BUILDING TRUST ONLINE: THE REALITIES OF TELEPRESENCE FOR MEDIATORS ENGAGED IN ONLINE DISPUTE RESOLUTION

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I. INTRODUCTION

Mediation is a voluntary, confidential process in which a trained third-party neutral, known as a mediator, helps disputing parties to communicate and negotiate a resolution of their choice. Mediation may occur in a traditional, face-to-face setting or as part of online dispute resolution (ODR): a method to resolve disputes using some form of technology. As the Internet has exploded and revolutionized the way we do business, ODR, including mediation, has adapted to information communications technology. An individual who works at a distance away from parties—what we call a virtual mediator—can assist disputants in lean media such as email, which lacks verbal and visual cues, or in a video-
collaborated environment that assumes many aspects of rich face-to-face media.

Irrespective of the context, for mediation to work effectively, the parties must trust that the mediator will adhere to mediation values and ethics while facilitating their communication. The mediator must act impartially and preserve party secrets. The mediator must remain nonjudgmental, protecting party autonomy. As parties begin to develop rapport with the mediator, their trust ensues, which promotes candor in their communication.

Trust is an amorphous concept because it is multidimensional: it is based on an individual’s predisposition to trust, as well as his perceptions. Trust may fluctuate within varying contexts. For example, will a party engaged in rich media—a face-to-face environment involving contextual cues—easily trust a mediator? How does lean media, such as email, which is devoid of contextual cues, affect a party’s ability to trust a mediator? Somewhere in the middle is an online experience involving a video-collaborated environment; what impact does that context have on an ability to stimulate trust?

Research exists that involves trust and online communication. Scholars have discussed “trust” in the context of consumer acceptance of e-commerce, demonstrating that consumers trust web-based business enough to make online purchases or seek advice. Trustworthiness, as distinguished from trust, has been examined in a business to consumer e-commerce setting. Literature suggests that website design affects an ability to arouse trust. Scholars also have written about trust inherent in an online environment.

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6. Susan Nauss Exon, Maximizing Technology to Establish Trust in an Online, Non-Visual Mediation Setting, 33 U. LA VERNE L. REV. 27, 43–44 (2011) (describing six building blocks of trust, many of which apply to website design); Yakov Bart et al., Are the Drivers and Role of Online Trust the Same for All Web Sites and Consumers? A Large-Scale Exploratory Empirical Study, 69 J. OF MKTG. 133, 133 (2005) (discussing factors in website design that are important to building consumer online trust, such as privacy, security,
nonvisual context such as email⁷ as well as a visual context using video-based mediation or negotiation⁸ and avatars.⁹

To date, however, we are unable to find scholarship involving trust-building techniques in a video-collaborated environment known as telepresence, enhancing the importance of this empirical research study. Telepresence “is the extent to which one feels present in the mediated environment, rather than in the immediate physical environment”; in other words, one feels present by means of a communication medium.¹⁰

The sense of being present is based primarily on the ability of information communications technology (ICT) to generate dimensions of vividness and interactivity.¹¹ Telepresence platforms are comprised of highly sensitive microphones combined with special cameras that can automatically zoom in and pan the room, helping participants track the flow of a conversation better than videoconferencing;¹² participants feel verbal and social cues

navigation and presentation, brand strength, advice, order fulfillment, community features, and absence of errors).  
⁸. See Noam Ebner & Jeff Thompson, @ Face Value? Non-Verbal Communication and Trust Development in Online Video-Based Mediation, 2 INT’L J. OF ONLINE DISP. RESOL. 103, 103 (2014) (discussing techniques for trust building that virtual mediators can use in nonverbal communication via webcam); Noam Ebner, Negotiation via Videoconferencing, in THE NEGOTIATOR’S DESK REFERENCE 151, 161–66 (Chris Honeyman & Andrea Kupfer Schneider eds., 2017) (discussing benefits and risks of negotiating by videoconferencing); see also Ernst Bekkering & J.P. Shim, @ Trust in Videoconferencing, 49 COMMIS. OF THE ACM 103, 105 (2006); Ravi Sharma et al., Best Practices for Communication Between Client and Vendor, in IT Outsourcing Projects, 3 J. OF INFO., INFO. TECH., & ORGS. 61, 79 (2008) (showcasing empirical research regarding the best forms of information communications technology that engender trust between clients and vendors when executing an IT outsourcing contract).  
¹¹. Id. at 10–11 (defining “vividness” as “the ability of a technology to produce a sensorially rich mediated environment” and “interactivity” as “the degree to which users of a medium can influence the form or content of the mediated environment”).  
¹². Email from Kristin Lewis, WebEx Technical Support Administrator, Univ. of La Verne, to Susan Nauss Exon, Professor of Law, Univ. La Verne Coll. of Law, (Sept. 18, 2018, 9:52 AM PST) (on file with author). The telepresence camera responds to audio sounds such that it may zoom in on one person who is speaking or zoom out to show a whole group of people.
happening real time in a meeting such as mediation, yielding a good conversation flow.\textsuperscript{13} Telepresence platforms also include special lighting, which enhances the inclusive environmental sensations and facilitates eye contact. In contrast, videoconferencing relies on a computer-based stationery camera that typically focuses on a person’s headshot or upper torso, which can create an uncomfortable conversation modality due to awkward pauses and/or people interrupting or talking over each other since participants cannot see or scale each other like an in-person experience.\textsuperscript{14}

Telepresence can be analogized to a looking glass in which individuals can look through one room to another, looking directly at each other rather than at a computer-based camera.\textsuperscript{15} Indeed, telepresence is tantamount to a face-to-face setting.

The purpose of this study is to examine the extent to which parties can trust a mediator when the parties and mediator are not present in the same physical location. Will parties who have never met the mediator prior to the mediation and only communicate with that mediator using telepresence have the same extent of trust in the mediator as parties who communicate face-to-face with the mediator? What type of mediator behavior signifies trustworthiness in the eyes of the parties? What factors significantly provoke parties to trust a mediator? Do such factors as age, gender, and educational level affect an individual’s ability to trust a mediator? Does an individual’s familiarity with, and use of, a video-collaborated environment such as Skype, FaceTime, or a similar platform affect an individual’s ability to trust a mediator? What is the impact of an individual’s predisposition to trust? These questions are answered in this groundbreaking research study.

The research study is based on subjects participating as parties to a simulation, built around a fictitious fact pattern that involves close friends, Gene and Michelle, who encounter a personal conflict that results in the filing of a lawsuit. They agree to mediate without attorneys. Half of the participants communicate with the mediator in a face-to-face setting while the other half communicate via telepresence. Prior to the mediation simulation, participants complete a survey of questions that test

\textsuperscript{13} Id.
\textsuperscript{14} Id.
\textsuperscript{15} Telephone Interview with Kristin Lewis, WebEx Technical Support Administrator, Univ. La Verne (Sept. 17, 2018).
their predisposition to trust others. After the simulation, they answer survey questions relating to their personal interaction with the mediator as well as their personal perceptions about the mediator.

The remainder of this Article is organized as follows. Part II examines the general nature of interpersonal trust and its typical traits. As explained, interpersonal trust may change depending on the context and scope of a relationship. Part II also discusses the context in which trust is measured, examining an individual's disposition to trust as well as characteristics indicative of trustworthiness, which is a precursor to trust. It also includes a discussion of the importance of trust to mediation. Part III surveys online dispute resolution (ODR), including telepresence. It discusses notions of trust within that context, including limitations of trust due to technology. Part IV discusses the research project. It explains the methodology used, including the mediator, participants, simulated scenario, and measures of main variables. Part V presents the results and then sets forth findings. As predicted, levels of trust are fairly uniform whether the participants communicated face-to-face or virtually with the mediator. The Article concludes with a discussion of future possibilities for study and research.

II. THE GENERAL NATURE OF TRUST

A. Interpersonal Trust

Definitions of trust vary because it is a nebulous concept consisting of an abundant array of fine nuances. Few scholars agree on the dimensions of this multidimensional concept. Definitions vary depending on the field of the researcher. An additional challenge to defining trust exists because different types of trust exist, as explained in this Part.

One definition of trust is “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.”

Stated more simply, trust is an individual’s belief about

others and a willingness to “act on the basis of the words, actions and decisions of another.”

“Trust can be described as the belief that the other party will behave in a socially responsible manner, and, by so doing, will fulfill the trusting party’s expectations without taking advantage of its vulnerabilities.”

Because the research project focuses on one’s ability to trust another individual—in this case, a mediator—this Article focuses on interpersonal trust, which is shaped by interaction and communication among people. It is a subjective concept based on perceptions such that a trustor must infer feelings of trust indirectly. “Interpersonal trust” is defined as “an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon.”

Thus, a trustor becomes vulnerable, assuming a risk to rely on personal expectations that someone else will fulfill a promised action or duty because the trustor lacks control over his counterpart. What exactly does this mean? What does that action or duty look like?

Trust is strengthened when a trustee demonstrates that he cares for the needs and benefits of the trustor. Feelings of trust, therefore, are affected by perceptions of satisfaction or attraction, interpersonal visual cues such as smiling, and the trustee’s ability, integrity, and benevolence; reputation and past experiences also influence feelings of trust. Perceptions of the trustee’s credibility, which include salient characteristics of honesty, reliability, and integrity, also implicate trust.

It is easy to see that trust is a social concept because it relies on human interaction. When individuals trust one another, they let down their guards and cooperate. According to Colin Rule and

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23. Riegelsberger et al., *supra* note 9, at 269.
Larry Friedberg, trust “is deeply validating.”27 When the trustee fulfills a promise or duty, that action reinforces a bond between two people, creating a special connection.28

Trust also involves a level of reciprocity; people who are willing to trust others tend to be more cooperative and trustworthy themselves.29 This notion of reciprocity is consistent with the “social exchange theory” developed by Peter Blau.30 Blau suggests that people seek to balance their relationships with one another so that a person who receives a benefit will feel obligated to reciprocate by returning some benefit.31 Benefits can be tangible or intangible. For example, a senior manager may give a raise to a junior manager or may mentor the junior manager by offering time and advice. In turn, the junior manager expresses gratitude.32 Low levels of trust, however, tend to induce competitive behavior, which may exacerbate feelings of distrust. Hostile feelings will destroy any identification-based trust.33

Finally, trust may involve a leap of faith.34 Consider the first time that you rely on someone: you assume a risk. That reliance is trust.

B. Types of Trust

Scholars provide different labels for trust. Roy Lewicki and his colleagues differentiate calculus-based trust and identification-based trust.35

27. Id. at 195.
28. Id.
31. PETER M. BLAU, EXCHANGE AND POWER IN SOCIAL LIFE 91 (1964) (defining “social exchange” as “voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others”).
32. Id. at 90.
33. COLTRI, supra note 29, at 185. See infra pt. II.B.2 for a discussion of identification-based trust.
34. Rule & Friedberg, supra note 3, at 195.
based trust depending on the depth or intensity of a relationship.\textsuperscript{35} Others differentiate trust specifically for online relationships.\textsuperscript{36}

1. Calculus-Based Trust

Calculus-based trust is premised on the idea that trust relates to consistent behavior and people will act the way others want them to act for fear that they will be punished for inconsistent behavior.\textsuperscript{37} For instance, if parties settle a case during mediation and one party fails to make a timely payment pursuant to the settlement agreement, interest may be charged.\textsuperscript{38} According to Lewicki, not only is calculus-based trust grounded in the fear of punishment for violating a trust, but it also may result in rewards for maintaining the trust.\textsuperscript{39}

Calculus-based trust is the easiest kind of trust to engender because parties need not be well acquainted.\textsuperscript{40} It typically applies to arm’s-length business transactions and the beginning stages of new relationships.\textsuperscript{41} For example, in a personal injury action involving an automobile accident, parties at mediation most likely include the plaintiff and the defendant’s insurance carrier. Neither party knows each other nor will they probably ever see each other after the mediation has concluded. The parties’ abilities to negotiate a settlement agreement are based on a simple contract that includes knowledge of negative consequences for noncompliance as well as incentives for compliance. Such agreements outline respective duties of the parties; each must trust that the other will carry out his individual obligations.

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35. See infra pt. II.B.1–2 (describing this idea).
36. See infra pt. II.B.3 (describing this idea).
38. COLTRI, supra note 29, at 179 (citing an example of calculus-based trust in a settlement of a lawsuit—a settlement agreement may require the payment of interest and penalties if the principal amount is paid late).
39. Lewicki & Bunker, supra note 37, at 145.
40. COLTRI, supra note 29, at 180.
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2. Identification-Based Trust

The highest level of trust is known as identification-based trust. It is based on understanding and appreciating another’s desires and intentions due to a long-standing relationship. Because of such a strong relationship, parties can act on behalf of each other. They are able to identify with each other’s desires and values almost to the point of substituting for the other person. The parties trust each other implicitly because they have developed a mutual understanding and share common values. Identification-based trust applies to intimate relationships as well as organizational associations such as partnerships and long-standing business relationships. One can witness identification-based trust in a surgical team’s superior ability to transplant a kidney and a rowing team’s unified, strong strokes that lead to victory.

3. Online Trust

Scholars suggest specific models of online trust. These include initial trust, swift trust, and felt trust.

Initial trust occurs when parties have not yet formed a relationship or shared meaningful information in which to form any type of bond. Once a trustee offers personal information, a trustor may perceive initial trust. “[C]ognitive-based trust literature posits that trusting beliefs may form quickly (before parties have meaningful information about each other) because of social categorization, reputation, illusions (irrational thinking), disposition, institutional roles and structures, or out of the need to immediately cooperate on a task.”

Swift trust is another form of trust needed for temporary situations; it is viewed more as a cognitive and action form rather than an interpersonal form. Within an electronic setting, swift

43. Lewicki & Bunker, supra note 37, at 151.
44. McKnight et al., supra note 4, at 335.
45. Id. at 336.
trust “depends entirely on the rapid and successive interplay of initiations and responses.”47 One study, for example, involved temporary teams of students who were asked to work with people that they had not met before. They communicated with each other electronically. Researchers found that continuous interaction among the team members signified trust and predicted the team’s performance.48

Like initial trust, swift trust is particularly relevant to a one-time, nonvisual mediation in which the disputants do not share a history or relationship among themselves or with the mediator. The mediator should be mindful that continuous interaction among all of the disputants would help to engender trust, especially because the continuous interaction helps establish predictability inherent in calculus-based trust.

Finally, felt trust relates to a trustor’s awareness or perception that others trust him.49 The trustor’s perceptions of how others treat him are important because the trustor may be receptive to an information exchange during mediation based on others’ actions.

C. Context in Which Trust Is Measured

Notwithstanding types of trust, literature suggests two methods to measure trust. First, one may assess an individual’s tendency to trust. Second, one may explore characteristics of trustworthiness.

1. Individual Disposition to Trust

One’s inclination to trust may be shaped by a history of social interaction, including childhood experiences with parents and siblings.50 Other factors may include personality types, culture, and developmental experiences.51 Social capital, including cultural nuances within different geographic locations, impacts the vitality

47. Id. at *2. See Sirkka L. Jarvenpaa & Dorothy E. Leidner, Communication and Trust in Global Virtual Teams, 10 Org. Sci. 791, 794 (1999) (noting that once a virtual team has begun to work together, the team members can maintain trust by a “highly active, proactive, enthusiastic, generative style of action”).
48. Iacono & Weisband, supra note 46, at *1.
49. Dashti et al., supra note 30, at 1–2.
50. Lewicki, Trust and Distrust, supra note 41, at 204–05.
of economic organizations as evidenced in low- and high-trust societies. Some scholars believe that trust is neurobiological and may differ across genders.

2. Trustworthiness Characteristics

Trustworthiness is not the same thing as trust; it is a precursor to trust. Whereas trust signifies a willingness to rely on another in situations that may be risky, trustworthiness includes a set of beliefs about the trustee that precedes that willingness. Trustworthiness, according to Roger Mayer, is characterized by one’s ability, benevolence, and integrity.

Ability relates to one’s expertise, competence, and skill to perform; it is perceived as influential by others. If a person promises to do a job, he or she must fulfill that obligation to engender trustworthiness.

Benevolence is the extent to which a trustor perceives that a trustee wants to do good for him (the trustor). Benevolence suggests some type of bond or relationship exists, such as that of mentor (trustee) and protégé (trustor). “Being supportive of our interests, communicating honestly and openly, and showing willingness to delegate decisions and share power or control with us, are all indicators of one’s benevolence.”

Integrity involves a trustor’s perceptions that a trustee abides by a set of principles that a trustor finds acceptable, including implications of morality and credibility. Integrity is measured by a trustor’s perceptions of a trustee’s character traits, including consistency of past behavior, reputation, fairness, openness, the extent to which the trustee’s actions and words align, and a belief

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53. Lewicki, Trust and Distrust, supra note 41, at 205.
55. Serva et al., supra note 5, at 90.
56. Id.
57. Mayer et al., supra note 16, at 717; see Dashti et al., supra note 30, at 3 (adopting Mayer’s trustworthiness dimensions of ability, benevolence, and integrity and applying them in the context of e-government).
59. Lewicki, Trust and Distrust, supra note 41, at 205.
61. Lewicki, Trust and Distrust, supra note 41, at 205.
62. McKnight et al., supra note 4, at 339.
that the trustee has a strong sense of justice. The trustor's perceptions of these traits are paramount, demonstrating that both the trustee’s actions and the trustor’s standards are significant. If the trustee takes some action that involves her personal integrity, but the trustor does not find such conduct acceptable, the trustor will not perceive the trustee as possessing integrity.

D. Importance of Trust in Mediation

Trust is important to mediation irrespective of the setting, i.e., whether face-to-face or virtual. The participants—parties and their lawyers—must trust everyone enough to engage in productive communication and negotiation. They must trust both the mediator and the process enough to share personal, confidential information anticipating that the mediator will offer a third-party, neutral perspective. As they acquiesce to the timely sharing of relevant information, disputants also enable the mediator to uncover underlying party interests and enhance problem-solving efforts. When mediators feel rapport with parties, they feel better able to offer creative ideas to help craft a settlement. All of this makes sense because literature points to a mediator’s ability to engender trust based on personal skills, including both verbal and nonverbal communication, as well as expertise and reputation. More specifically, factors that engender trust include a mediator’s neutrality and impartiality, mastery of the mediation process, empathy and warmth, helpfulness, and chemistry between parties and the mediator, including the

64. Dale E. Zand, Trust and Managerial Problem Solving, 17 ADMIN. SCI. Q. 229, 230–31 (1972) (explaining that people will be receptive to another’s, in this case the mediator’s, influence when they do not feel a risk of abuse for sharing information).
66. Ebner, supra note 8, at 158–61 (focusing on how to engender trust via nonverbal communication in e-mediation based on five categories of the METTA (Movement, Environment, Touch, Tone, and Appearance) model).
mediator’s friendliness and likability.\textsuperscript{68} Often, chemistry is exhibited by attraction to the mediator or building a good rapport because the mediator shares experiences or values in common with the parties.\textsuperscript{69} Other examples of nonverbal actions that are linked to rapport building include smiling, head nodding, directional gaze, direct body orientation, and uncrossed arms and legs.\textsuperscript{70}

Notwithstanding the critical nature of trust to mediation, noted scholar Roy Lewicki explains the importance of also examining the concept of distrust. Rather than looking at trust and distrust as opposites, Lewicki suggests that trust and distrust co-exist along separate dimensions.

Whereas trust is seen as the trustor’s confident positive expectations regarding the trustee’s conduct, distrust is defined as the trustor’s confident negative expectations regarding the trustee’s conduct. While both trust and distrust involve movements toward certainty of another’s conduct, the nature of that certainty and the emotional and behavioral reactions that come with it will differ considerably. That is, trust evokes a feeling of hope and a demonstrated willingness to become vulnerable to the trustee. Distrust, on the other hand, evokes fear and actions to buffer oneself from the harmful conduct of the other party.\textsuperscript{71}

Simply stated, trust is about giving credit to the trustee such that the trustor is willing to take a risk and be vulnerable; distrust is “about ruling out such credit up front” because the trustor focuses on potential vulnerabilities.\textsuperscript{72}

Possessing a certain amount of both trust and distrust is healthy for participants negotiating in a mediation context. Trusting too much allows a trustor to be exploited. Too much distrust will probably prevent someone from coming to the mediation table at all. Considering the multi-faceted relationships between people, someone may trust another in certain contexts but

\textsuperscript{68} Noam Ebner, \textit{ODR and Interpersonal Trust}, in \textit{ODR: Theory and Practice} 203, 210 (M.S. Abdel Wahab, E. Katsh & D. Rainey eds., 2012) [hereinafter Ebner, \textit{ODR and Interpersonal Trust}].

\textsuperscript{69} Poitras, \textit{supra} note 67, at 308.

\textsuperscript{70} Ebner, \textit{supra} note 8, at 161–65.


\textsuperscript{72} Gefen, Benbasat & Pavlou, \textit{supra} note 54, at 278.
not in others. Hence, one may trust a mediator to ensure a quality process grounded in principles of confidentiality, yet not trust that mediator to prepare his tax returns or build a house.

Disputing parties also need to feel safe within a trustworthy environment. Mediators can help foster a trustworthy environment between themselves and each party by encouraging reciprocal cooperation by all parties. Relying on the notion of reciprocity, or Blau’s social exchange theory, mediators can encourage participants to disclose information or make concessions in return for similar signs of good-faith participation by opponents. In the context of virtual mediation, the “felt trust” implies that a trustor is more willing to engage in an information exchange based on how others treat him. Mediators, therefore, need to develop a trusting relationship so that all parties feel comfortable to reciprocate in their information exchanges. If a mediator treats the disputants in an impartial, trustworthy manner by using good communication techniques, the disputants are likely to trust the mediator and use the mediation process to the fullest extent to which it is intended. These mediator skills implicate ability and integrity, characteristics that signal trustworthiness. Additionally, if mediation participants perceive that the mediator wants to help them resolve their conflict, this sense of benevolence also indicates a mediator’s trustworthiness.

Finally, trustworthiness can affect the efficiency with which mediation participants work. If a trustor knows that a trustee will be helpful, the need for documentation and confirmation is reduced. Likewise, it is easier to draft settlement agreements when participants are not skeptical about each other’s anticipated actions.

III. TRUST INVOLVED IN ONLINE DISPUTE RESOLUTION

A. Overview of ODR

Parties engaged in online dispute resolution use information and communications technologies (ICT) to help them resolve disputes. In its most simplified version, ODR entails any dispute resolution method that is not face-to-face. It may involve

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73. See id.
74. See supra pt. II.B.3 for a discussion of felt trust.
telephones, many aspects of the Internet (i.e., email, chat, web-based platforms designed specifically for dispute resolution), video-conferencing, and other forms of audio and video projection. Although many scholars believe that ODR and ADR are different concepts, we agree with Colin Rule, who says that, “ODR and ADR are fundamentally the same thing” because they are both designed to resolve disputes; ODR simply involves new and different tools.\textsuperscript{75}

ODR also involves additional participants. These metaphorical participants are known as the “fourth party,” which is technology itself, and the “fifth party,” which includes designers, developers, and providers of that technology.\textsuperscript{76}

ODR originated in the mid-1990s as Internet disputes began to occur. It initially started as a way to resolve e-commerce disputes; eBay was at the forefront when it hired SquareTrade to manage disputes arising out of its e-commerce consumer transactions. Today, ODR involves both online and offline disputes ranging from neighborhood disagreements and simple small claims matters to emotional divorces and complex, multi-party transactional disputes.

In its earliest form, ODR attempted to mimic offline negotiation and mediation with various blind-bidding processes.\textsuperscript{77} During its first two decades, ODR evolved and continues to do so.\textsuperscript{78} ODR now assumes a variety of perspectives.

First, ODR may be used alone and resemble traditional dispute resolution processes in which all parties are in the same room. Here, the mediator engages the parties in communication by using some type of ICT.

Second, ODR may facilitate a hybrid process where the parties engage in face-to-face interaction augmented by the use of ICT, such as telephone, email, chat, or video communications.\textsuperscript{79} For example, a mediator may use ICT for administrative and scheduling purposes and then conduct the mediation in a face-to-face setting. Alternatively, a mediator may begin mediation in a

\textsuperscript{75} Rule, supra note 2, at 8.
\textsuperscript{76} Susan Nauss Exon, Ethics and Online Dispute Resolution: From Evolution to Revolution, 32 OHIO STATE J. DISP. RESOL. 609, 610–11 (2017).
\textsuperscript{77} Suzanne Van Arsdale, User Protections in Online Dispute Resolution, 21 HARV. NEGOT. L. REV. 107, 118 (2015).
\textsuperscript{78} Ethan Katsh & Colin Rule, What We Know and Need to Know About Online Dispute Resolution, 67 S.C.L. REV. 329, 330 (2016).
face-to-face setting and, if it cannot be concluded within a specific time period, continue the session to an online platform.

Finally, ODR may take the form of a fully automated dispute resolution process. Many companies have come and gone, each developing its own algorithmic service. Smartsettle and Cybersettle are examples of companies that use a blind-bidding process in which parties post their bidding amounts and certain aspects, such as a bottom line, are kept confidential.80

Today, ODR has expanded from private disputes to public, court-connected platforms operated by governmental entities. The European Union maintains a website for ADR with an ODR component.81 A sampling of other progressive governments that operate ODR services hail from the UK and Wales;82 Mexico (where the Consumers’ Protection Agency created Concilianet to resolve consumer to business disputes);83 and British Columbia, Canada, where the government commenced the British Columbia Civil Resolution Tribunal (CRT) in 2016 to resolve strata property (condominium) disputes of any amount, small claims disputes $5,000 and under, and motor vehicle injury claims up to $50,000.84


83. Van Arsdale, supra note 77, at 121; see Preguntas Frecuentes, PROFECO, http://concilianet.profeco.gob.mx/Concilianet/faq.jsp (last visited Aug. 10, 2019) (noting that the Office of the Federal Prosecutor for the Consumer (PROFECO), supported by the judiciary, regulates the online platform).

Additionally, in 2017, China established an online court in the city of Hangzhou to handle online activity including online shopping.85

In the United States, several federal agencies have adopted ODR practices. The National Mediation Board (NMB) facilitates labor-management disputes for U.S. railroad and airline industries.86 It offers ODR services using web-based video conferencing and other ICT to enable the drafting of agreements online87 and maintains “asynchronous online platforms” for “submissions-only arbitration.”88 The Federal Mediation and Conciliation Service (FMCS) provides mediation and arbitration services to improve labor-management relations and facilitate collective bargaining.89 It enables online communication and facilitates web-based meetings using its FMCS TAGSTM.90 These two agencies are among the leaders and early users of ODR technology in the United States.91 Currently, most U.S. states are considering incorporating ODR systems into the workings of state and local courts. Dozens of courthouses already have operational ODR programs with documented success, and this number is expected to expand greatly in the near future.92

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88. Email from Daniel Rainey, Adjunct Professor at Southern Methodist Univ., to Susan Nauss Exon, Professor of Law, Univ. of La Verne College of Law (Sept. 6, 2016, 09:39 AM PST) (copy on file with Professor Exon).


91. Email from Daniel Rainey, supra note 88.

B. Trust Within the Context of ODR

Trust in conjunction with ODR may mean different things to different people. Noam Ebner characterizes four types of trust involved in ODR. First, some may look to ODR as a trust-provider/facilitator; incorporating ODR into systems, such as e-commerce enhances consumers’ trust in the e-commerce system. Others may focus on a user’s trust in ODR and ask whether technology can manage a dispute efficiently and effectively. Still others may focus on interpersonal trust facilitating parties’ willingness to communicate with one another to resolve conflict using an online system. Finally, trust can be analyzed in terms of the content offered by a system. For example, some ODR systems are built around algorithms; people need to be assured that outcomes predicted by a blind bidding process are legitimate. Although all aspects of trust and ODR are important, this Article focuses on interpersonal trust using telepresence as a communication channel for ODR.

The context in which parties communicate may affect the ability to develop trust. Several studies illustrate how the richness of the communication channels affects one’s ability to trust.

Nathan Bos and his colleagues evaluated three-person groups involved in a social dilemma as they played an investment game. They measured the total payoff after thirty rounds, looking specifically at levels of cooperation. Cooperation, of course, is indicative of trust. They found that participants in the face-to-face, videoconference, and audio conference groups had no significant difference in their ability to trust their partners, although it took longer to trust within the context of video and audio. Ultimately, by the last few rounds, the groups in these three communications media showed similar levels of trust-based cooperation.

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93. Ebner, ODR and Interpersonal Trust, supra note 68, at 215.
94. Id. at 215–16.
95. Id. at 216.
98. Id. at 3–4.
99. Id. at 3.
based groups did the worst by not exhibiting the same levels of trust-based cooperation.\textsuperscript{100}

Using a modified version of the same investment game, David Nguyen and John Canny used an innovative video system known as MultiView and compared it to conventional video and face-to-face meetings of groups of participants.\textsuperscript{101} They found that:

\begin{enumerate}
\item cooperative-based trust in face-to-face groups was significantly higher than trust in non-directional video conferencing;
\item cooperative-based trust in directional video conferencing was significantly higher than trust in non-directional video conferencing; and
\item no significant difference existed in cooperative-based trust between groups meeting face-to-face and groups meeting using directional video conferencing.\textsuperscript{102}
\end{enumerate}

Likewise, Ernst Bekkering and J.P. Shim found that the richness of communication channels influences trust perceptions.\textsuperscript{103} Focusing on the gaze of a participant, they simultaneously videotaped an individual with three different cameras—looking straight into the camera, looking up, and looking sideways.\textsuperscript{104} They found that perceptions of trust for voicemail and for the sender who addressed the camera directly were considerably higher than email, meaning that the visual message may not contribute more information than the audio message.\textsuperscript{105} In other words, as the visual quality of the video deteriorated, participants focused more on the verbal message than what they saw.\textsuperscript{106}

These studies may implicate research that for some cultures, especially in the United States, eye contact is important to infer feelings of trust. In these cultures, failure to maintain eye contact signifies deception and leads to feelings of mistrust.\textsuperscript{107}

\textsuperscript{100} Id. at 3–4.
\textsuperscript{102} Id.
\textsuperscript{103} Bekkering & Shim, \textit{supra} note 8, at 105.
\textsuperscript{104} Id. at 106.
\textsuperscript{105} Id.
\textsuperscript{106} Id.
\textsuperscript{107} Id. at 105.
C. Limitations of Trust and Technology

Current research focuses on limitations of trust with respect to video conferencing; poor reception may distort or limit facial expressions, and body language may be lacking if an entire body image is not accurately projected. Distortions may occur to the extent that parties anticipate their video communications to mirror in-person communications; they may fail to filter contextual cues used in online video communication. Webcams refocus eye contact toward cameras on a computer rather than direct eye contact with a counterpart. Ebner and Thompson also illustrate how distance between a user and a webcam can affect one’s ability to engender trust. Finally, sensory perceptions of touch and smell are lacking.

Although the current research project does not involve text-based ODR, it is worthy to note some of its limitations as they may apply to video conferencing. Text-based ODR, such as email and chat, have specific limitations. Contextual cues are missing since people cannot see or hear each other; therefore, a sarcastic tone may be missed and other non-verbal cues such as facial expressions and body language are lost. Contextual cues are critical to communication; studies show that upwards of ninety-three percent of our communication is nonverbal. Since online textual communication involves delay and occasionally not responding in chronological order, communication synchronicity is lost.

Limitations also may apply to aspects of technology other than communication channels. Over a decade ago, Rule and Friedberg noted that customer attitudes toward trust were changing in light

109. Ebner & Thompson, supra note 8, at 121.
110. Id. at 124–25.
112. See V. HALE STARR & MARK MCCORMICK, JURY SELECTION § 26.02, 26-6 (4th ed. 2009) (citing studies asserting that 65–70% of communication is non-verbal and noting that some studies claim up to 93% of communication is non-verbal).
of problems involving identity theft and potential fraud in advertising.\textsuperscript{114}

\textbf{IV. THE PROJECT}

Although many scholars have written about trust from varying face-to-face and online contexts, the effect of telepresence on trust has been underexplored. In light of the originality of this research project, describing the methodology in detail will bound conclusions and form a foundation for follow-on studies.

We designed the research project for thirty separate mediation simulations.\textsuperscript{115} Each mediation session involved the same facts and character parts for disputants to ensure an objective process and limit subjective elements.

\textbf{A. The Mediator}

In all simulations, the same mediator was involved to alleviate differences in personality, demeanor, and communication style. Although the mediator knew the nature of the project, he did not know the facts of the simulated dispute. The tradeoff was that as the mediator performed more and more mediations, he knew basic and confidential facts prior to beginning a new simulation, creating a somewhat tedious situation for him. The participants, however, embellished different facts and brought subtle nuances to each session through their own personalities, demeanor, and communication styles.

\textbf{B. Participants}

We solicited students to serve as the disputing participants.\textsuperscript{116} They included law students, pre-law students, and business and

\textsuperscript{114} Rule & Friedberg, \textit{supra} note 3, at 203.
\textsuperscript{115} In actuality, thirty-one took place.
\textsuperscript{116} The most challenging aspect of the project was obtaining student volunteers who followed through with their assigned simulation. As the principal investigator, Exon made short presentations in numerous classes around the University of La Verne main campus and at its College of Law campus. Students volunteered to participate and were assigned a specific date and time to participate in their simulation. About two to three days prior to the simulation, Exon emailed instructions and confidential character facts to students so that they could prepare for the simulation. To maintain anonymity, students were assigned a Study Number. The mediator and one student were located in the sole telepresence room at the College of Law. The other student was assigned to a telepresence room located at the La Verne main campus, approximately ten miles away. In numerous instances, one student
management students, although students in other majors also had been approached. A combination of graduate and undergraduate students volunteered. We informed participants that the “purpose of the study is to evaluate the effectiveness of distance mediation in a video collaborated environment using telepresence.” We also told students that they were “invited to participate in the research study since telepresence is an innovative, new form of communications technology that is growing in popularity in both business and education professions.” Initially, participants were not informed that the project related to trust in an effort to prevent participation biases. At the conclusion of all of the simulations, we sent a letter to participants, informing them of the true nature of the project: “The real purpose was to test whether a mediator (a third-party neutral who helps disputing parties resolve conflict) can develop trust and rapport with disputing parties when not present in one physical location.”

Participants were informed that one person would be in the same room as the mediator and the other would participate in the simulated mediation via telepresence. They would find out the context of their participation when they arrived at their assigned location. They also were instructed to answer questions in a pre- and post-mediation Qualtrics questionnaire; each would take about ten minutes to complete.  

C. The Scenario

The mediation simulation was based on the following fictitious fact pattern. Michelle (Michael for a male) owned her own physical therapy office and when long-time friend Gene (Jean for a female) needed work, she hired him as her assistant; everything worked out great until that fateful day when Michelle was walking her dog, Freckles. While off her leash, Freckles happened upon a skunk, which gave Freckles a new kind of perfume. As Michelle and
Freckles continued to walk home, they saw Gene. Freckles became so excited that he immediately ran over and jumped up on Gene, licking his face. Gene was dressed in a brand-new suit and new shoes. He was so stunned by Freckles and the smell of the skunk that he tried to back away. In the frenzy of backing away from the dog, Gene fell backwards over a fence into a five-foot hole that the City had dug to repair a water line. As he fell into the hole, Gene twisted his left leg and broke his femur. While falling, he instinctively stuck out his arms, landing on his right wrist, breaking it. He also suffered a concussion, not to mention tearing and ruining his new suit.

The entire episode with Gene took a matter of seconds, during which Michelle laughed uncontrollably. Michelle apologized to Gene and offered to drive him to the hospital; however, Gene wanted nothing to do with Michelle. In fact, Gene told Michelle that he quit and did not return to work since the incident. Complications delayed the healing process, and Gene grew more and more furious over the incident. To make matters worse, Gene was heading to a job interview at the time of the incident; although he loved working for Michelle, he wanted a job with advancement opportunities. In light of the incident, he missed his job interview and did not get the job.

Gene sued Michelle for negligence and negligent infliction of emotional distress, seeking personal injuries and lost wages. Before the lawsuit advanced too far, the parties agreed to mediate without any attorneys present.

D. Measures of Main Variables

1. Predisposition to Trust

To establish the participants’ predisposition to trust others, we gave them a pre-mediation questionnaire that followed Julian B. Rotter’s scale for the measurement of interpersonal trust. It included twenty-five questions relating to trust and eight filler questions.

118. A research assistant was located at each site to administer the Qualtrics questionnaires using a laptop computer. They also assisted the participants to get started with the simulation and then left the room. No one other than the two students, role-playing as disputants, and the mediator participated in the mediation. No recording was made of any mediation simulation. The mediator was not told real names of the students so that everyone could stay in character.

questions so that participants would not know the true nature of the study. The questions were written using a five-point Likert scale from one to five. Lower scores indicate lower levels of trust and higher scores higher levels of trust. The neutral position is a score of three. To create an index of predisposition to trust, we averaged the scores of the twenty-five questions.

2. Trust in the Mediator Post-Mediation

The post-mediation questionnaire included twenty-four questions based on our research regarding trust and trustworthiness. The first part of the questionnaire included questions related to the participant’s personal interaction with the mediator. The second part of the questionnaire asked the participant’s personal perceptions about the mediator to determine whether the mediator appeared trustworthy. The questions on the post-mediation questionnaire also were measured on a five-point Likert scale. A partial list of the questions is presented in the Appendix.

Among the post-mediation questions, we examined two direct outcome measures: trust in the mediator and trustworthiness of the mediator. For the trust measure, participants responded to the following statement after the mediation: “I felt that I could trust the mediator. (‘Trust’ is defined as to have faith in; to rely on someone to do or refrain from doing something.)” The statement was set up on a five-point Likert scale, with higher scores indicating higher levels of trust. For the trustworthiness measure, participants responded to the following statement after the mediation using the same scale of measurement: “I felt that the mediator was trustworthy. (‘Trustworthy’ is defined as deserving trust.)”

V. RESULTS

We conducted thirty-one iterations of the study. We discovered problems with the recording of several corresponding pre- and post-mediation questionnaires, which led us to delete several

After the deletions, we ended up with fifty-nine observations. This Part describes the participants’ demographic information, their familiarity with video-collaborated communications, and their predisposition to trust. Then we will describe the two main outcomes of the experiments as to whether participants trusted the mediator and whether they thought the mediator was trustworthy.

A. Descriptive Statistics

Summary statistics of the participants are presented in Table 1. Twenty-nine people participated in the mediation simulation via telepresence while thirty participated in a face-to-face context. The mediation simulations included thirty-six female and twenty-three male participants.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Categories</th>
<th>Number of participants</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of Communication</td>
<td>Telepresence</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Face-to-Face</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>23</td>
<td>38.98</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>36</td>
<td>61.02</td>
</tr>
<tr>
<td>Age Group</td>
<td>18–25</td>
<td>18</td>
<td>30.51</td>
</tr>
<tr>
<td></td>
<td>26–35</td>
<td>29</td>
<td>49.15</td>
</tr>
<tr>
<td></td>
<td>36 &amp; Older</td>
<td>12</td>
<td>20.34</td>
</tr>
<tr>
<td>Educational Attainment</td>
<td>High school</td>
<td>7</td>
<td>11.86</td>
</tr>
<tr>
<td></td>
<td>Associate</td>
<td>9</td>
<td>15.25</td>
</tr>
<tr>
<td></td>
<td>Bachelor</td>
<td>34</td>
<td>57.63</td>
</tr>
<tr>
<td></td>
<td>Post graduate</td>
<td>9</td>
<td>15.25</td>
</tr>
<tr>
<td>Frequency of Having Video</td>
<td>Never</td>
<td>15</td>
<td>25.42</td>
</tr>
<tr>
<td></td>
<td>At least once a month</td>
<td>21</td>
<td>35.59</td>
</tr>
<tr>
<td></td>
<td>At least once a week</td>
<td>13</td>
<td>22.03</td>
</tr>
</tbody>
</table>

121. A pre-mediation questionnaire for one Study Number was never saved and that same Study Number had saved two post-mediation questionnaires, which included different responses. Both post-mediation questionnaires were deleted. A Study Number included a pre-mediation questionnaire and two post-mediation questionnaires, which included different responses. All questionnaires for that Study Number were deleted. Finally, one Study Number had a pre-mediation questionnaire but no corresponding post-mediation questionnaire, requiring the deletion of the pre-mediation questionnaire.
We categorized the participants into three age groups: 18 to 25 years old, 26 to 35 years old, and 36 years old and over. The youngest group was about 31% of the participants. Almost half of the participants were aged between 26 and 35. The oldest group comprised about 20% of the sample.

Participants were asked to indicate the levels of education that they had completed. A vast majority of participants completed some college education. Seven participants completed high school education, nine associate-level education, thirty-four a bachelor’s degree, and nine a post-graduate education.

Participants also were asked how frequently they used a video-collaborated environment such as Skype, FaceTime, or a similar platform.122 Fifteen participants responded that they did not use it at all. Twenty-one participants said they used it at least once a month while thirteen participants said at least once a week. About 17% of the participants reported that they communicated with others via a video-collaborated environment more than once a week.

Figure 1 shows the distribution of the predisposition-to-trust scores. The average score was 2.69, indicating that participants’ predisposition to trust was lower than the neutral position (a score of 3.00). It means that they tended to distrust more than to trust on average. More than three quarters of the study participants’ pre-disposition to trust was lower than 3.00.

122. While Skype and FaceTime may be considered low-tech types of videoconferencing and are not similar to high-tech telepresence, we relied on a question about familiarity with low-tech platforms because they are readily available to the average person at no cost. Telepresence is not as well-known and is expensive; therefore, we did not question participants about their familiarity with it. That will be a good area to explore in future research. Focusing on any type of videoconferencing provided insight regarding the technological sophistication of the participants.
Figure 1

Distribution of Scores for Predisposition to Trust Among Participants

<table>
<thead>
<tr>
<th>Predisposition to Trust (Pre-mediation)</th>
<th>% of Participants</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>5.085</td>
<td>0</td>
</tr>
<tr>
<td>2.5</td>
<td>15.25</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>30.51</td>
<td>9</td>
</tr>
<tr>
<td>3.5</td>
<td>10.17</td>
<td>50</td>
</tr>
<tr>
<td>3.75</td>
<td>8.475</td>
<td>0</td>
</tr>
<tr>
<td>4.0</td>
<td>3.39</td>
<td>0</td>
</tr>
</tbody>
</table>

Strikingly, although most study participants exhibited less than neutral predisposition to trust, once the mediation concluded, all of them either mildly or strongly agreed that they could trust the mediator and that the mediator was trustworthy. Table 2 shows the distribution of responses.

Table 2

Trust in and Trustworthiness of the Mediator after the Mediation

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of participants</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mildly Disagree</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Neither Agree nor Disagree</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mildly Agree</td>
<td>9</td>
<td>15.24</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>50</td>
<td>84.75</td>
</tr>
</tbody>
</table>
Trustworthiness: "The mediator was trustworthy"

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Mildly Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Mildly Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>50</td>
</tr>
</tbody>
</table>

Since all of the study participants trusted the mediator and felt that the mediator was trustworthy, it is evident that all factors, and mainly the mode of communication (face-to-face vs. telepresence), have no impact on the fundamental trust outcome, which is one of the main findings we report here: Participants who communicated with the mediator through telepresence and face-to-face are equally likely to trust the mediator or to perceive the mediator as trustworthy.

Although the variation is minimal, we examined the outcome variation, specifically whether participants strongly or mildly agreed that they trusted the mediator and that they felt that he was trustworthy. The following Part explores whether demographic factors, familiarity with video-collaborated environment, and predisposition to trust significantly affected the degrees to which participants trusted the mediator or perceived him as trustworthy. Note that our statistical analyses are limited due to minimal variation in the outcome variables, trust and trustworthiness. For instance, a logistic regression analysis can be ideal, but difficult to conduct. Thus, we focus on a series of $t$ tests and analysis of variance tests (ANOVA).

### B. Factors that Affect the Degree of Trust

This Part conducts various statistical tests for the factors that might affect the degrees of trust in the mediator after a mediation. Table 3 summarizes the results. On a five-point Likert scale, the overall average score of trust by mode of communication was 4.85. Considering the scale, the average score is substantially high.

---

123. Note that almost all participants strongly agreed and only nine of them mildly agreed on each statement.
### Table 3

Average Trust Scores by Various Factors

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Average Score of Trust</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>59</td>
<td>4.85</td>
<td></td>
</tr>
<tr>
<td><strong>1. Mode of Communication</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face-to-Face</td>
<td>29</td>
<td>4.79</td>
<td></td>
</tr>
<tr>
<td>Telepresence</td>
<td>30</td>
<td>4.90</td>
<td>( t_{(51)}=1.13, \ p=.26 )</td>
</tr>
<tr>
<td><strong>2. Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23</td>
<td>4.83</td>
<td>( t_{(43)}=.35, \ p=.72 )</td>
</tr>
<tr>
<td>Female</td>
<td>36</td>
<td>4.86</td>
<td></td>
</tr>
<tr>
<td><strong>3. Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–25</td>
<td>18</td>
<td>4.94</td>
<td></td>
</tr>
<tr>
<td>26–35</td>
<td>29</td>
<td>4.76</td>
<td>( F_{(2,56)}=1.78, \ p=.18 )</td>
</tr>
<tr>
<td>36 &amp; Older</td>
<td>12</td>
<td>4.92</td>
<td></td>
</tr>
<tr>
<td><strong>4. Educational Attainment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>7</td>
<td>4.86</td>
<td></td>
</tr>
<tr>
<td>Associate</td>
<td>9</td>
<td>4.89</td>
<td>( F_{(3,55)}=.12, \ p=.95 )</td>
</tr>
<tr>
<td>Bachelor</td>
<td>34</td>
<td>4.82</td>
<td></td>
</tr>
<tr>
<td>Post Graduate</td>
<td>9</td>
<td>4.89</td>
<td></td>
</tr>
<tr>
<td><strong>5. Frequency of Having Video Communications</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>15</td>
<td>4.80</td>
<td></td>
</tr>
<tr>
<td>At least once a month</td>
<td>21</td>
<td>4.86</td>
<td>( F_{(4,54)}=.42, \ p=.79 )</td>
</tr>
<tr>
<td>At least once a week</td>
<td>13</td>
<td>4.92</td>
<td></td>
</tr>
<tr>
<td>More than once a week</td>
<td>10</td>
<td>4.80</td>
<td></td>
</tr>
<tr>
<td><strong>6. Predisposition to Trust</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower half</td>
<td>29</td>
<td>4.83</td>
<td>( t_{(56)}=.41, \ p=.68 )</td>
</tr>
<tr>
<td>Upper half</td>
<td>30</td>
<td>4.87</td>
<td></td>
</tr>
</tbody>
</table>

Notes: the \( t \)-test results are based on an unequal variance assumption and a two-tailed test.

#### 1. Mode of Communication

Twenty-nine participants interacted with the mediator face-to-face; their average trust score was 4.79. Thirty participants interacted with the mediator via telepresence; their average trust score was 4.90. The mean difference is about 0.11, with a slightly higher average among the participants who participated using the telepresence mode of communication. The two-sample \( t \) test indicates that the difference is not statistically different from zero at the 95% significance level \((t=1.13, \ p=.26)\). Therefore, there is no statistically significant difference in the levels of trust between the two modes of communication.
2. Gender

Gender categories were divided into twenty-three male participants and thirty-six female participants. The males' average trust score was 4.83 and the females' average trust score was 4.86. A 0.03 point difference exists between the two genders with a slightly higher score among females, but the difference is not statistically different from zero at the 95% significance level ($t=.35, p=.72$); therefore, there is no statistically significant difference between the ability to trust the mediator between genders.

3. Age

The study participants were divided into three age groups: The youngest group included ages between 18 and 25; their average trust score was 4.94. The second group included ages between 26 and 35; their average trust score was 4.76. The last group—the oldest group—included people older than 35; their average trust score was 4.92. The ANOVA test indicates that there is no statistically significant difference in the average trust scores among the age groups ($F(2,56)=1.78, p=.18$).

4. Educational Attainment

For study participants with an associate's degree, the average trust score was 4.89. For people with a bachelor's degree, it was 4.82. For people with a master's degree and higher, it was 4.89. Although there are slight differences, the differences are not statistically significant. An ANOVA analysis indicates that age is not statistically significant in affecting trust levels ($F(3,55)=.12, p=.95$).

5. Familiarity with Video-Collaborated Environment

Approximately 25% of study participants never used a video-collaborated environment prior to participating in this project, and 35% used a video-collaborated environment at least once a month. Despite the disparity in familiarity, all groups had very high scores of trust. ANOVA results also show no statistically significant difference in levels of trust by the degrees of familiarity to online communicating environments ($F(4,54)=.42, p=.79$).
6. Predisposition to Trust

For simplicity, we divided the participants into two groups by their predisposition to trust: The lower half of the participants with lower predisposition to trust tended to distrust, while the upper half of them, with higher scores of predisposition to trust, tended to trust more. The average score of trust was 4.83 for the lower half and 4.87 for the upper half. The difference is only 0.04 points. A $t$-test result indicates that there is no statistically significant difference in trust by predisposition to trust ($t=.41$, $p=.68$).

C. Factors that Affect the Degree of Trustworthiness

This Part conducts similar tests for trustworthiness of the mediator. Table 4 summarizes the results. On a five-point Likert scale, the overall score of trustworthiness (for all participants) was 4.85. Given the scale, participants on average showed a very high level of perceived trustworthiness of the mediator.
Table 4

Average Trustworthiness Scores by Various Factors

<table>
<thead>
<tr>
<th></th>
<th>Average Score of Trustworthiness</th>
<th>N</th>
<th>s</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td>59</td>
<td>4.85</td>
<td></td>
</tr>
<tr>
<td>1. Mode of Communication</td>
<td>Face-to-Face</td>
<td>29</td>
<td>4.86</td>
<td>t(57)=.30, p=.76.</td>
</tr>
<tr>
<td></td>
<td>Telepresence</td>
<td>30</td>
<td>4.83</td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>Male</td>
<td>23</td>
<td>4.91</td>
<td>t(56)=1.20, p=.24.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>36</td>
<td>4.81</td>
<td></td>
</tr>
<tr>
<td>3. Age</td>
<td>18–25</td>
<td>18</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26–35</td>
<td>29</td>
<td>4.79</td>
<td>F(2,56)=2.4, 7, p=.09.</td>
</tr>
<tr>
<td></td>
<td>36 &amp; Older</td>
<td>12</td>
<td>4.75</td>
<td></td>
</tr>
<tr>
<td>4. Educational Attainment</td>
<td>High School</td>
<td>7</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Associate</td>
<td>9</td>
<td>4.78</td>
<td>F(3,55)=.60, p=.62.</td>
</tr>
<tr>
<td></td>
<td>Bachelor</td>
<td>34</td>
<td>4.82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post Graduate</td>
<td>9</td>
<td>4.89</td>
<td></td>
</tr>
<tr>
<td>5. Frequency of Having Video Communication</td>
<td>Never</td>
<td>15</td>
<td>4.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At least once a month</td>
<td>21</td>
<td>4.81</td>
<td>F(4,54)=1.0, 1, p=.41.</td>
</tr>
<tr>
<td></td>
<td>At least once a week</td>
<td>13</td>
<td>4.92</td>
<td></td>
</tr>
<tr>
<td></td>
<td>More than once a week</td>
<td>10</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>6. Pre-disposition to Trust</td>
<td>Lower half</td>
<td>29</td>
<td>4.96</td>
<td>t(39)=2.61, p=.01</td>
</tr>
<tr>
<td></td>
<td>Upper half</td>
<td>30</td>
<td>4.73</td>
<td></td>
</tr>
</tbody>
</table>

Notes: the t-test results are based on an unequal variance assumption and a two-tailed test.

1. **Mode of Communication**

For face-to-face study participants, the average score was 4.86, while the average was 4.83 among those who participated using telepresence. There is 0.03-point difference between the two groups in terms of the average scores. A t-test result shows that the difference is not statistically different from zero (t=.30, p=.76). Thus, there is no statistically significant difference between the groups in their assessed level of trustworthiness of the mediator.
2. Gender

The average score of trustworthiness among male participants was 4.91 while it was 4.81 among female participants. The average of the male group is slightly higher by 0.05, but the difference is not statistically different from zero. The $t$-test result shows that there is no statistically significant difference in the level of trustworthiness between the two genders ($t=1.20, p=.24$).

3. Age

The youngest group’s average score of trustworthiness was 5.00, meaning that all of the participants in the 18–25 age group strongly agreed that the mediator was trustworthy. The middle group’s average was 4.79, while the oldest group’s average was 4.75. The ANOVA results show that age has no statistically significant difference in the participants’ perception of trustworthiness in the mediator ($F=2.47, p=.09$).

4. Educational Attainment

The average score for high school graduates was a 5.00; everyone in that group strongly agreed that the mediator was trustworthy. For study participants who had earned an associate degree, their average was 4.78. For a bachelor’s degree, it was 4.82. For a post-graduate degree, it was 4.89. Results from an ANOVA test show no statistically significant differences in trustworthiness among these study participants with different educational attainment ($F=.60, p=.62$).

5. Familiarity with Video-Collaborated Environment

Recall from Table 1 that a large disparity exists with respect to study participants’ familiarity with video-collaboration. Nevertheless, they almost uniformly found the mediator to be trustworthy. An ANOVA test shows that there is no statistically significant difference among these groups ($F(4,54)=1.01, p=.41$).

6. Predisposition to Trust

The participants were divided into two groups: participants with the lower half of the scores and with the upper half of the
scores. The average score for trustworthiness was 4.96 among the participants with the lower half and 4.73 with the upper half. The difference is about 0.23 points, which does not seem to be substantial. It is somewhat puzzling that people who tend to distrust have a higher average score of trustworthiness. Nevertheless, the $t$-test result shows that the 0.23-point difference is statistically significant at the 5 percent significance level ($t=2.61, \, p=.01$). Statistically, it implies that people who are predisposed to distrust perceive the mediator as more trustworthy, compared to people who are predisposed to trust.

D. Discussion

Of the fifty-nine study participants, all felt that they could trust the mediator and perceived the mediator as trustworthy. On the five-point Likert scale, all participants either mildly agreed or strongly agreed with these two positions. There was no statistically significant difference on any factor, whether mode of communication, age, gender, education, or familiarity with a video-collaborated environment. Moreover, the study participants’ predisposition to trust did not seem to affect their ability to trust the mediator or perceive the mediator as trustworthy, whether in the control group or test group (with one exception of the effect of predisposition to trust compared to findings of trustworthiness). These findings are consistent with previous empirical research that tested trust within a variety of communication modes.\(^\text{124}\)

To our knowledge, our project is the first empirical research involving trust of a mediator in a video-collaborated environment known as telepresence, breaking new ground in the field of ODR. Arguably, the results are a product of the visual clarity provided by telepresence such that the mode of communication is comparable to face-to-face communication.

The statistically insignificant differences presented in this Article could be due to limitations in study design. For instance, the post-mediation questionnaire was written to capture the multi-

\(^{124}\) See supra pt. III.B for a discussion of other empirical research studies that determined the richness of a video-collaborated environment stipulated trust. Nathan Bos and his colleagues concluded that no significant difference existed in participants’ ability to trust their partners when comparing face-to-face, videoconferencing, and audioconferencing groups, albeit it took longer to trust for the video and audio groups. See supra notes 99–102 and accompanying text.
dimensional elements of trust and trustworthiness when applied to mediation. The questionnaires might have been worded differently to collect relevant data. Perhaps a ceiling effect occurred in which a questionnaire did not provide a measurement of the participant's distinction of trust factors. In other words, if some participants had some levels of mistrust, the questions did not capture that response.

The only statistically significant difference exists in the measurement of predisposition to trust compared to findings of trustworthiness at the conclusion of the mediation. Recall that participants who are predisposed to distrust perceived the mediator as more trustworthy compared to people who are predisposed to trust. It is possible that those participants who are predisposed to distrust are actually more discriminating as to whom they trust. Once they trust someone, it is expected that they have a higher than average trust for that person; however, we have no evidence for this theory. Finally, since this is the only statistically significant result among all of the previous tests, it might be that this result is an anomaly, especially in light of the overwhelming feelings of trust for the mediator.

We also acknowledge that there could be unobserved factors that affected the outcome of the study, including, but not limited to, the simulated environment. It is unknown whether the results would be different if participants had an emotional or financial investment in a real-life conflict. Some may believe that the results are simply a product of a good mediator. Perhaps the mediator's level of experience influenced the study. These are all plausible arguments, but we believe that this study enables us to take the

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125. See supra pt. II.D for a discussion of the importance of trust in mediation.

126. ENCYCLOPEDIA OF RESEARCH DESIGN (Neil J. Salkind ed., 2010) https://books.google.com/books?hl=en&lr=&id=HVmxuaQl2oC&oi=fnd&pg=PP1&ots=HQjIQIE4DiL&sig=GHzFjJBPhgwGKBojboqBt1K24dE#v=onepage&q&f=true (defining “ceiling effect” as “a measurement limitation that occurs when the highest possible score or close to the highest score on a test or measurement instrument is reached, thereby decreasing the likelihood that the testing instrument has accurately measured the intended domain. A ceiling effect can occur with questionnaires, standardized tests, or other measurements used in research studies. A person’s reaching the ceiling or scoring positively on all or nearly all the items on a measurement instrument leaves few items to indicate whether the person’s true level of functioning has been accurately measured.”).

127. Recall that feelings of trustworthiness are a precursor to trust. See supra pt. II.C.2. It is axiomatic, therefore, that once one finds another to be trustworthy, feelings of trust will ensue.
first step to explore the effectiveness and feasibility of telepresence in mediation.

E. Implications for Future Research

In an effort to alleviate as many subjective factors as possible, the project was based on fictitious facts for a series of mediation simulations involving only one mediator. Because students volunteered to role-play as disputants in the simulation, arguably they lacked an emotional connection to the factual dispute and any potential settlement. A question exists whether an emotional connection has an impact on this trust project. Further research, therefore, should focus on real-life mediations rather than simulations.

The use of a simulated mediation makes it difficult to predict what type of trust the study participants felt. Calculus-based trust is based on consistent behavior and the fear that one will be punished for inconsistent behavior;\textsuperscript{128} because this type of trust is based on an emotional connection, it is difficult to apply within a simulated experience. Identification-based trust is based on a long-standing relationship; therefore, it is inapplicable to this study.\textsuperscript{129} Recall that online trust has been categorized as initial trust, swift trust, and felt trust. Of the three types, initial trust is the only possible type of interpersonal trust that may apply to this project because it relates to an experience where people have not yet formed a relationship or shared meaningful information; once a trustee offers personal information, the trustor may perceive initial trust.\textsuperscript{130} Perhaps future study opportunities could be designed to focus specifically on one type of trust within a real-life mediation.

Conflicts involved in real-life mediations pose a host of additional study opportunities. One could study the timing of mediations to determine whether length of time involved affects a disputant's ability to trust the mediator and find the mediator trustworthy. For example, would a fifteen- to thirty-minute small claims court mediation have differing results on trust and trustworthiness when compared to a day-long mediation?

\textsuperscript{128} See supra pt. II.B.1.
\textsuperscript{129} See supra pt. II.B.2.
\textsuperscript{130} See supra pt. II.B.3.
Would subject matter and relational issues impact trust and trustworthiness? Consider a divorce mediation involving spouses who have been married for years and must continue to communicate regarding child custody and support issues in contrast to a personal injury mediation involving parties who have never met and for which relationship issues are nonexistent. Would the parties’ own relationship issues influence their perceptions of trust and trustworthiness regarding a mediator? Could the context of the mediation—conducted exclusively in joint session or private caucus or a combination of the two—affect one’s ability to trust a mediator and find a mediator trustworthy? Would the mediation outcome—settlement or nonsettlement—affect trust and trustworthiness issues? As noted in Part V.A, would the technological sophistication of the study participants—measured against familiarity with high tech telepresence—influence feelings of trust and trustworthiness during mediation? Finally, it would be interesting to measure and compare trust and trustworthiness issues within a variety of ODR platforms, such as an asynchronous text-based platform, a type of video-conference, and telepresence. The future holds an amazing array of possibilities for further exploration.

VI. CONCLUSION

Mediation is an autonomous method of dispute resolution for parties involved in conflict. In the context of ODR, when participants are not assimilated geographically, they assume communication challenges with their mediator. One of those is the ability to perceive trust, especially when not involved in rich face-to-face media. Yet it is crucial for mediators to create a trustworthy environment in which disputants can develop feelings of trust for the mediator.

This project tested whether disputants in a fictitious mediation simulation found the mediator trustworthy to such an extent that they could trust the mediator. The paramount factor compared responses of study participants who communicated face-to-face with the mediator to responses of study participants who communicated with the mediator using a video-collaborated platform known as telepresence. The results show that there is no statistically significant difference in trusting the mediator by the mode of communication and by any of the other factors that were
measured, including age, gender, education, familiarity with video collaboration, and predisposition to trust. The same result applies to trustworthiness except for one exception regarding the effect of a predisposition to trust.  

Empirical research now exhibits that different communication media evoke similar levels of trust and perceptions of trustworthiness. This research should appease those who engage in ODR as well as those who are considering ODR in their mediation practices.

Appendix

Summary of Post-Mediation Questionnaire

The first half of the post-mediation simulation questionnaire included statements relating to the interaction between the study participant and mediator. These statements mirror factors that are indicative of interpersonal trust. For instance, a sampling of statements included:

- I felt that the mediator treated me in a friendly manner.
- I felt that the mediator was helpful to me.
- I felt that the mediator cared about me.
- I felt that the mediator was empathetic.
- I felt that the mediator understood my point of view.
- I felt that the mediator treated me with respect.
- I felt that I could tell the mediator personal information. (“Personal” is defined as belonging or particular to one person, private.)
- I felt that the mediator had good eye contact with me.

The intent was to ascertain whether the study participants responded to a statement that included an element of trust to the same degree as a single statement that they could trust the mediator.

The same rationale was applied to statements that indicate a finding that the mediator was trustworthy. The following statements are some examples of what was posed to study participants:

participants before a basic statement that the mediator was trustworthy:

- I felt that the mediator was highly qualified to mediate our matter.
- I felt that the mediator treated all parties with benevolence. (“Benevolence” is defined as the extent to which a person wants to do good for others.)
- I felt that the mediator possessed integrity. (“Integrity” is defined as a set of principles that are acceptable to me.)
- I felt that the mediator was genuine. (“Genuine” is defined as being sincere.)
- I felt that the mediator was a good listener.