91	3.98	0.69	-						
2. Satisfaction with the Process	93	3.55	0.66	0.70***	-					
3. Richness of Information (visual and/ or vocal cues)	94	3.80	0.99	0.24*	0.35**	-				
4. Richness of Information (synchronous)	94	3.44	1.29	0.23*	0.21*	0.28**	-			
5. Richness of Information (asynchronous)	94	2.34	1.05	0.21*	0.36***	0.25*	-0.06	-		
6. Conversational Flow	93	3.42	0.70	0.05	0.13	0.26*	0.56***	0.05	-	
7. Emotion Communication	93	3.46	0.81	0.35**	0.55***	0.59***	0.35**	0.06	0.35**	-

Note. All variables were scored on a 5-Point Likert scale (1-5). * $p < 0.05$ (2-tailed); ** $p < 0.01$ (2-tailed); *** $p < 0.001$ (2-tailed).

Table 2 provides an overview of the topic-related categories used to cluster respondents' memories of conflict situations for the imaginary VOM. In total 94 memories were described. Most of them fell into the category of social relationships, which encompasses friends, acquaintances, and work colleagues (53.2%, $n = 50$), followed by partner related (28.7%, $n = 27$), and family related (11.7%, $n = 11$) conflict situations. Only six conflict situations were with strangers (8.5%). Particularly from the offenders' perspective participants chose situations related to general social relationships (63.8%, $n = 30$). The severity of the reported conflict situations ranged from miscommunication (6.4%, $n = 6$) to abuse (1.1%, $n = 1$). Frequently reported conflict situations were related to mobbing, verbal offenses, and acts of violence. Mobbing encompassed conflict situations in which individuals were repeatedly mistreated over a longer period, which became apparent through the description of events prior to the actual conflict situation, and often related to social exclusion. Verbal offenses encompassed conflict situations in which individuals were verbally threatened, discriminated, or insulted. Acts of violence encompassed conflict situations in which individuals were physically hurt (e.g., pushed or hit). Work-place conflicts were categorized separately because power structures within the respective organization had an influence, while they were also sharing properties with verbal offenses or mobbing.

All memories used for data analysis met the established requirements. A chi-square test of independence showed no significant difference between the proportion of participants per condition in relation to the severity of described events, $X^2 (4, N = 94) = 5.18, p = 0.27$. A chi-square test of independence showed no significant difference between the proportion of the taken perspective in relation to the severity of described events $X^2 (2, N = 94) = 3.33, p = 0.19$.

Table 2. Topic-related categories for the experiences recalled and used by participants for the imaginary VOM.

	Topic victim's perspective (n)	Topic offender's perspective (n)
Social Relationship (known)	Work-place conflicts (5); Mobbing (5); Verbal offense (4); sexual harassment (3); Miscommunication (2); Act of violence (1)	Disrespect (7); Act of violence (5); Miscommunication (5); Verbal offense (5); Mobbing (4); Social revenge (2); Dishonesty (2)
Partner relationship (known)	Affair (7); Break up (4); Emotional pressure (3); Vandalism (1); Act of violence (1)	Break up (3); Verbal offense (2); Emotional Pressure (2); Affair (2); Dishonesty (1); Act of violence (1)
Family relationship (known)	Act of violence (1); Abuse (1); Emotional abuse (2); Disrespect (1); Miscommunication (1); Vandalism (1)	Verbal offense (2); Act of violence (2)
Unknown	Public discrimination (1); traffic collision (1); Intimidation (1); Act of violence (1)	Traffic collision (1); Act of violence (1)

Randomization within the study was successful. *Table 3* summarizes the frequencies of conditions and sub-conditions. A chi-square test of independence showed no significant difference between the proportion of participants per condition in relation to gender [$X^2 (4, N = 47) = 7.72, p = 0.10$], age [$X^2 (40, N = 47) = 40.64, p = 0.44$], education [$X^2 (6, N = 45) = 2.76, p = 0.84$], and employment status [$X^2 (8, N = 47) = 6.44, p = 0.60$].

Table 3. Frequencies of conditions and sub-conditions.

	Frequency	Percentage	Victim First	Offender First
MP Video Conferencing	17	36,2	8	9
MP Chat Interaction	15	31,9	6	9
Video Messages	15	31,9	10	5
Total	47	100	24	23

There was no difference in the satisfaction with the outcome or the process because of the order in which participants were asked to take the perspective of the victim's or the offender's perspective. A one-way ANOVA on Satisfaction with the Outcome across the victim first and offender first discrimination revealed a non-significant difference between the two conditions [$F(1,44) = 0.62, p = 0.44$]. A one-way ANOVA on Satisfaction with the Process across the victim first and offender first discrimination revealed a non-significant difference between the two conditions [$F(1,44) = 0.10, p = 0.76$].

Testing the Hypothesis

Differences in the anticipated satisfaction of CBC-VOM depending on the mediation format

(H3) Multi-party video conferencing is anticipated to be more satisfactory than video messages and multi-party text interaction regarding the mediation outcome.

(H4) CBC-VOM multi-party video conferencing is anticipated to be more satisfactory than video messages and multi-party text interaction regarding the mediation process.

For the coherence of the results section, the satisfaction with the outcome of the CBC-VOM depending on the mediation format (H3) and the satisfaction with the process of the CBC-VOM depending on the mediation format (H4) are tested first. A repeated measures ANOVA on satisfaction with the outcome across CBC technologies, and perspective as within-subjects factor, revealed a statistically non-significant main effect, $F(2,42) = 0.58, p = 0.56$, partial $\eta^2 = 0.03$. The tests of within-subjects effects revealed a statistically non-significant model for perspective [$F(1,42) = 1.81, p = 0.19$, partial $\eta^2 = 0.04$] and a statistically significant interaction effect between CBC-technologies and perspective [$F(2,42) = 3.47, p = 0.04$, partial $\eta^2 = 0.14$]. The simple effects approach indicated that the average score in the multi-party text interaction condition from the victim's perspective is significantly higher ($M = 4.03, SD = 0.50$) than from the offender's perspective [$(M = 3.66, SD = 0.69), F(1,42) = 6.98, p = 0.01$, partial $\eta^2 = 0.14, 0.09 < CI < 0.65$], and that the differences of the average score in the video messages condition [$F(1,42) = 0.17, p = 0.68$] as well as in the multi-party video conferencing condition [$F(1,42) = 0.93, p = 0.34$] differed statistically non-significant in relation to the perspective. Against the expectations no difference in satisfaction with the outcome in relation to the different CBC technologies was observed. Thus, based on this data H3 cannot be supported, but an interaction effect was observed, indicating that victims were overall more satisfied with the outcome of the imaginary VOM than offenders in the multi-party text messages condition.

A repeated measures ANOVA on satisfaction with the process across CBC technologies, and perspective as within-subjects factor, revealed a statistically non-significant main effect, $F(2,43) = 0.92, p = 0.41$, partial $\eta^2 = 0.07$. The tests of within-subjects effects revealed a statistically significant model for perspective [$F(1,43) = 6.23, p = 0.02$, partial $\eta^2 = 0.13$] and a statistically non-significant interaction effect between CBC-technologies and perspective [$F(2,43) = 1.87, p = 0.17$, partial $\eta^2 = 0.08$]. The simple effects approach indicated that the average score from the victim's perspective is significantly higher ($M = 3.76, SD = 0.78$) than from the offender's perspective [$(M = 3.56, SD = 0.81), F(1,43) = 6.23, p = 0.02$, partial $\eta^2 = 0.13, 0.04 < CI < 0.37$]. Against the expectations no difference in satisfaction with the process in relation to the different CBC technologies was observed. Thus, based on this data H4 cannot be supported, but a within-subjects effect was observed, indicating victims were overall more satisfied with the process of the imagined VOM than offenders.

Perceived Richness of information in mediation formats and its impact

(H1) The anticipated satisfaction with the mediation process will be higher in multi-party video conferencing, in which the mediation is perceived to entail vocal and visual cues and is synchronous, than in video messaging, in which the mediation is perceived to entail vocal and visual cues but is asynchronous, and multi-party text messaging, in which mediation is perceived to have no visual and vocal cues but is synchronous.

In this section, the influence of the richness of information on the satisfaction with the mediation process among the CBC technologies is tested. A repeated measures ANOVA on the richness of information (visual and/or vocal cues) across CBC technologies, and perspective as within-subjects factor, revealed a statistically significant main effect, $F(2,44) = 3.96, p = 0.03$, partial $\eta^2 = 0.15$. Post hoc analyses using the Tukey criterion for significance indicated that the average score of richness of information (visual and/or vocal cues) in the multi-party text interaction condition is significantly lower ($M = 3.29, SD = 1.25$) than in the video messages condition [$(M = 3.96, SD = 0.91), p = 0.03, -1.62 < CI < -0.07$] and tends to be lower than in the multi-party video conferences condition [$(M = 4.13, SD = 0.49), p = 0.09, -1.42 < CI < 0.08$]. The tests of within-subjects effects revealed a statistically non-significant model for perspective [$F(1,44) = 0.37, p = 0.55$, partial $\eta^2 = 0.01$] and a statistically non-significant interaction effect between CBC-technologies and perspective [$F(2,44) = 0.90, p = 0.42$, partial $\eta^2 = 0.04$].

A repeated measures ANOVA on the richness of information (synchronous) across CBC technologies, and perspective as within-subjects factor, revealed a statistically significant main effect, $F(2,44) = 8.13, p < 0.01$, partial $\eta^2 = 0.27$. Post hoc analyses using the Tukey criterion for significance revealed that the average score of richness of information (synchronous) in the video messages condition is significantly lower ($M = 2.27, SD = 0.90$) than in the multi-party video conferences condition [$(M = 3.07, SD = 0.43), p < 0.01, -2.05 < CI < -0.29$] and in the multi-party text interaction condition [$(M = 3.30, SD = 0.86), p < 0.01, -2.31 < CI < -0.49$]. The tests of within-subjects effects revealed a statistically non-significant model for perspective [$F(1,44) = 0.09, p = 0.77$, partial $\eta^2 < 0.01$] and a statistically significant interaction effect between CBC-technologies and perspective [$F(2,44) = 3.63, p = 0.04$, partial $\eta^2 = 0.14$]. The simple effects approach indicated that the average score in the multi-party video conferencing condition from the victim's perspective is significantly lower ($M = 3.47, SD = 1.13$) than from the offender's perspective [$(M = 4.00, SD = 0.79), F(1,44) = 4.29, p = 0.04$, partial $\eta^2 = 0.09, -1.05 < CI < -0.01$], and that the differences of the average score in the video messages condition [$F(1,44) = 1.50, p = 0.23$] as well as in the multi-party text messages condition [$F(1,44) = 1.50, p = 0.23$] differed statistically non-significant in relation to the perspective.

A repeated measures ANOVA on the richness of information (asynchronous) across CBC technologies, and perspective as within-subjects factor, revealed a statistically non-significant main effect, $F(2,44) = 2.24, p = 0.12$, partial $\eta^2 = 0.09$. The tests of within-subjects effects revealed a statistically non-significant model for perspective [$F(1,44) = 0.29, p = 0.59$, partial $\eta^2 < 0.01$] and a statistically non-significant interaction effect between CBC-technologies and perspective [$F(2,44) = 0.13, p = 0.08$, partial $\eta^2 < 0.01$]. Hence, participants perceived the CBC technologies in accordance with the two-dimensional model of communication channels.

Multiple linear regression analysis was employed to test if the richness of information (visual and/or vocal cues), the richness of information (synchronous), and the richness of information (asynchronous) predict the satisfaction with the mediation process, and a significant model [$F(3,92) = 8.57$; $p < 0.001$] with an adjusted R -squared of 0.22 was observed. Beta values of richness of information (visual and/or vocal cues), richness of information (synchronous), and richness of information (asynchronous) were respectively 0.22 ($p = 0.03$), 0.17 ($p = 0.08$), 0.31 ($p < 0.01$). This indicates that richness of information (asynchronous) contributes the greatest prediction of the variance in the criterion, followed by richness of information (visual and/or vocal cues). Meaning, that the anticipation of richness of information (asynchronous; visual and/or vocal cues) predicts the anticipation of the satisfaction with the mediation process. As established in the previous section for H3 and H4, the data displayed no overall difference in satisfaction with the mediation process. Therefore, even though richness of information was anticipated by the participants as expected according to the two-dimensional model of communication channels and a significant relationship between richness of information (visual and/or vocal cues) and richness of information (asynchronous) satisfaction with the mediation process was found, H1 cannot be supported.

Perceived conversational flow in mediation formats and its impact

(H2) The anticipated satisfaction with the mediation process will be higher if participants of the mediation anticipate the experience of a conversational flow, and this will be the most in multi-party video conferencing, followed by multi-party text interaction, and the least in video messages.

In this section, the influence of the conversational flow on the satisfaction with the mediation process among the CBC technologies is tested. A repeated measures ANOVA on the conversational flow across CBC technologies, and perspective as within-subjects factor, revealed a statistically non-significant main effect, $F(2,43) = 1.48$, $p = 0.24$, partial $\eta^2 = 0.06$. The tests of within-subjects effects revealed a statistically non-significant model for perspective [$F(1,43) = 0.42$, $p = 0.52$, partial $\eta^2 = 0.01$] and a statistically non-significant interaction effect between CBC-technologies and perspective [$F(2,43) = 0.25$, $p = 0.78$, partial $\eta^2 = 0.01$]. Linear regression analysis was employed to test if the conversational flow predicts satisfaction with the process, and a non-significant model was observed [$F(1,91) = 1.51$; $p = 0.22$] with an adjusted R -squared of 0.01. Against the expectations, there was no difference in perceived conversational flow among experiment conditions and no observed predictive value on the satisfaction with the mediation process. Based on this data H2 cannot be supported.

Explorative analysis

Perceived capability to communicate emotions in mediation formats and its impact

In this section, the influence of the capability to communicate emotions on the satisfaction with the mediation outcome and mediation process among the CBC technologies is tested. A repeated measures

ANOVA on the capability to communicate emotions across CBC technologies, and perspective as within-subjects factor, revealed a statistically non-significant main effect, $F(2,43) = 0.47, p = 0.63$, partial $\eta^2 = 0.02$. The tests of within-subjects effects revealed a statistically non-significant model for perspective [$F(1,43) = 0.52, p = 0.48$, partial $\eta^2 = 0.01$] and a statistically significant interaction effect between CBC-technologies and perspective [$F(2,43) = 3.72, p = 0.02$, partial $\eta^2 = 0.15$]. The simple effects approach indicated that the average score in the multi-party text interaction condition from the victim's perspective is significantly higher ($M = 3.55, SD = 0.79$) than from the offender's perspective [$(M = 3.25, SD = 0.78), F(1,43) = 4.21, p < 0.05$, partial $\eta^2 = 0.09, 0.01 < C < 0.58$], and that the differences of the average score in the video messages condition [$F(1,43) = 0.70, p = 0.41$] as well as in the multi-party video conferences condition [$F(1,43) = 2.94, p = 0.09$] differed statistically non-significant in relation to the perspective. Linear regression analysis was employed to test if the capability to communicate emotions predicts satisfaction with the mediation outcome, and a significant model was observed [$F(1,89) = 12.58; p < 0.01$] with an adjusted R -squared of 0.12. The capability to communicate emotions had a beta value of 0.35 ($p < 0.01$). Linear regression analysis was employed to test if the capability to communicate emotions predicts satisfaction with the mediation process, and a significant model was observed [$F(1,91) = 38.57; p < 0.001$] with an adjusted R -squared of 0.29. The capability to communicate emotions had a beta value of 0.55 ($p < 0.001$). This indicates that the perceived capability to communicate emotions did not differ among the CBC technologies, but an interaction effect was observed, indicating that victims felt more capable to communicate emotions anticipating multi-party text interaction than offenders. Furthermore, it is associated with both the satisfaction with the mediation outcome and the satisfaction with the mediation process.

Exploratory path analysis

In this section follow-up analyses based on the inter-scale correlations of *Table 1* and the findings of the previous sections are conducted to deepen the understanding of the relation of associated variables. These analyses examine the flow of the relationships between the variables. They do not test predicted assumptions but are explorative. A three-step path analysis was conducted. First, a multiple regression analysis was employed to see if the conversational flow, the richness of information (visual and/or vocal cues), the richness of information (synchronous), and the richness of information (asynchronous) had a significant unique effect on the capability to communicate emotions. The same analysis, changing emotion communication and richness of information (asynchronous). Second, a multiple regression analysis was employed to see if the capability to communicate emotions, the conversational flow, the richness of information (visual and/or vocal cues), the richness of information (synchronous), and the richness of information (asynchronous) had a significant unique effect on the satisfaction with the mediation process. Third, a multiple regression analysis was employed to see if the capability to

communicate emotions, the conversational flow, the richness of information (visual and/or vocal cues), the richness of information (synchronous), the richness of information (asynchronous), and the satisfaction with the process had a significant unique effect on the satisfaction with the mediation outcome.

(1) A multiple regression analysis was employed to test if the conversational flow, the richness of information (visual and/or vocal cues), the richness of information (synchronous), and the richness of information (asynchronous) predict the capability to communicate emotions, and a significant model was observed [$F(4,92) = 14.78, p < 0.001$] with an adjusted R -squared of 0.37. Beta values and significance levels show that richness of information (visual and/or vocal cues) accounts for the prediction of the variance in the criterion (see *table 4*). This model indicates that richness of information (visual and/or vocal cues) has the only unique effect on the capacity to communicate emotions. However, factor analysis showed 1 underlying factor with an eigenvalue greater than 1 ($\lambda = 2.51$) which explained 50.1% of the total variance for richness of information (synchronous) and conversational flow. The reliability was good with $\alpha = 0.86$. This indicates that the two constructs validly and reliably measure the same factor. Therefore, these two constructs are computed for the path analysis. It will be referred to as conversational flow. A multiple regression analysis was employed to test if the conversational flow, the richness of information (visual and/or vocal cues), and the richness of information (asynchronous) predict the capability to communicate emotions, and a significant model was observed [$F(3,92) = 19.81, p < 0.001$] with an adjusted R -squared of 0.38. Beta values and significance levels show that richness of information (visual and/or vocal cues) contributes the greatest prediction of the variance in the criterion, followed by conversational flow (see model 1 *table 5*). This model indicates that richness of information (visual and/or vocal cues) and conversational flow have unique effects on the capacity to communicate emotions. A multiple regression analysis was employed to test if the conversational flow, the richness of information (visual and/or vocal cues), the richness of information (synchronous) and the capability to communicate emotions predict the richness of information (asynchronous), and a non-significant model was observed [$F(4,92) = 2.11, p = 0.09$] with an adjusted R -squared of 0.05.

Table 4. Regression model including B, SEB, and p for every predictor with emotion communication as the dependent variable

	B	SEB	p
Conversational flow	0.14	0.11	0.16
Richness of information (visual and/or vocal cues)	0.53	0.07	0.00
Richness of information (synchronous)	0.12	0.06	0.21
Richness of information (asynchronous)	-0.06	0.07	0.51

Note. p -values significant at $\alpha < 0.05$.

(2) A multiple regression analysis was employed to test if the capability to communicate emotions, the conversational flow, the richness of information (visual and/or vocal cues), and the richness of information (asynchronous) predict the satisfaction with the mediation process, and a significant model was observed [$F(4,91) = 15.14$, $p < 0.001$] with an adjusted R -squared of 0.38. Beta values and significance levels show that the capability to communicate emotions contributes the greatest prediction of the variance in the criterion, followed by richness of information (asynchronous) (see model 2 *table 5*). This model indicates that the capability to communicate emotions and the richness of information (asynchronous) both have a unique effect on the satisfaction with the mediation process.

(3) A multiple regression analysis was employed to test if the capability to communicate emotions, the conversational flow, the richness of information (visual and/or vocal cues), the richness of information (asynchronous), and the satisfaction with the process predict the satisfaction with the mediation outcome, and a significant model was observed [$F(5,88) = 16.45$, $p < 0.001$] with an adjusted R -squared of 0.47. Beta values and significance levels show that the satisfaction with the mediation process accounts for the prediction of the variance in the criterion (see model 3 *table 5*). This model indicates satisfaction with the mediation process has the only unique effect on the satisfaction with the mediation outcome.

Table 5. Path analysis model including B, SEB, and p for every predictor with emotion communication as the dependent variable for model 1, satisfaction with the mediation process as the dependent variable for model 2, and satisfaction with the mediation outcome as the dependent variable for model 3

	Model 1			Model 2			Model 3		
	B	SEB	p	B	SEB	p	B	SEB	p
Conversational flow	0.23	0.10	0.01	-0.01	0.08	0.92	-0.01	0.08	0.87
Richness of information (visual and/or vocal cues)	0.54	0.07	0.00	-0.09	0.07	0.39	0.06	0.07	0.53
Richness of information (asynchronous)	-0.06	0.07	0.49	0.34	0.05	0.00	-0.05	0.06	0.56
Emotion communication				0.59	0.09	0.00	-0.07	0.10	0.53
Satisfaction (mediation process)							0.74	0.11	0.00

Note. p -values significant at $\alpha = 0.05$.

Figure 2 combines the results of the path analysis into a flow chart. Emotion communication was chosen as the first predictor because it significantly correlated with every other dependent variable (see *table 1*). It was chosen to combine richness of information (synchronous) and conversational flow because they appeared to measure the same factor. The path analysis indicates that both the anticipation of a conversational flow and the anticipation of the richness of information (visual and/or

vocal cues) contribute towards the anticipation of the capability to communicate emotions. This perceived capability again, together with the anticipated richness of information (asynchronous) contributes towards the anticipation of the satisfaction with the mediation process. The anticipated satisfaction with the mediation process contributes towards the anticipation with the mediation outcome, resulting in a four-level flow chart (see *figure 2*).

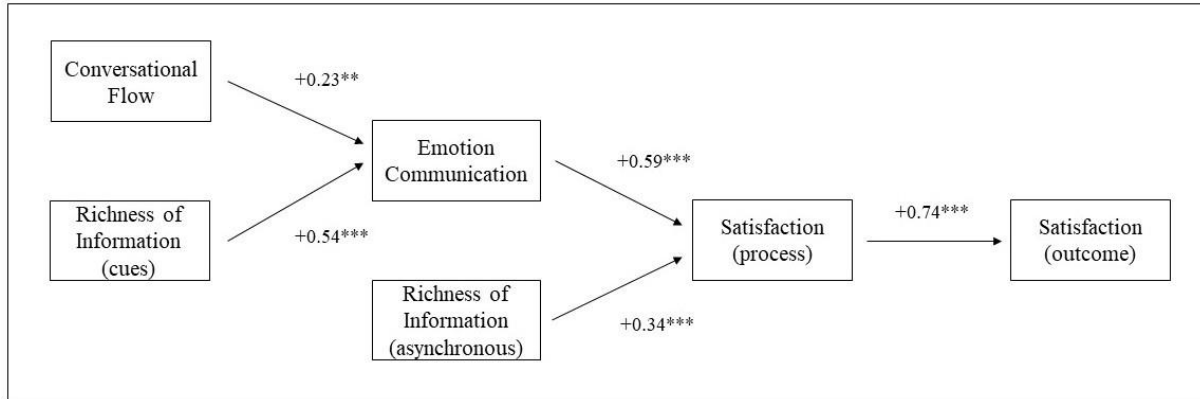


Figure 2. Flow of anticipated interpersonal aspects of communication in CBC and satisfaction in imaginary VOM based on the exploratory path analysis. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Discussion

Over the past decades, CBC became an integral component of our social and working life. This process got exponentially accelerated due to the corona pandemic (Schiller, 2020). Developments in CBC technologies might be valuable for VOM, since CBC-VOM might mitigate the disadvantages of traditional mediation formats. The aim of the current study was to examine differences in the anticipated satisfaction with a VOM concerning three CBC technologies. Interpersonal aspects of communication were assumed to be influential factors that contribute to the satisfaction with the mediation format, and consequently with the mediation process. As those technologies differ in richness of information and the capability to establish a conversational flow, it was expected that multi-party video conferencing would be perceived as more satisfactory, than video messaging and multi-party text interaction. Among scholars, emotion communication in CBC is discussed controversially (Derks et al., 2008). Yet, it was assumed to be constitutive for CBC-VOM and considered as a determinant whose impact must be explored. The spectrum of traditional VOM formats is limited. Indirect formats are substantially less satisfactory than direct formats, while the latter are sometimes too confronting and stressful (Hansen & Umbreit, 2018, Bouffard et al., 2017, Shapland, 2007). CBC technologies could be utilized to enrich the variety of mediation formats. As they provide qualities of both indirect and direct mediation, they might be better suited under certain circumstances. Therefore, it is necessary to create insight into the differences of the CBC technologies applicable for VOM to determine valuable and reliable alternatives to traditional formats. Knowledge

about the respective influence of interpersonal aspects of communication is of particular interest because underlying factors that contribute to the mediation process could facilitate the evaluation of new CBC technologies and deepen their conceptualization in a CBC environment.

Main Findings

The study's results neither indicate a difference in the perceived satisfaction with the mediation outcome nor the mediation process among multi-party video conferencing, video messaging, and multi-party text messaging. Hence, none of the hypotheses were supported. Overall was the reported degree of anticipated satisfaction with the CBC-VOM high. The satisfaction with the mediation result was expectedly high because the outcome of the imaginary VOM was intentionally framed optimal. This is in line with existing literature that established a fair restitution agreement, a complete apology, the expression of repentance as crucial predictors for the satisfaction with the mediation result (Bonesteffen et al., 2020; Hansen & Umbreit, 2018; Choi & Severson, 2009; Latimer et al. 2005). Interestingly and unexpectedly, victims anticipated to be significantly more satisfied with the outcome than offenders if multi-party text interaction was used for the imagined mediated contact; no such difference was observed for the other forms. The same pattern was observed for the degree to which the possibility of emotion communication was anticipated during CBC mediation process. Furthermore, the positive relationship with the satisfaction with the mediation process reveals, as expected, that independent of the actual result its evaluation is influenced by the satisfaction with the mediation process, respectively the distinct CBC technologies. The high anticipation of the satisfaction with the mediation process might indicate that all CBC technologies in question are useful for VOM under the presupposition that an acceptable outcome can be achieved. The results showed that overall, victims anticipated to be more satisfied with the mediation process than offenders. One participant reported that he was not as satisfied with the process in the offender role because the victim did not have the chance to immediately communicate the acceptance of the offender's apology, which could be an alternative explanation of that disparity. Literature supports this possibility, as the acceptance of an apology is a distinct part of the corrective process defined as an apology-followed-by-forgiveness process (Strickland, Allan & Allan, 2017; Dhimi, 2012).

The results revealed that participants perceived the richness of information of the CBC technologies according to the two-dimensional model of communication channels. The richness of information (visual and/or vocal cues; asynchronous) was associated with the satisfaction with the mediation process. However, there was no overall difference in the satisfaction with the mediation format across the CBC technologies. This suggests that richness of information (visual and/or vocal cues; asynchronous) is rather relevant on the level of individual perception than being a set of features that determine the usefulness of distinct CBC technologies for VOM in general. The needs and the perception of involved parties might vary substantially and therefore the necessity for rich

communication. This finding is not in line with the concept that inherent fixed cues of communication channels determine the richness of information and subsequently mediation outcomes (Swaab et al., 2012). The general relation between satisfaction with the mediation process and richness of information (visual and/or vocal cues) indicates that most people seemed to value this feature. Nevertheless, one respondent in the multi-party text interaction category explicitly stated, that it was advantageous for him not to see the opposing party because he would otherwise not have been able to overcome his anger and resolve the conflict. This supports the assumption of the communication orientation model that the influence of persisting negative feelings on the mediation can be overcome by reducing the richness of information (Swaab et al., 2012).

The results of the study showed no difference in the ability to establish a conversational flow among the CBC technologies. Furthermore, no relationship between the conversational flow and the satisfaction with the mediation format was found. These findings are against the expectations and not in line with literature related to this research field. Previous research on para-verbal and non-verbal aspects of communication in traditional face-to-face mediation was able to predict very accurately satisfaction measures (Ponce-Lopez et al., 2015). Communication theories highlight the importance of a conversational flow to establish and maintain a relationship between communication partners (Dunbar, 2004). The relationship with the perceived capability to communicate emotions and the richness of information (synchronous; visual and/or vocal cues) indicates that conversational flow might have rather an indirect influence on the satisfaction with the mediation process, which would resolve the tension between the findings, previous research, and theory. High-quality turn-taking, or short response latencies are subjective features of communication that foster the maintenance of a shared reality independent of the conversation's content (Koudenberg et al., 2017). Thus, the conversational flow might contribute towards implicit emotion communication and the experience of a synchronous conversation.

In addition, the current study's results indicate no overall difference between the capability to communicate emotions across the CBC technologies, but respondents perceived it easier to communicate emotions from the victim's perspective in the multi-party text interaction condition compared to the offender's perspective. Interestingly, the same interaction was observed concerning the satisfaction with the mediation outcome. These findings do support the model of emotion communication in CBC-technologies, which states that emotions are abundant in CBC, and contradicts the assumption that non-face-to-face mediations lack the same (Derks et al, 2008; Shapland et al., 2007). Previous research supports the findings of the current study. Liu, Niu and Carassai (2017) reported that a variety of CBC technologies, drawing on different methods, are capable of emotion communication. Particularly, in a text-based environment, four strategies are adopted to express and detect emotions: disagreement, negative affect terms, punctuation, and verbosity (Hancock, Landrigan,

& Silver, 2007). The results showed that the perceived capability to communicate emotions is not only related to the satisfaction with the mediation outcome and process but also with all other considered interpersonal aspects besides richness of information (asynchronous). This indicates that the perceived capability to communicate emotions has a pivotal function in CBC-VOM. The importance of emotion communication might be reflected in a core assumption of restorative justice (Mendelez, 2021). A VOM should be centered around the conflicting parties and tailored towards their needs. This encompasses the exchange of sensitive information and a secure environment, which provides the opportunity and space to express emotions.

The previously discussed findings indicate that, apart from richness of information, all considered aspects were determined by individual experience, not general differences between CBC technologies. The interrelation of the interpersonal aspects of communication and their individual association with the satisfaction with the mediation process and outcome, enabled their organization into a conceptual variable flow, in which two distinct branches are contributing directly to the satisfaction with the mediation process and indirectly to the satisfaction with the mediation outcome (see *figure 2*). Conversational flow and richness of information (visual and/or vocal cues; synchronous) facilitate the capability to communicate emotions. This branch might reflect underlying implicit aspects of conversation that contribute to the satisfaction with the mediation process. Richness of information (asynchronous) might reflect the explicit, content-related, contribution to the satisfaction with the mediation process. Thus, to which extent participants experienced enough time to decode received information and formulate a response (see *Appendix A*). These findings support the assumption that all considered CBC technologies are equally applicable for VOM. Their usability seems to depend on the evaluation of the respective technology of involved individuals, respecting their perceived capability to communicate emotions and express desired content during the mediated contact

Limitations of the study

The current study has limitations. The first is related to the methodology. The experiment was conducted in form of an online survey, with participants that imagined a VOM based on unresolved severe conflict situations from their past. Thus, they were neither actually participating in a VOM nor using the respective CBC technology but were anticipating the whole process. That has two major implications for the generalizability of the findings. First, it is impossible to estimate the authenticity of the experience concerning a real VOM. Second, unlike real VOM the participants had no voluntary choice to participate. However, the conflict situations, on which the imaginary VOM is based, were varying from very severe to slightly severe, which is comparable to real-world practice (see *table 2*). The non-representative sample is a limitation related to these problems. Different methods of convenient samples were used to approach participants. This implies that, at least to the knowledge of

the researcher, no participant had experience with VOM and that participants were rather approached through availability.

During the data analysis, two additional limitations concerning the constructs became apparent. The synchronicity aspect of richness of information had poor reliability, resulting in distinct constructs consisting only of one item each, richness of information (synchronous), and richness of information (asynchronous). Thus, conclusions drawn on these constructs must be very carefully considered and even then, their ambiguity is not rejectable. Even more under the circumstance that the validity of both is questionable as well. As indicated by the path analysis richness of information (synchronous) might be a measurement of conversational flow. A solution to this problem in a future repetition of the study would be, to split richness of information into two elaborated scales, one measuring the perception of visual and vocal cues and one measuring synchronicity. A second limitation to the survey's design is the lack of a response of the victim on the offender's apology during the imagined mediation. With this lack of acceptance, it is very difficult to address the difference in the satisfaction with the mediation process adequately.

The last limitation was a conscious study design exclusion. The study does not consider the impact of the mediator. This might be influential because of two reasons. First, the trust in the mediator is a predictor of satisfaction. Moreover, the conversation techniques of the mediator assure balanced participation, victim sensitivity, and prevent revictimization (Hansen & Umbreit, 2018; Gerkin, 2009). Second, the study revealed that victims and offenders must be confident with the chosen CBC technology to have a successful VOM. Most likely the same is true for the mediator, which should have acquaintance with the CBC technology to guide the mediation process.

Conclusion

The COVID-19 pandemic has drastically reshaped human society (Cruwys et al., 2021). Measures against the spread of the virus prohibited face-to-face meetings largely (Ibn-Mohammed et al., 2021). This fostered the development, refinement, and implementation of CBC technologies (Schiller, 2020). Furthermore, the importance of CBC technologies will not only persist but most likely increase after COVID-19. The field of VOM was no exclusion to these regimentations. Therefore, the current study investigated the usability of multi-party video conferencing, video massaging, and multi-party text messaging respective their usability for VOM to provide short-term alternatives to traditional direct or indirect mediations. In the long term, CBC-VOM could be a valuable addition to the methodology of VOM. The study showed that all CBC technologies have their distinct utility for VOM, depending on the involved parties' acquaintance and evaluation of the communication technology in respect to their needs and interpersonal aspects of communication, particularly the perceived capability to communicate emotions.

Future research directions

The current study provides several possibilities for further research. The study showed that richness of information was evaluated differently by the participants. It would be interesting to investigate whether the communication orientation model from Swaab et al. (2012) provides an adequate guideline to choose a CBC technology for VOM tailored towards the needs of the involved parties for satisfactory outcomes. This study indicated the crucial role of emotion communication for CBC-VOM. Nevertheless, more theory-building research is needed to adequately design a CBC-based process for VOM. It would be interesting to explore the role of the mediator in CBC-VOM. It could be explored how the attitude towards and the acquaintance with the CBC technology influences the mediator's willingness and capability to conduct a CBC-VOM. Of particular interest should be the agency of the mediator in a CBC environment. Therein, video messages could be of interest because it enhances the influence of the mediator, provides visual and vocal cues, while giving the victim and the offender the time to decode perceived information and articulate a response, which could result in reduced stress. For practical considerations, this study indicates the usability of CBC-VOM for real-world practices. CBC-VOM has the potential to enrich the methodology of restorative justice practices, given the appropriate technology is chosen according to the needs of all involved parties.

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Appendix A: Survey

Welcome Dear respondent,

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) programs that give both conflicting parties the opportunity to engage in a guided, mediated conversation to discuss how the crime has affected their lives. Currently, due to the COVID pandemic, many of these (mostly physical) meetings cannot take place or must be postponed. Therefore, practitioners' debate and test whether alternative ways to engage the parties in dialogue are possible, for example, by using digital means of communication. The purpose of the study is to explore the anticipated utility of Computer-Based Communication Technology in VOM programs. Within this study, you will be asked to remember and describe two situations, one in which you got hurt and one in which you have hurt someone yourself, to emulate an authentic scenario as the basis for an imaginary Victim-Offender Mediation. It will take you about 45 minutes to complete the survey. You are free to leave the survey at any point of time. There are no right or wrong answers. Your data is treated anonymously, and it is used only for the purpose of this study. Your data will be only saved if you press the finish button at the end.

If you have any questions, feel free to contact me: mediation_research@web.de

I appreciate your effort and thank you in advance!

Nils

Consent: Please read the following consent carefully. If you have any questions or remarks about it, feel free to contact me. mediation_research@web.de

I read and understood the previous information and agree that my data will be used anonymously for scientific purposes only. I agree to take part in this study on a voluntary basis and I am aware that I can stop at any point of time. I want to continue with the study.

☐ Yes, I agree. (1)

☐ No, I do not agree. (2)

Heading First, we are interested in your demographic information:

Gender What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Non-binary / third gender (3)
- ☐

Nationality What is your nationality?

- ☐ Dutch (1)
- ☐ German (2)
- ☐ Other (3) _____

Age What is your age?

Education What is your highest completed level of education?

- ☐ Primary education (1)
- ☐ Secondary education (2)
- ☐ Bachelor's degree (3)
- ☐ Master's degree (4)
- ☐ other, namely (9) _____

Employment What's your employment status?

☐ student (please specify your discipline): (3)

☐ employed (full or part-time) (1)

☐ unemployed (2)

☐ retired (4)

☐ self-employed (5)

☐ other (please specify): (6) _____

Outlook: Beforehand, we would like to give a short introduction to Victim-Offender Mediation (VOM) and the procedure of the survey; please read the information carefully: As an addition or alternative to traditional justice processes, VOM are worldwide established programs that give crime victims and those who are responsible for the misdeed (i.e. offenders) the opportunity to engage in a voluntary, mutual dialogue, to exchange their thoughts and perspectives and to share their individual narratives with respect to the wrongdoing. For example, as a victim, you can ask questions or explain how the misdeed affected your life and express your feelings. As an offender, you have the opportunity to apologize or to explain your reasons for committing the crime. By this, VOM programs offer an opportunity to restore justice by giving a voice to those who were directly involved in the misdeed. Often, this helps to find closure and to cope with the incident. In the following, you will be asked to remember two different situations. With these situations in mind, you will be guided through an imaginary VOM. After this, we are interested in your perception of such a mediated contact.

Situation:

Please recall a situation in which **you were hurt severely, emotionally and/or physically** by another person.

Please choose a situation which was not resolved with the other party afterwards and has left you with some things you would like to express or share.

If you have a situation in mind, please click on the arrow on the right to continue.

Situation: Please use the following questions to describe the situation and its circumstances in which you got hurt severely. Try to be as precise as possible and use the questions as guidance. Though, three to four sentences are sufficient. The description of the situation is important to emulate the

scenario and emotional state for the latter imaginary mediation. Your description will be processed anonymously and the information you share in the scenarios will not be published.

Describe: Please describe the events that led to the situation in which you were hurt severely.

Describe: Please describe what the opposing person said or did that hurt you severely.

Describe: Please describe what you felt within the situation and thereafter.

Describe: Please describe what you think the other person felt within the situation and thereafter.

Describe: Please describe what happened after the situation.

Scenario: Imagine that after the situation you described, a mediator approaches you and asks if you are interested in a VOM. He states that the opposing party took the initiative and that participation in VOM is always voluntary for both parties. You agree to participate with that in mind. You and the mediator arrange a meeting preceding the mediated contact. In this meeting you have the chance to express your feelings towards the offender and the meeting itself. You can also tell the mediator about your expectations. The mediator, in turn, tells you that during the mediated contact, you will have the opportunity to find out about the motives of the offender, ask questions, share your experience and how you are impacted by the incident. The mediator explains that this often helps to find closure and cope with the incident. Please read the following text carefully and pause after each paragraph to envision the different steps of the mediation vividly. Use your imagination to frame the situation (What is said or written? How do you feel? How does the situation or environment look like?). Please have in mind that everyone's imagination is different. So if you do not "see" anything, do not care, just use your imagination as it works.

Scenario: The mediator proposes to use video conferencing for the mediated contact. You can think of Skype or Zoom, for example. Webcams and microphones will be used so you are able to see and to talk with each other.

The mediator, the offender and you are in three different places. You chose a place in which you feel comfortable and safe. You join the online meeting and see the mediator and the other party on your screen. Envision how, guided by the mediator, the mediation is started. Firstly, you get the possibility to share your thoughts and emotions about the incident and ask prudent questions. In turn, the offender shares his narrative and responds to your questions. Take your time to picture this conversation. The mediator might invite either party to take the opposing stance or might invite to explore external circumstances that led to the incident. Finally, the offender apologizes sincerely during the video conference. He acknowledges the harm he did and promises that he won't make this mistake again. He is willing to compensate for the harm. Please visualize this situation. You and the offender draw a restitution agreement.

A while after the meeting the mediator asks you how it has been going and how you experienced the mediation and its process and if it had a sustaining effect on you.

Heading The following statements relate to the mediation result. Please indicate your personal satisfaction with the outcome.

1.1

I would consider a digital VOM, if I find myself in an applicable situation.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

1.2

I am satisfied with the overall result of the imagined mediation.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

1.3

It was satisfying to envision the apology from the offender.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

1.4 I would not recommend VOM to a friend.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

1.5 It was satisfying to visualize that the offender promises not to repeat his wrongdoing.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

Heading: These statements are related to the mediation process and the capacity of the used communication technology. Please indicate your personal anticipated satisfaction with the mediation process and the used medium.

2.1

I would consider this form of digital communication for the mediated contact if I should participate in VOM.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

2.2

I would have been able to share my experience of the incident in the digital environment.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

2.3 I would have been satisfied with the level of involvement in the process.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

2.4

I would have been able to communicate and express my needs.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

2.5 I would not recommend this form of digital communication for VOM to a friend.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

2.6 I am satisfied with the form of digital communication I (imaginary) experienced.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

Heading: The following statements relate to features of communication. Please indicate to what extent you agree or disagree.

3 During the imagined communication with the other party, I felt that I could...

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (4)	Somewhat agree (5)	Strongly agree (6)
...see facial expressions of the opposing party. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...respond in real time. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...have a pause in between messages. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...hear the opposing party. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...see gestures of the opposing party. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Heading: The following statements are about your (potential) experience of the conversation. Please indicate to what extent you agree or disagree.

4 If I would have mediation with the other party, as described above, I would expect...

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
...a fluent conversation. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...only few interruptions. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...to experience only little overlap in communication. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...to be able to respond within a pleasant time frame. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...problems to decide when it is my turn to speak. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Heading: The following statements are about the possibility to communicate emotions in a digital environment. Please indicate your personal expectation based on your imagined mediation.

5 I would be able to...

	Strongly Disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
...express my emotions. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...recognize emotions in the opposing party. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...grasp fine nuances in the atmosphere of the dialogue. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...recognize how the opposing party was feeling, without it being verbalized. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...connect emotionally with the opposing party. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Situation: Please recall a situation in which **you severely hurt** another person, **emotionally and/or physically**

Please choose a situation which was not resolved with the other party afterwards and has left you with _____ the _____ desire _____ to _____ apologize.

If you have a situation in mind, please click on the arrow on the right to continue.

Situation: Please use the following questions to describe the situation and its circumstances in which you severely hurt someone. Try to be as precise as possible and use the questions as guidance. Though, three to four sentences are sufficient. The description of the situation is important to emulate the scenario and emotional state for the latter imaginary mediation. Your description will be processed anonymously and the information you share in the scenarios will not be published.

Describe: Please describe the events that led to the situation in which you severely hurt the opposing person.

Describe Please describe what you said or did that severely hurt the opposing person.

Describe Please describe what you felt within the situation and thereafter.

Describe Please describe what you think the other person felt within the situation and thereafter.

Describe Please describe what happened after the situation.

Scenario: Imagine that after the situation you described, you want to have a VOM. Therefore, you make contact with a mediator. The mediator states that he will approach the victim and that participation in VOM is always voluntary for both parties.

You agree to participate with that in mind. You and the mediator arrange a meeting preceding the mediated contact. In this meeting you have the chance to express your feelings towards the victim and the meeting itself. You can also tell the mediator about your expectations. The mediator, in turn, tells you that during the mediated contact, you will have the opportunity to share your narrative about the incident or to take responsibility and apologize for what you have done. The mediator explains that this often helps to find closure and cope with the incident.

Please read the following text carefully and pause after each paragraph to envision the different

steps of the mediation vividly. Use your imagination to frame the situation (What is said or written? How do you feel? How does the situation or environment look like?). Please have in mind that everyone's imagination is different. So if you do not "see" anything, do not care, just use your imagination as it works.

Scenario: The mediator proposes to use video conferencing for the mediated contact. You can think of Skype or Zoom, for example. Webcams and microphones will be used so you are able to see and to talk with each other.

The mediator, the victim and you are in three different places. You chose a place in which you feel comfortable and safe. You join the online meeting and see the mediator and the other party on your screen. Envision how, guided by the mediator, the mediation is started. Firstly, the victim shares his thoughts and emotions about the incident and asks prudent questions. In turn, you get the possibility to share your narrative and respond to the victim's questions. Take your time to picture this conversation. The mediator might invite either party to take the opposing stance or might invite to explore external circumstances that led to the incident. Finally, you apologize sincerely during the video conference. You acknowledge the harm you did and promise that you won't make this mistake again. You are willing to compensate for the caused harm. Please visualize this situation. You and the victim draw a restitution agreement.

A while after the meeting the mediator asks you how it has been going and how you experienced the mediation and its process and if it had a sustaining effect on you.

Heading: The following statements are related to the mediation result. Please indicate your personal anticipated satisfaction with the outcome.

6.1 I would consider a digital VOM, if I find myself in an applicable situation.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

6.2 I am satisfied with the described result of the imagined mediation.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

6.3 It was satisfying to envision to apologize for my past behavior.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

6.4 I would not recommend VOM to a friend.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

6.5

It was satisfying to envision the expression of repentance and my feelings of guilt.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

Heading: These statements are related to the mediation process and the capacity of the used communication technology. Please indicate your personal anticipated satisfaction with the mediation process and the used medium.

7.1 I would consider this form of digital communication for the mediated contact if I should participate in VOM.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

7.2 I would have been able to share my experience of the incident in the digital environment.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

7.3

I would have been satisfied with the level of involvement in the process.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

7.4 I would have been able to communicate and express my needs.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

7.5 I would not recommend this form of digital communication for VOM to a friend.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

7.6 I am satisfied with the form of digital communication I (imaginary) experienced.

- ☐ Strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (6)

Heading: The following statements relate to features of communication. Please indicate to what extent you agree or disagree.

8 During the imagined communication with the other party, I felt that I could...

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (4)	Somewhat agree (5)	Strongly (6) agree
...see facial expressions of the opposing party. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...respond in real time. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...have pause in between messages. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...hear the opposing party. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...see gestures of the opposing party. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Heading: The following statements are related to your expected experience of the conversation. Please indicate to what extent you agree or disagree.

9 If I would have mediation with the other party, as described above, I would expect...

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
...a fluent conversation. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...only few interruptions. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...to experience only little overlap in communication. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...to be able to respond within a pleasant time frame. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...problems to decide when it is my turn to speak. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Heading: The following statements are about the possibility to communicate emotions in a digital environment. Please indicate your personal expectation based on your imagined mediation.

10 I would be able to...

	Strongly Disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
...express my emotions. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...recognize emotions in the opposing party. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...grasp fine nuances in the atmosphere of the dialogue. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...recognize how the opposing party was feeling, without it being verbalized. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...connect emotionally with the opposing party. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11 We are now interested in your perceived risks of the communication form you experienced in both scenarios. Please indicate your estimations for each question below. Within this communication form there is a high risk that...

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (5)	Strongly Agree (6)
...a mediator would not be able to keep guidance of the conversation dynamics. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...the situation will escalate or get out of hand. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...the conversation will stop. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...disruptions will occur. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...I do not receive the other's message due to technical problems. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...the program you use will not work properly. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...the hardware will not work properly. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...the system will be hacked and data will be stolen. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...third parties would get access to the data without permission. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12 Given that you, the other party and the mediator all have average or good knowledge and skills of communication technology usage: What are your estimations about the following statements? A person with basic technical skills is likely to...

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat Agree (4)	Strongly Agree (5)
...stop the conversation accidentally. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...be able to setup the technology for this contact properly (e.g. starting the application). (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...learn how to work with the technology, tool or gadgets necessary to set up digital meetings. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...find it easy to start the application or program. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...find it difficult to re-start the application or program, if necessary. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...be able to assure that the application or program will work properly. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13 We would like to know how you would perceive the impact of these events. An event with a low impact would not detrimentally disrupt the conversation and could easily be fixed. An event with a high impact would cause major disruptions in the communication and would break off the conversation forcing you to stop with the mediation.

	no impact (1)	low impact (2)	a bit (3)	high impact (4)	very impact (5)	high
One or more participants are not able to use the application or program. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
A mediator would lose control over the conversation dynamics. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Third parties would get access to the conversation without permission. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I can not receive the other's message due to technical problems. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Parts of the other's messages are not understandable due to disruptions in the internet connection or the application. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Heading: Finally, it is of interest how easy or difficult it was to fill in this survey. Please indicate this in the questions below.

14.1 It was easy for me to find an appropriate victim and offender situation.

- ☐ strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

14.2 The Victim-Offender Mediation was described understandable.

- ☐ strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

14.3 I could connect with my victim and offender situation.

- ☐ strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

14.4 I have taken the survey seriously.

- ☐ strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

14.5 It was difficult for me to envision the imaginary Victim-Offender mediation.

- ☐ strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ neutral (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

SONA SONA (if applicable): Did you enroll via UT SONA systems and would like to grant study credits for participation? Please then indicate your SONA number in the text box below:

Amazon AMAZON Voucher: If you want to have the chance to win an AMAZON voucher, (25 Euro) please indicate your E-mail so that we can notify you in case you are the lucky winner! (your mail will not be linked to your answers; if you don not wish to indicate your mail here, you can also send an email with "VOM" to: mediation_research@web.de)

Suggestions Please indicate if you have any remarks, comments or questions in the text box below (optionally).

Goodbye: Thank you very much for taking your time to participate! Please make sure to hit the right button, otherwise the survey will not be saved as completed. The purpose of this study was to assess the risks and opportunities of different digital forms of communication within VOM. This study aims to explore to what extent online video conferencing (such as Skype or Zoom), text-based chat (such as WhatsApp) or video messages (that are relayed by a mediator) are applicable to establish a meaningful conversation between conflicting parties. For this purpose participants were randomly allocated to one of the before mentioned three conditions. If you have any further questions concerning the research or are curious about the results, do not hesitate to write me. Please do not share this information with other possible participants. mediation_research@web.de Kind regards and have a nice day! Nils
PS: if you are using SurveySwap please use the following link to earn your credits: <https://surveyswap.io/sr/UPx3Uh8BWHrf2SWu>

Situation: Please recall a situation in which **you were hurt severely, emotionally and/or physically** by another person.

Please choose a situation which was not resolved with the other party afterwards and has left you with some things you would like to express or share.

If you have a situation in mind, please click on the arrow on the right to continue.

Situation: Please use the following questions to describe the situation and its circumstances in which you got hurt severely. Try to be as precise as possible and use the questions as guidance. Though, three to four sentences are sufficient. The description of the situation is important to emulate the scenario and emotional state for the latter imaginary mediation. Your description will be processed anonymously and the information you share in the scenarios will not be published.

Describe Please describe the events that led to the situation in which you were hurt severely.

Describe Please describe what the opposing person said or did that hurt you severely.

Describe Please describe what you felt within the situation and thereafter.

Describe Please describe what you think the other person felt within the situation and thereafter.

Describe Please describe what happened after the situation.

Scenario: Imagine that after the situation you described, a mediator approaches you and asks if you are interested in a VOM. He states that the opposing party took the initiative and that participation in VOM is always voluntary for both parties.

You agree to participate with that in mind. Imagine you and the mediator arrange a meeting preceding the mediated contact. In this meeting you have the chance to express your feelings towards the offender and the meeting itself. You can also tell the mediator about your expectations. The mediator, in turn, tells you that during the mediated contact you will have the chance to find out about the motive of the offender, ask questions, share your experience and how you are impacted by the incident. The mediator explains that this helps frequently to find closure and cope with the incident. Please read the following text carefully and pause after each paragraph to envision the different steps of the mediation vividly. Use your imagination to frame the situation (What is said or written? How do you feel? How does the situation or environment look like?). Please have in mind that everyone's imagination is different. So if you do not "see" anything, do not care, just use your imagination as it works.

Scenario: You and the offender decide to communicate via text messages for the mediated contact. Think of a WhatsApp desktop application for example. You can type a message at any given moment. By the means of wiggling dots and a name it is, indicated when a user is writing. Please use this information to picture the following mediated contact.

The mediator, the offender and you are taking part in the mediated contact. You chose a place in which you feel comfortable and safe. Envision how, guided by the mediator, both the offender and you write text messages. You get the possibility to share and ask what is important for you concerning the incident. In turn, the offender shares his narrative and responds to your questions. Picture this conversation. The mediator might invite either party to take the opposing stance or might invite to explore external circumstances that led to the incident. Finally, the offender apologizes sincerely. He acknowledges the harm he did and promises that he won't make this mistake again. He is willing to compensate for the caused harm. Please visualize this situation. You and the offender draw a restitution agreement.

A while after the meeting the mediator asks you how it has been going and how you experienced the mediation and its process and if it had a sustaining effect on you.

Situation: Please recall a situation in which **you severely hurt** another person, **emotionally and/or physically**

Please choose a situation which was not resolved with the other party afterwards and has left you with the desire to apologize.

If you have a situation in mind, please click on the arrow on the right to continue.

Situation: Please use the following questions to describe the situation and its circumstances in which you severely hurt someone. Try to be as precise as possible and use the questions as guidance.

Though, three to four sentences are sufficient. The description of the situation is important to emulate the scenario and emotional state for the latter imaginary mediation. Your description will be processed anonymously and the information you share in the scenarios will not be published.

Describe Please describe the events that led to the situation in which you severely hurt the opposing person.

Describe Please describe what you said or did that severely hurt the opposing person.

Describe Please describe what you felt within the situation and thereafter.

Describe Please describe what you think the other person felt within the situation and thereafter.

Describe Please describe what happened after the situation.

Scenario: Imagine that after the situation you described, you want to have a VOM. Therefore, you make contact with a mediator. The mediator states that he will approach the victim and that participation in VOM is always voluntary for both parties. You agree to participate with that in mind. You and the mediator arrange a meeting preceding the mediated contact. In this meeting you have the chance to express your feelings towards the victim and the meeting itself. You can also tell the mediator about your expectations. The mediator, in turn, tells you that during the mediated contact, you will have the opportunity to share your narrative about the incident or to take responsibility and apologize for what you have done. The mediator explains that this often helps to find closure and cope with the incident.

Please read the following text carefully and pause after each paragraph to envision the different steps of the mediation vividly. Use your imagination to frame the situation (What is said or written? How do you feel? How does the situation or environment look like?). Please have in mind that everyone's imagination is different. So if you do not "see" anything, do not care, just use your imagination as it works.

Scenario: The mediator proposes to communicate via text messages for the mediated contact. You can think of a WhatsApp desktop application for example. You have the chance to type a message at any given moment. By the means of wiggling dots and a name it is indicated when a user is writing. Please use this information to picture the following mediated contact. The mediator, the victim and you are

taking part in the mediated contact. You chose a place in which you feel comfortable and safe. Envision how, guided by the mediator, both the victim and you write text messages. Firstly, the victim shares his thoughts and emotions about the incident and asks prudent questions. In turn, you get the possibility to share your narrative and respond to the victim's questions. Picture this conversation. The mediator might invite either party to take the opposing stance or might invite to explore external circumstances that led to the incident. Finally, you apologize sincerely during the text exchange. You acknowledge the harm you did and promise that you won't make this mistake again. You are willing to compensate for the caused harm. Please visualize this situation. You and the victim draw a restitution agreement. A while after the meeting the mediator asks you how it has been going and how you experienced the mediation and its process and if it had a sustaining effect on you.

Situation : Please recall a situation in which **you were hurt severely, emotionally and/or physically** by another person.

Please choose a situation which was not resolved with the other party afterwards and has left you with some things you would like to express or share.

If you have a situation in mind, please click on the arrow on the right to continue.

Situation Please use the following questions to describe the situation and its circumstances in which you got hurt severely. Try to be as precise as possible and use the questions as guidance. Though, three to four sentences are sufficient. The description of the situation is important to emulate the scenario and emotional state for the latter imaginary mediation. Your description will be processed anonymously and the information you share in the scenarios will not be published.

Describe Please describe the events that led to the situation in which you were hurt severely.

Describe Please describe what the opposing person said or did that hurt you severely.

Describe Please describe what you felt within the situation and thereafter.

Describe Please describe what you think the other person felt within the situation and thereafter.

Describe Please describe what happened after the situation.

Scenario: Imagine that after the situation you described, a mediator approaches you and asks if you are interested in a VOM. He states that the opposing party took the initiative and that participation in VOM is always voluntary for both parties. You agree to participate with that in mind. Imagine you and the mediator arrange a meeting preceding the mediated contact. In this meeting you have the chance to express your feelings towards the offender and the meeting itself. You can also tell the mediator about your expectations. The mediator, in turn, tells you that during the mediated contact you will have the chance to find out about the motive of the offender, ask questions, share your experience and how you are impacted by the incident. The mediator explains that this helps frequently to find closure and cope with the incident. Please read the following text carefully and pause after each paragraph to envision the different steps of the mediation vividly. Use your imagination to frame the situation (What is said or written? How do you feel? How does the situation or environment look like?). Please have in mind that everyone's imagination is different. So if you do not "see" anything, do not care, just use your imagination as it works.

Scenario: The mediator proposes to use video messages for the mediated contact. You and the offender exchange video messages and the mediator functions as a shuttle between you. The mediator is present while you watch and record videos. Please use this information to picture the following mediated contact.

You are receiving and recording messages for the mediation while the mediator is present. Therefore, you chose a place in which you feel comfortable and safe. Envision how, guided by the mediator, this exchange of video messages takes place. Firstly, you get the possibility to record a video in which you share your thoughts and emotions about the incident and ask prudent questions. In turn, the offender shares his narrative and responds to your questions. Picture this conversation. The mediator might invite either party to take the opposing stance or might invite to explore external circumstances that led to the incident. Finally, the offender apologizes sincerely in a video message. He acknowledges the harm he did and promises that he won't make this mistake again. He is willing to compensate for the caused harm. Please visualize this situation. You and the offender draw a restitution agreement.

A while after the meeting the mediator asks you how it has been going and how you experienced the mediation and its process and if it had a sustaining effect on you.

Situation: Please recall a situation in which **you severely hurt** another person, **emotionally and/or physically**

Please choose a situation which was not resolved with the other party afterwards and has left you with the desire to apologize.

If you have a situation in mind, please click on the arrow on the right to continue.

Situation: Please use the following questions to describe the situation and its circumstances in which you severely hurt someone. Try to be as precise as possible and use the questions as guidance. Though, three to four sentences are sufficient. The description of the situation is important to emulate

the scenario and emotional state for the latter imaginary mediation. Your description will be processed anonymously and the information you share in the scenarios will not be published.

Describe Please describe the events that led to the situation in which you severely hurt the opposing person.

Describe Please describe what you said or did that severely hurt the opposing person.

Describe Please describe what you felt within the situation and thereafter.

Describe Please describe what you think the other person felt within the situation and thereafter.

Describe Please describe what happened after the situation.

Scenario: Imagine that after the situation you described, you want to have a VOM. Therefore, you make contact with a mediator. The mediator states that he will approach the victim and that participation in VOM is always voluntary for both parties.

You agree to participate with that in mind. You and the mediator arrange a meeting preceding the mediated contact. In this meeting you have the chance to express your feelings towards the victim and the meeting itself. You can also tell the mediator about your expectations. The mediator, in turn, tells you that during the mediated contact, you will have the opportunity to share your narrative about the incident or to take responsibility and apologize for what you have done. The mediator explains that this often helps to find closure and cope with the incident.

Please read the following text carefully and pause after each paragraph to envision the different steps of the mediation vividly. Use your imagination to frame the situation (What is said or written? How do you feel? How does the situation or environment look like?). Please have in mind that everyone's imagination is different. So if you do not "see" anything, do not care, just use your imagination as it works.

Scenario: The mediator proposes to use video messages for the mediated contact. You and the victim exchange video messages and the mediator functions as a shuttle between you. The mediator is present while you watch and record videos. Please use this information to picture the following mediated contact.

You are receiving and recording messages for the mediation while the mediator is present.

Therefore, you chose a place in which you feel comfortable and safe. Envision how, guided by the mediator, this exchange of video messages takes place. Firstly, the victim records a video in which he shares his thoughts and emotions about the incident and asks prudent questions. In turn, you get the possibility to share your narrative and respond to the victim's questions. Picture this conversation. The mediator might invite either party to take the opposing stance or might invite to explore external circumstances that led to the incident. Finally, you apologize sincerely in a video message. You acknowledge the harm you did and promise that you won't make this mistake again. You are willing to compensate for the harm you caused. Please visualize this situation. You and the victim draw a restitution agreement.

A while after the meeting the mediator asks you how it has been going and how you experienced the mediation and its process and if it had a sustaining effect on you.