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KATHOLIEKE UNIVERSITEIT LEUVEN

FACULTEIT PSYCHOLOGIE EN  
PEDAGOGISCHE WETENSCHAPPEN

Onderzoeksgroep Arbeids-, Organisatie- en Personeelspsychologie

**You can't shake hands with a clenched fist.**

The impact of trust in the mediator and negative emotions on online mediation successfulness.

Master thesis presented to  
obtain the degree of Master  
in de Psychologie

By  
**Ine Willemse**

promotor: Prof. Dr. M. Euwema  
m.m.v. Dra. K. Bollen

2009-2010

## **Summary**

**Willemse, Ine**, You can't shake hands with a clenched fist. The impact of trust in the mediator and negative emotions on online mediation successfulness.

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Exam period: June 2010

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Online mediation allows disputants to reach a settlement via the Internet through the assistance of a neutral third party. The lack of research on online mediation with real-life conflicts seriously hinders the advancement of the field. In the following quantitative study we addressed this issue by investigating the relationships between experienced negative emotions, trust in the mediator and mediation successfulness in the context of online divorce mediation.

Data (n=126) were collected from real mediation cases on family conflicts, through cooperation with an international organisation specialised in Online Dispute Resolution (ODR) solutions. Participants used an online tool to reach a divorce settlement and completed a questionnaire to evaluate the mediation process. Data obtained from these questionnaires were analysed with regression analysis.

Main findings were that the presence of negative emotions during online mediation hindered the successfulness of that mediation. The opposite was true for trust in the mediator such that higher levels of trust in the mediator were associated with lower levels of mediation successfulness. Concerning the interaction between trust in the mediator and negative emotions on mediation successfulness, we found that trust in the mediator can moderate the negative effect of experienced negative emotions on mediation successfulness. Negative emotions had a negative effect on mediation successfulness when trust in the mediator was low and a positive effect on mediation successfulness when trust in the mediator was average to high.



## **Prologue**

Voor u ligt mijn thesis over online mediation. Deze masterproef is geschreven in het kader van mijn laatste jaar Arbeids – en Organisationspsychologie en hiermee rond ik mijn studie dan ook af. Door het schrijven van deze thesis kon ik mij verdiepen in de wereld van het wetenschappelijk onderzoek en zo kreeg ik de onderzoeksmicrobe te pakken. Ik heb er dan ook voor gekozen om te schrijven in artikelvorm omdat hierbij de mogelijkheid tot een wetenschappelijke publicatie, en meer specifiek een publicatie in het tijdschrift “Negotiation and Conflict Management Research”, open lag.

Voor mijn thesis rond online mediation kon ik beroep doen op een reeds bestaande dataset die ik aangeleverd kreeg van mijn promotor Martin Euwema en van Katalien Bollen. Op basis van deze dataset ging ik op zoek naar interessante onderzoekspistes. Hoewel er verschillende zaken interessant waren om te onderzoeken, legde ik, na overleg met Katalien, mijn definitief onderzoeksopzet vast. Op basis van dit opzet ging ik in de literatuur op zoek naar relevante wetenschappelijke artikels en boeken. Vervolgens heb ik zelfstandig gewerkt aan mijn data-analyses en het uitschrijven van mijn thesis. Toch kon ik doorheen mijn data-analyses en het uitwerken van mijn tekst steeds gebruik maken van de nuttige feedback en tips van zowel Katalien als mijn promotor. Ook wanneer ik met vragen zat, kon ik steeds bij hen terecht.

Ik wil graag alle mensen bedanken die hebben bijgedragen aan de totstandkoming van deze thesis. Eerst en vooral denk ik hierbij aan mijn promotor Martin Euwema voor zijn hulp, nuttige suggesties en feedback. Naast professor Euwema, wil ik graag Katalien Bollen uitdrukkelijk bedanken voor de regelmatige feedback en de algemene begeleiding tijdens het hele proces. Verder wil ik graag mijn ouders, familie en vrienden bedanken voor hun steun tijdens mijn studie en in het bijzonder bij deze masterproef. Tot slot wil ik T.G. bedanken voor het verkennen van mogelijke onderzoekspistes, zijn hulp bij de lay-out en zijn nuttige tips. Ik heb het welslagen van dit project dan ook mede aan hen allemaal te danken.





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## **1. Introduction**

Online Dispute Resolution (ODR) can be defined as information technology and telecommunication via the Internet applied to Alternative Dispute Resolution (ADR) (Hornle, 2003). Online mediation is a special type of ODR services and allows the assistance of a neutral third party in reaching a settlement through the Internet (Turel, Yuan, & Rose, 2007). Although online mediation originated in the context of internet-related disputes, this type of dispute resolution is now applied to conflicts in diverse domains, e.g. labour conflicts, family disputes, political conflicts and e-commerce (Raines, 2005). In several countries, like the Netherlands, the use of online mediation is under growing governmental attention. As such, the use of online dispute resolution systems is on the rise. In contrast, research in the context of online dispute resolution, and more specifically online mediation, is very scarce. Most authors limit themselves to a description of the pros and cons of online dispute resolution whereas a systematic testing of these assumptions is lacking (e.g. Conley Tyler & Raines, 2006; Raines, 2006). The little available research is often conducted in experimental settings with fictional conflicts, mostly without the intervention of professional mediators (e.g. Gabuthy, Jacquemet, & Marchand, 2008; Turel et al., 2007). As such, the external validity of these findings is questionable.

The lack of research on online mediation with real-life conflicts seriously hinders the advancement of the field of ODR. First of all, it remains inconclusive whether online mediation is more or less effective than face-to-face mediation. To gain insight in this matter, we compared the agreement rate in our study with online mediation cases to that of face-to-face mediation cases. Furthermore, there is a great need to explore those factors that contribute to the effectiveness of online mediation. Without systematic empirical research at the determinants of the successfulness of online mediation, it is hard to formulate practical guidelines for mediators. To address this issue, we examined the role of emotions and trust in the context of online divorce mediation. First, we focused on the effect of negative emotions on mediation successfulness. Second, we examined the link between trust in the mediator and mediation successfulness. Finally,

we explored whether trust in the mediator influences the relationship between negative emotions and mediation successfulness.

## **2. Emotions**

### **2.1. Emotions in mediation**

Several authors are surprised by the lack of research on the role of emotions in mediation (Jones & Bodtker, 2001). This is remarkable given the centrality of emotions in conflict and thus conflict resolution (Barry, 1999; Poblet & Casanovas, 2007). Most research concerning emotions in mediation practice is descriptive or identifies techniques that mediators can use to handle the emotions of disputing parties. Surprisingly, these techniques have never been systematically tested (Van Kleef, De Dreu, & Manstead, 2004a). Even contemporary mediation theory (Folger & Jones, 1994) does not address the importance of emotions in mediation. Whereas research concerning the role of emotions in face-to-face mediation is scarce, this is even more so in the context of online mediation.

### **2.2. Emotions in online mediation**

The views of several authors regarding the expression of emotions in online mediation remain contradictory. First, critics argue that online dispute resolution tools hinder the expression of emotions. Since emotions are usually communicated nonverbally (Ekman & Friesen, 1975), the use of online media would complicate the expression of emotions. As such, these authors believe that online dispute resolution can not match the richness of emotions that is present in face-to-face alternative dispute resolution (Goodman, 2003; Nadler, 2004). Second, other authors suggest that because of unclear social norms for online communications and the social distance that is present in an online environment, people are emotionally less inhibited in an online environment compared to a face-to-face one (Kiesler & Sproull, 1992; Tan, Bretherton, & Kennedy, 2004). Consequently, people will show and express their emotions more strongly in an online environment. Third, other authors state that online dispute resolution is a valuable

alternative to face-to-face dispute resolution, since emotions are expressed in a different way, but not in an inferior way (Poblet & Casanovas, 2007). For example, instead of shouting at their opponent, people use capital letters to show their anger in an online environment. A recent study by Hammond (2003) even shows that disputants think more about their emotions and express them more rationally in an online compared to an offline environment. As such, online dispute resolution may even lead to better outcomes than offline dispute resolution.

### **2.3. Emotions and mediation successfulness**

Emotions are inherent and central to all conflicts (Jones & Bodtker, 2001). People become emotional when their plans are interrupted or when they perceive a discrepancy between their goals or aspirations and reality (Ortony, Clore, & Collins, 1988). In short, emotions arise as soon as people perceive that something personally relevant is at stake. When involved in conflicts, these emotions are most of the time negative in nature. Recently, there has been lots of interest in the impact of especially one negative emotion, namely anger, in the context of negotiation and mediation (Friedman et al., 2004; Van Kleef et al., 2004a, 2004b). This is not surprising given that anger is one of the basic emotions one gets confronted with most during conflicts. Nevertheless, feelings of frustration and disappointment deserve attention too. Since Robinson (2008) categorises these emotions as basic negative emotions, it is to expect that they will play a principal role in the context of mediation. In mediation, disputants are totally dependent on each other to come to an agreement without the possibility to force each other. This feeling of powerlessness can lead to frustration. Furthermore, feelings of disappointment can develop when disputants do not reach the settlement they had hoped for. Therefore we investigate the impact of anger, frustration and disappointment on mediation effectiveness.

Mediators will do their best to limit the presence and potential negative impact of emotions during the mediation and this for several reasons. First of all, the presence and perception of negative emotions has a negative impact on disputants' perceptions of each other and on their satisfaction with the mediation process (Friedman et al., 2004).

Second, following emotional contagion theory, the expression of negative emotions by one disputing party will produce negative emotions in the other disputing party (Hatfield, Cacioppo, & Rapson, 1992). As such, the experience of negative emotions will make it less likely that both disputants will join forces to obtain a win-win solution, which is the ultimate goal of mediation. Research confirms that negotiators who experience positive affect tend to be more co-operative, whereas negotiators who are in a negative affective state tend to be more competitive and more reluctant to make concessions, which hinders the accomplishment of a win-win solution (Baron, 1990; Baron, Fortin, Frei, Hauver, & Shack, 1990; Forgas, 1998). As such, it is a central task for mediators to intervene in these negative emotion spirals (Herrman, Hollett, Gale, & Foster, 2001).

When strong emotions become salient in conflict, the potential for destructive conflict escalation increases (Northrup, 1989). Since emotions are both a cause and a consequence of conflict, it is impossible for mediators to erase them completely in the context of mediation. The occurrence of negative emotions can hinder the accomplishment of an agreement and mediation successfulness will decrease. Support is found in the work of Donohue (1991). This author investigated affect in the context of divorce mediation and concluded that frequency and reciprocity of negative affect were the determining factors to distinguish “successful” mediations from “unsuccessful” ones. Furthermore, Friedman et al. (2004) investigated the effect of the expression of anger on the resolution rate of online mediation and came to the conclusion that disputants who control their anger and are able to focus on conflict resolution are more likely to reach a settlement. In line with this research, we hypothesised that negative emotions will limit disputants’ willingness to come to an agreement and as such mediation successfulness will decrease.

**Hypothesis 1:** The presence of negative emotions during online mediation is negatively related to mediation successfulness.

### 3. Trust

#### 3.1. The concept of trust

The applicability of the concept of trust reaches far, as is proven by the wealth of research on this topic and the several divergent definitions that are applied by academics from disciplines as diverse as psychology, sociology and economics (Bigley & Pearce, 1998; Doney, Cannon, & Mullen, 1998; Hagen & Choe, 1998; Lewicki, McAllister, & Bies, 1998; Mayer, Davis, & Schoorman, 1995; McKnight, Cummings, & Chervany, 1998; Whitener, Brodt, Korsgaard, & Werner, 1998). Rousseau, Sitkin, Burt, and Camerer (1998) tried to find a common ground in these different views of trust and developed a comprehensive, cross-disciplinary view of trust: *“Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another”* (p.395).

Several authors distinguish different types and dimensions of trust. Since these distinctions do not fall under the scope of our research, we refer interested readers to Rousseau et al. (1998) and Lewicki and Bunker (1995) for an overview.

In order for trust to arise, two conditions need to be fulfilled. The first condition concerns the existence of a certain amount of risk in the situation. Risk is defined as “the perceived probability of loss, as interpreted by the decision maker” (Chiles & McMackin, 1996; MacCrimmon & Wehrung, 1986). There is a reciprocal relationship between risk and trust, such that risk creates an opportunity for trust, which in turn leads to risk taking. Accordingly, Lewis and Weigert (1985) suggest that in situations where actions can be taken with complete certainty, and no risk is present, trust is not needed. Interdependence is the second condition that needs to be fulfilled for trust to develop. Interdependence exists when the interests of one party cannot be achieved without reliance upon another party (Rousseau et al., 1998). Sheppard and Sherman (1998) suggest that the relationship between risk and trust depends on the level of interdependence between the parties that are involved.

The condition of risk is always present in the mediation context. Disputing parties enter the mediation with an obligation of the best intentions. This means that parties have to

perform the best that they can and are open for any outcome of the mediation, they do not commit themselves to a specific result. Since they do not know what the outcome of the mediation might be, the consequences of mediation may be unpredictable but also far-reaching. For example, an unsuccessful mediation process may result in the termination of the existing relationship between parties, or parties might decide to go to court. Obviously, this can be a risk in itself. Disputants can only do their best and put their trust in the mediator, hoping that the mediator will guide them towards an acceptable agreement. The condition of interdependence is also fulfilled in mediation. Disputants rely on each other and on the mediator to complete the mediation process successfully. Each of the parties involved in mediation takes responsibility hoping that their combined efforts will lead to an acceptable win-win agreement.

Compared to face-to-face mediation, the conditions of risk and interdependence may be even more salient in online mediation. In online mediation, disputants do not have the opportunity to meet the mediator in person. Orbell and Dawes (1991) suggest that in order to develop trust, it is important that the trustor is able to detect and interpret behavioural cues that reveal the trustee's intentions. Accordingly, in online mediation, it is difficult for disputants to judge the mediator's trustworthiness since the social information upon which interpersonal trust is based is less readily available. As a result, the perception of risk is higher in online compared to face-to-face mediation. Furthermore, mediator neutrality is a defining characteristic of mediation, as the definition of mediation shows:

Mediation is a process in which an impartial third party -a mediator- facilitates the resolution of a dispute by promoting voluntary agreement (or "self-determination") by the parties to the dispute. A mediator facilitates communications, promotes understanding, focuses the parties on their interests, and seeks creative problem solving to enable the parties to reach their own agreement (Press et al., 2004, p.3).

Face-to-face mediation makes it possible for disputants to observe the relationship between the mediator and the other disputing party. As a result, they can evaluate whether the mediator is truly neutral and does not favour one of the disputing parties. In

online mediation, this possibility to observe each other does not exist and therefore is it more risky for disputants to believe in the good intentions of the mediator. Finally, professional mediators indicate that, in online mediation, it is easier for participants to abandon the mediation process before it is completed (Raines, 2006). Disputants may simply quit responding to messages from the mediator or the other party since concerns about losing face are limited in an online environment. Consequently, this makes the conditions of interdependence and risk more apparent in online mediation.

### **3.2. Trust in the mediator and mediation successfulness**

Trust between disputants has already often been indicated as an important predictor of mediation successfulness (Deutsch, 1958; Ross & Wieland, 1996). Nevertheless, potentially equally important for mediation success, might be the trust between the mediator and the disputant. Research shows that cooperation is one of the most evident behavioural manifestations of trust and individuals will be unlikely to share information with someone they do not trust (Ferrin, Bligh, & Kholes, 2008; Rousseau et al., 1998; Zucker, Darby, Brewer, & Peng, 1996). As such, when trust in the mediator is lacking, disputants will not work cooperatively with the mediator and the mediator will not get the information that is needed to solve the conflict.

Previous research has stressed the importance of trust in the mediator in order to obtain a successful mediation outcome. Trust in the mediator would enable disputants to bridge their own mistrust in each other (Poitras, 2009; Poitras & Bowen, 2002; Poitras, Bowen, & Byrne, 2003). Empirical research on this topic has rather been scarce. Yiu, Cheung, and Mok (2006) found a linear relationship between the level of trust in the mediator and the probability to reach an agreement. In fact, both professional mediators themselves and representatives of disputing parties saw the development of trust in the mediator as the most important factor influencing the success to reach a mediation agreement (Goldberg, 2005; Goldberg & Shaw, 2007). Nevertheless, these last two studies did not take into account the view of the disputing parties as data were obtained from mediators and the representatives of disputing parties.

Although trust seems to be an important determinant of mediation success in face-to-face mediation, the question remains whether the same holds true for online mediation. Several authors assume that tight coupling, defined as dense relations and the ability to observe each other, is necessary for trust to develop (Burt & Knez, 1996; Coleman, 1990). Research by Wilson, Straus, and McEvily (2006) however, has shown that trust in computer-mediated groups develops in a same way as trust in co-located groups, but only at a slower pace. Thus, the ability to observe each other is not a necessary condition for the development of trust. As such we hypothesised that, like in face-to-face mediation, trust in the mediator is an important predictor of the successfulness of online mediation.

**Hypothesis 2:** Parties' trust in the mediator is positively related to mediation successfulness.

### **3.3. Trust as a moderator**

Rousseau et al. (1998) indicate that several researchers have investigated the role of trust as a moderating variable in a causal relationship between two other variables. For example, Mishra and Spreitzer (1998) investigated the role of trust as a cause and a moderator in employee's reactions to downsizing. To our knowledge, there is no research in the context of mediation that aims to investigate the role of trust as a moderator. Therefore, we explore whether trust in the mediator plays a moderating role in the relationship between negative emotions and mediation successfulness. We put forward that trust in the mediator can alter the negative impact of negative emotions on the successfulness of mediation.

**Hypothesis 3:** Trust in the mediator will moderate the negative relationship between experienced negative emotions and mediation successfulness. More specifically we assume that negative emotions will have a stronger negative effect on mediation successfulness when levels of trust in the mediator are low compared to high.

The four hypotheses of this research are summarised in Figure 1.

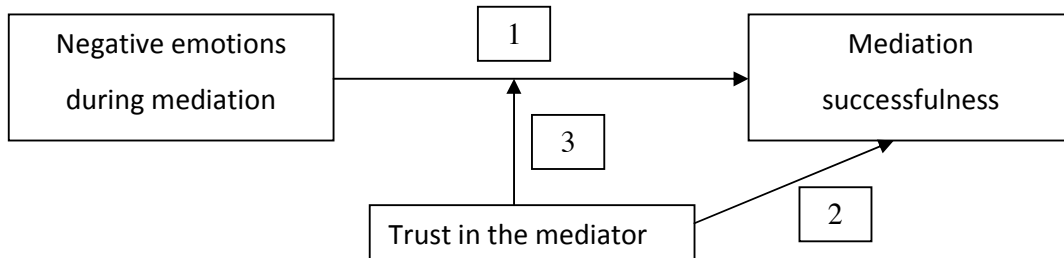


Figure 1. Overview of our research hypotheses.

## 4. Method

### 4.1. Context

The data for this research were collected by Juripax, an international organisation specialised in ODR solutions. Commissioned by the Dutch Legal Aid Board, this organisation developed an online tool for the settlement of family law cases. An important characteristic of this tool was that it only included asynchronous communication channels. As such, disputants could communicate with each other through a series of e-mails or other messages that were separated in time, but it was not possible for disputants to communicate with each other through a chat room or video conferencing. The tool was used in the context of divorce mediation to resolve issues including custody and parenting arrangements, alimony and child support, division of assets and other divorce-related issues. The service was provided at no cost to participants in the project, the only prerequisite being that they would complete an online questionnaire to evaluate the tool after the mediation process. Participants were assured that the data for this research would be processed in a complete anonymous and confidential way.

To limit the impact of educational level on the successfulness of mediation, all participants received instructions on how to use the online tool. Likewise, the 12

professional mediators that were involved in this project were all trained in the use of the online technology.

## **4.2. Sample**

The response rate in this study was 90%, which is high for this type of research (Saks, Schmitt, & Kilmoski, 2000). The questionnaire was completed by 126 participants.

In socio-demographic terms, 59 males and 67 females completed the survey. The average age of the participants was 40 years. Nearly 15.1% of the respondents had a university degree, 25.4% had a college diploma, 57.9% had a high school diploma and the rest of the respondents (1.6%) had primary school as their highest educational level. In terms of employment, most respondents worked full-time (64.3%), 9.5% worked as an independent, 5.5% was unemployed, 3.2% was a housewife/houseman and 17.5% indicated that none of these alternatives were applicable to them. The average net household income per month of most respondents (39.7%) varied between €1901 and €3150 per month.

## **4.3. Measures**

### **4.3.1. Emotions**

As stated before, *anger*, *frustration* and *disappointment* are basic negative emotions (Robinson, 2008) that are particularly salient in the context of mediation. To investigate the impact of these emotions on mediation effectiveness, we developed a three-item scale that included the following items: “To what extent did you feel angry during the mediation process?”, “To what extent did you feel frustrated during the mediation process?” and “To what extent did you feel disappointed during the mediation process?”. Participants could indicate their answer on a 5-point Likert scale with anchors ranging from “To a very small extent/not at all” to “To a very large extent/completely”.

#### **4.3.2. Trust in the mediator**

*Trust in the mediator* was measured with four items. First of all, we used a global measure of trust in the mediator. Additionally, three items from the scale developed by Tyler (2003) were added. Since Tyler developed this scale to measure interpersonal trust between direct supervisor and employee, the items of this scale were adjusted in order to cover the mediation context. As a result, trust in the mediator was measured with a four-item scale. Included items were: “Were you able to trust the mediator?”, “Did the mediator consider your views and feelings during the mediation process?”, “Was the mediator honest in his/her communications with you” and “Did the mediator consider your needs in the mediation outcome?”. These items were measured on a 5-point Likert scale with anchors ranging from “To a very small extent/not at all” to “To a very large extent/completely”.

#### **4.3.3. Mediation successfulness**

A number of studies measure mediation effectiveness in terms of whether an agreement is reached or not (Donohue, Lyles, & Rogan, 1989; Irving & Benjamin, 1992). Following Hollett, Herrman, Eaker, and Gale (2002), we argue that the existence of an agreement is only one indicator of mediation success and to use this as the only measure of mediation effectiveness provides a limited picture. Hollett et al. (2002) developed an instrument to measure the successfulness of mediation and include dimensions of client satisfaction, distributive justice, relationship improvement, and resolution of conflict. The first three dimensions of Hollett et al. (2002) were included in our measurement of the successfulness of mediation. The last dimension, resolution of conflict, was not included in our measurement since conflicts that underlie divorce mediation are very complex and the resolution of these conflicts is not always the ultimate goal of divorce mediation.

To measure *client satisfaction* we used an item that assessed the global satisfaction of the disputant with the mediation outcome. For the measurement of *distributive justice*

we used what Lind and Tyler (1988) call an indirect measure of justice, since it does not measure fairness directly but rather assesses fairness criteria. To determine whether an outcome is fair, people compare their ratio of received outcomes/delivered contributions to that of a referent other (Adams, 1965). In mediation, the most significant referent other is the other disputing party. To measure distributive justice, we asked participants to report the perceived fairness of the mediation outcome given the contribution to the problem as well as the efforts to solve the problem of both parties. *Relationship improvement* was measured through the extent to which reconciliation between disputants was reached.

In sum, to measure mediation successfulness we used a six-item scale that included the following items: “Are you satisfied with the outcome of the mediation?”, “Does the mediation outcome take into account the contribution of the other party to the problem?”, “Does the mediation outcome take into account your contribution to the problem?”, “Does the mediation outcome take into account the efforts of the other party to solve the problem?”, “Does the mediation outcome take into account your efforts to solve the problem?” and “Did the mediation outcome improve your relationship with the other party involved in the conflict?”. These items were measured on a 5-point Likert scale with anchors ranging from “To a very small extent/not at all” to “To a very large extent/completely”.

Appendix I contains an overview of all the items that were used in this study.

## **5. Results**

### **5.1. Factor analysis**

We conduct a principal component analysis with oblimin rotation to examine the fit of the proposed measurement model (Table 1). The initial eigen values show that the first factor explains 48% of the variance, the second factor accounts for 14% of the variance and the third factor explains 9% of the variance. The first, second and third factor are in line with what we called Trust in the mediator, Mediation successfulness and Negative emotions respectively. The three factors together explain 71 % of the variance in the data. After examining four, five and six factor solutions, we prefer the three factor

solution because of its previous theoretical support, the ‘leveling off’ of eigen values on the scree plot after three factors (Appendix II), and the difficulty of interpreting fourth and subsequent factors.

Table 1

*Factor Loadings Based on a Principal Components Analysis with Oblimin Rotation for 13 Items (N=126)*

	Factor 1: Trust in the mediator	Factor 2: Mediation successfulness	Factor 3: Negative emotions
Frustration			.85
Anger			.95
Disappointment			.75
Consideration of views and feelings	.69		
Honesty mediator	.74		
Consideration of needs	.60		
Trust mediator	.88		
Contribution of other party to the problem		.90	
Own contribution to the problem		.77	
Efforts of other party to solve the problem		.86	
Own efforts to solve the problem		.73	
Relationship improvement		.69	
Outcome satisfaction <sup>a</sup>	.50		

*Note.* Factor loadings <.4 are suppressed.

<sup>a</sup> This item is removed for further analyses.

Except for one item, namely “Outcome satisfaction”, all items have a high primary factor loading and a cross-loading smaller than .4. As such, a clear structure congruent with our measurement model emerges. The item that assesses outcome satisfaction has a primary factor loading smaller than .4 and a cross-factor loading of .50 on the Trust Factor. Therefore this item loads on the wrong factor and we remove it for further

analyses. As such, one item is removed for further analyses and we continue our study with the remaining 12 items.

## 5.2. Descriptive statistics

We create composite scores for each of the three factors, based on the mean of the items which had their primary loading on each factor. Descriptive statistics, correlations and internal consistency reliabilities of the research variables are reported in Table 2. In our sample, trust in the mediator is rather high ( $M=4.10$ ,  $SD=.77$ ) and participants experience a rather low level of negative emotions ( $M=2.18$ ,  $SD=1.06$ ). Mediation successfulness is above average but scores neither low nor high ( $M=3.37$ ,  $SD=1.07$ ). The distribution of our research variables is included in Appendix II.

Cronbach's alpha is high for Trust in the mediator (Cronbach's alpha = .80), Negative emotions (Cronbach's alpha = .86) and Mediation successfulness (Cronbach's alpha = .88), which proves the internal consistency of our scales.

Table 2

*Means (M), Standard Deviations (SD), Correlations and Internal Consistency Reliabilities*

Variable	M	SD	1	2	3	4	5	6
1. Gender	.53	.50	-					
2. Age	40.40	9.21	.19*	-				
3. Agreement	.24	.43	.002	-.07	-			
4. Negative emotions	2.18	1.06	-.09	.007	.49**	(.86)		
5. Trust in the mediator	4.10	.77	.34*	.18*	-.46**	-.62**	(.80)	
6. Mediation successfulness	3.37	1.07	.07	.02	-.47**	-.48**	.57**	(.88)

*Note.* N=126. Tests for correlations are two-tailed. Internal consistency reliabilities are presented along the diagonal in parentheses.

\*  $p < .05$  \*\*  $p < .01$

### **5.3. Agreement rate**

As far as the outcome of the mediation is concerned, 76.2 % of the cases led to a complete agreement and in 7.9 % of the cases a partial agreement was reached. This means that only in 15.9 % of the cases, disputants were not able to reach an agreement.

### **5.4. Regression analyses**

To test our hypotheses, we use linear regression analyses. In all our regression analyses, we control for gender, age and whether an agreement is reached during mediation or not. We run our primary analyses with and without these controls, per recommendations by Becker (2005). The results are not affected by Gender and Age, but the results are affected by Agreement, so we only include the latter as control. To test for collinearity, we calculate the VIF-statistic. Since the value of this statistic is never above 10, there is no evidence of collinearity in our data (Hair, Anderson, Tatham, & Black, 1995).

A linear regression model is fitted to the data to test Hypothesis 1 regarding the relationship between experienced negative emotions and mediation successfulness. According to the model, negative emotions are negatively related to mediation successfulness ( $\beta = -.331$ ,  $p < .001$ ). In other words, when the level of experienced negative emotions increases, mediation successfulness decreases. As such, Hypothesis 1 is confirmed.

Regressing trust in the mediator on mediation successfulness, we see that results indicate a positive relationship between trust in the mediator and mediation successfulness ( $\beta = .453$ ,  $p < .001$ ). Higher levels of trust in the mediator are associated with higher mediation successfulness. Hypothesis 2 is thus confirmed.

We conduct linear regression analyses to test the interaction between trust in the mediator and negative emotions on mediation successfulness. Prior to our analyses, we dummycode Agreement and mean-center Negative Emotions, Trust in the mediator and Mediation successfulness. Next, we create the cross-product term from the centered predictors (trust in the mediator x negative emotions). Table 3 presents the results of the analyses. We report the unstandardised B coefficients, since standardised  $\beta$ -coefficients

are not interpretable for interaction effects (Aiken & West, 1991). In the first step, we only enter the control variables in our model. Reaching an agreement is significantly related to mediation successfulness ( $B=-1.132$ ,  $p<.001$ ). In the second step, we add experienced negative emotions to the model. This second-step regression model reveals a significant negative relationship between experienced negative emotions and mediation successfulness ( $B=-.334$ ,  $p<.001$ ). Higher levels of experienced negative emotions are associated with lower levels of mediation successfulness. In the third step, we include trust in the mediator in our model. Trust in the mediator is positively related to mediation successfulness and this relationship is statistically significant ( $B=.417$ ,  $p<.001$ ). Thus, as predicted, mediation successfulness increases when trust in the mediator rises. As Table 3 shows, the effect of negative emotions on mediation successfulness becomes insignificant when Trust in the mediator is entered into the model ( $B=-.124$ ,  $p>.05$ ).

Table 3

*Regression Analysis of Trust in the Mediator, Negative Emotions and the Interaction Term on Mediation Successfulness*

	Model 1	Model 2	Model 3	Model 4
Variables	B	B	B	B
(Constant)	.247*	.163	.101	.028
Agreement <sup>a</sup>	-1.132***	-.764***	-.587**	-.750**
Negative emotions		-.334***	-.124	-.090
Trust in the mediator			.417***	.475***
Negative emotions * trust in the mediator				-.185*
R <sup>2</sup>	.221	.307	.396	.417
R <sup>2</sup> change		.086***	.89***	.022*

*Note.* N = 126. B = unstandardised coefficients

<sup>a</sup> Reference group: agreement reached

\*  $p<.05$ , \*\*  $p<.01$ , \*\*\*  $p<.001$

Finally, we enter the cross-product term (trust in the mediator x negative emotions) in our model. As is shown in Table 3, the interaction effect of trust in the mediator and negative emotions on mediation successfulness is statistically significant ( $B=-.185$ ,  $p<.05$ ). As such, with higher levels of trust in the mediator, negative emotions have a less strong impact on mediation successfulness than with lower levels of trust in the mediator. Thus, Hypothesis 4 is confirmed in our research. In the full model, other variables that are significantly related to mediation successfulness are Agreement ( $B=-.750$ ,  $p<.01$ ) and Trust in the mediator ( $B=.475$ ,  $p<.001$ ).

Following the recommendations of Preacher, Curran, and Bauer (2006) we plot three slopes corresponding to three values of Trust in the mediator: mean, one standard deviation below mean and one standard deviation above mean. In Figure 2, we see that the relationship between negative emotions and mediation successfulness is negative when trust in the mediator is low and positive when trust in the mediator is average or high.

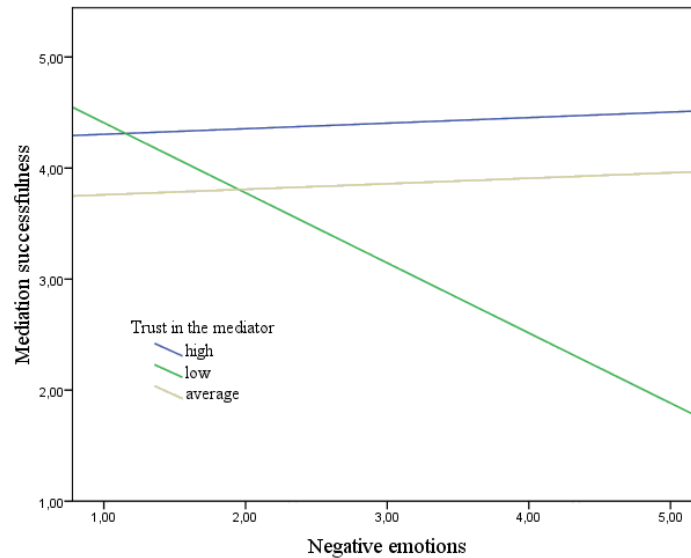


Figure 2. Interaction effect of Trust in the mediator on the relationship between Negative emotions and Mediation successfulness.

## **6. Discussion**

### **6.1. Implications**

We aspired to determine the effect of experienced negative emotions and trust in the mediator on mediation successfulness. As our results show, the presence of negative emotions during online mediation hinders the successfulness of that mediation. The opposite is true for trust in the mediator. When trust in the mediator increases, mediation successfulness rises. Concerning the interaction between trust in the mediator and negative emotions on mediation successfulness, we find that trust in the mediator can influence the negative relationship between experienced negative emotions and mediation successfulness. Negative emotions have a strong negative effect on mediation successfulness when levels of trust in the mediator are low and a positive effect on mediation successfulness when trust in the mediator is average or high.

Many academics and researchers are critical concerning the usefulness of online mediation for the settlement of disputes (Eisen, 1998). In our study a full agreement is reached in 76% of the cases. Irving and Benjamin (1992) determined the settlement rate of divorce cases in a face-to-face mediation context and found exactly the same number. As such, in accordance with other researchers (Conley Tyler & Bretherton, 2003; Conley Tyler & Raines, 2006), we find the settlement rate in our study to be high and comparable to the settlement rate in face-to-face mediation cases. This should convince critics of the usefulness of online mediation as an alternative to face-to-face mediation.

Trust building is a commonly accepted mediation tactic in face-to-face mediation (Goldberg, 2005; Stimec & Poitras, 2009). Our research confirms the importance of trust building between mediator and disputant in an online mediation context. In our study, trust in the mediator has a positive impact on mediation effectiveness on its own and influences the negative relationship between negative emotions and mediation successfulness. Since trust in the mediator is such an important factor which contributes to mediation effectiveness, professional mediators should gain a thorough understanding of trust building techniques. Mediators can rely on several trust bases to

gain the confidence of disputants. First of all, empathic listening is the cornerstone of building rapport. Mediators do not only have to listen to each party's concerns and needs, they also need to acknowledge the legitimacy of some of those concerns (Goldberg, 2005). Nevertheless, empathic listening may never create the idea that the mediator holds a biased attitude towards one of the disputants. Above all, the mediator needs to remain neutral and impartial in order for trust to develop (Goldberg, 2005; Goldberg & Shaw, 2007). Second, trust can result from the mediator's reputation, experience or membership of a well thought-of professional organisation (Doney et al., 1998; Goldberg & Shaw, 2007; Sheppard & Sherman, 1998). Finally, disputants can trust the mediator because of certain personal characteristics they share, for example common values and experiences (Moore, 1996). Accordingly, the mediator can gain the disputant's trust by communicating relevant information about himself, his professional mediation organisation and his career at the beginning of the mediation process.

Previous research in the context of mediation and negotiation shows that negative emotions have a negative impact on disputants' perceptions of each other and their satisfaction with the mediation process (Friedman et al., 2004). Furthermore, negotiators who experience positive affect are more co-operative towards each other, whereas negotiators who are in a negative affective state tend to be more competitive and more reluctant to make concessions (Baron et al., 1990; Forgas, 1998). As such, the experience of negative emotions hinders the accomplishment of win-win agreements in mediation (Donohue, 1991). Our findings are in line with this research, since we found negative emotions to have a negative effect on mediation successfulness. It would be interesting to see whether negative emotions are more apparent in face-to-face compared to online mediation and whether the influence of negative emotions on mediation effectiveness is stronger or less strong in an online compared to an offline mediation environment. Moreover, the presence of emotions and its effect on mediation successfulness could differ according to the communication mode that is used in the online environment. In synchronous online mediation, in which disputants can react to their opponent immediately, disputants feel less inhibited to express their emotions because of unclear social norms (Kiesler & Sproull, 1992; Tan et al., 2004). Therefore, in synchronous online mediation, the risk for conflict escalation could increase. In contrast, in asynchronous mediation, in which communication does not occur

simultaneously between disputants and the mediator, disputants have more time to approach their emotions in a rational matter and to calm down before they react to their opponent. Accordingly, disputants express their emotions in a more rational way in an online compared to an offline environment (Hammond, 2003). In our research, the average level of experienced negative emotions was rather low ( $M=2.18$ ). This could be due to the asynchronous nature of our online mediation process. It would be interesting to compare the presence and impact of negative emotions in asynchronous and synchronous online mediation.

Since emotions are an intrinsic part of conflict and thus conflict resolution, it is impossible for mediators to avoid them completely in a mediation setting. However, our study confirms the importance for professional mediators to deal with expressions of emotions and anger effectively. By making participants aware of the negative impact of these emotions on mediation successfulness, their effect can be limited (Herrman et al., 2001). Furthermore, although emotions can hinder mediation effectiveness, they are also an important aid since they signal to the mediator that an important issue is at stake for the disputant (Jones & Bodtger, 2001).

## **6.2. Strengths and limitations**

### **6.2.1. Strengths**

The mediation cases in this study concerned real disputants involved in real-life conflicts, not students engaged in simulated disputes. This is an important contribution compared to experimental studies since it is difficult to simulate the emotions that arise in real-life conflicts. Furthermore, previous research was mostly descriptive in nature and did not investigate the relationships between emotions, trust and mediation successfulness in an empirical manner. Although numerous academics write about the importance of trust and emotions in online mediation, this study finally provides an empirical basis for this reasoning.

Our study draws upon the views of disputing parties. Several other studies, also identifying trust building as the single most important factor contributing to mediation success, based their data on the perspectives of mediators and representatives from disputing parties (Goldberg, 2005; Goldberg & Shaw, 2007; Yiu et al., 2006). Our study extends these findings by coming to the same conclusion based on data obtained from disputing parties. Besides, by looking at trust in the mediator from the participant's perception, the validity of the measured concept increases substantially.

Our study contributes to the field of online mediation by being one of the first to investigate mediation processes in an online context. Since the use of online mediation is on the rise, this type of research is very much needed. Furthermore, we examined the interaction between trust in the mediator and negative emotions on mediation successfulness. To our knowledge, no other authors have investigated this relationship yet and possible interaction effects between predictors of mediation successfulness are mostly set aside. However, our study points to the importance of considering such interaction effects in future research.

Finally, our study is based on mediation cases concerning divorce disputes obtained from a mediation office in the Netherlands. This organisation received the mediation cases from the Dutch Legal Aid Board, which is accessible to a broad target group. As such, we obtained a very diverse sample for our study, which is also proved by the diverse background of our respondents in terms of gender, age, educational level and income. This benefits the representativeness of our sample which is an important strength of our study.

### **6.2.2. Limitations**

Our study faces three important drawbacks. First of all, we did not differentiate between disputants' experienced and expressed emotions. Previous research shows that experienced and expressed emotions of disputants can have a different effect on the behaviour of disputants and the resulting outcome of the conflict (Van Kleef et al., 2004a). Although our questioning asks respondents to report their level of experienced

emotions, it is not clear whether disputants could make a clear distinction between experienced and expressed emotions.

Second, in dispute resolution, the parties usually begin with strongly felt emotions (Brett, 2001). This is especially true in the context of divorce disputes. In our study, we did not differentiate between emotions that arose during mediation and those that were already present before the mediation process started.

Third, the cross-sectional nature of this study makes it impossible to draw conclusions about the causal nature and direction of our findings. It is possible that, after a successful mediation, disputants underestimated the level of experienced negative emotions by thinking more about the positive aspects of mediation. Concerning trust in the mediator, it could be that disputing parties rated the mediator more favourably after a successful mediation.

### **6.3. Future research**

The effect of experienced positive emotions on mediation successfulness was not considered in our study. Previous research indicates that negotiators who experience positive affect, tend to be more cooperative and conciliatory (Van Kleef, De Dreu, & Manstead, 2004). Future research could explore whether, contrary to experienced negative emotions, positive emotions can promote the successfulness of online mediation. If this proves to be true, mediators can enhance mediation successfulness by making parties attentive to accomplishments, gains and promising turns in the mediation process. This could evoke positive emotions and as such mediation successfulness could be raised.

Another interesting arena for future research concerns a longitudinal testing of our findings. The surveys in this research were conducted at one moment in time and only after the online mediation process had taken place. It would be interesting to see how the development of trust and the experience of negative emotions affect mediation successfulness at different points in time. Furthermore, this could shed light on the

debate whether trust develops in a linear fashion (Yiu et al., 2006) or whether trust only influences mediation successfulness until a certain threshold (Stimec & Poitras, 2009).

Mediation is a mutual influence process between disputants and mediator (Folger & Jones, 1994). Mediators are human too and as such the mediation process can emotionally influence them as well (Jones & Bodtger, 2001). Therefore, it would be interesting for future research to assess the influence of a mediator's emotions on the mediation process and possibly mediation effectiveness.

In our research, we wanted to investigate the intrapersonal effects of negative emotions and trust in the mediator on mediation successfulness. Since emotions have important social functions and consequences, and thus do not only influence the disputant's own behaviour but also that of his counterpart, it would be interesting for other researchers to look at interpersonal effects of emotions in online mediation (Van Kleef et al., 2004). Concerning trust in the mediator, it would be interesting to investigate whether the level of trust in the mediator of one disputant is related to that of the other disputant and how this influences mediation successfulness.

We investigated two determinants of mediation successfulness, namely negative emotions and trust in the mediator. Hence, we pictured a limited part of those factors that contribute to mediation effectiveness. Mediation theory and practice is lacking a comprehensive framework and research on this topic is much-needed to further the art of mediation.

## **7. Conclusion**

The findings of this research remind us of what Mahatma Gandhi suggested about half a century ago: *You can't shake hands with a clenched fist*. First of all, this refers to the negative impact of negative emotions on mediation successfulness. It is difficult to settle a dispute when negative emotions, like anger, frustration and disappointment, dominate the mediation process. Second, the clenched fist could symbolise a disputant's

suspicious attitude towards the mediator. Such a suspicious attitude hinders the development of trust in the mediator and as such impedes mediation successfulness.

Our study stresses the importance of trust building techniques for mediators. Trust in the mediator does not only have a positive impact on mediation successfulness but also alters the relationship between experienced negative emotions and mediation successfulness. Mediators can limit the negative impact of experienced negative emotions on mediation successfulness by ensuring that the level of trust between mediator and disputant is high enough. By doing this, the negative relationship between experienced negative emotions and mediation successfulness will decrease.

Although research on the topic of online mediation is on the rise, there is still a lot to learn. We hope our study contributed to the field of online mediation by showing to mediators the importance of building trust with parties and handling negative emotions effectively. We hope this study stimulates others to follow up our trail and to conduct more research with a solid empirical basis.

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## Appendices

Appendix I. Questionnaire items

1	2	3	4	5
To a very small extent/ not at all	To a small extent	To an average extent	To a large extent	To a very large extent/ completely

**Negative emotions: To what extent...**

Did you feel frustrated during the mediation process?	1	2	3	4	5
Did you feel disappointed during the mediation process?	1	2	3	4	5
Did you feel angry during the mediation process?	1	2	3	4	5

**Trust in the mediator: To what extent...**

Did the mediator consider your views and feelings during the mediation process?	1	2	3	4	5
Was the mediator honest in his/her communications with you?	1	2	3	4	5
Did the mediator consider your needs in the mediation outcome?	1	2	3	4	5
Were you able to trust the mediator?	1	2	3	4	5

**Mediation successfulness**

**A. Client satisfaction: To what extent...**

Are you satisfied with the outcome of the mediation?	1	2	3	4	5
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**B. Distributive justice: To what extent...**

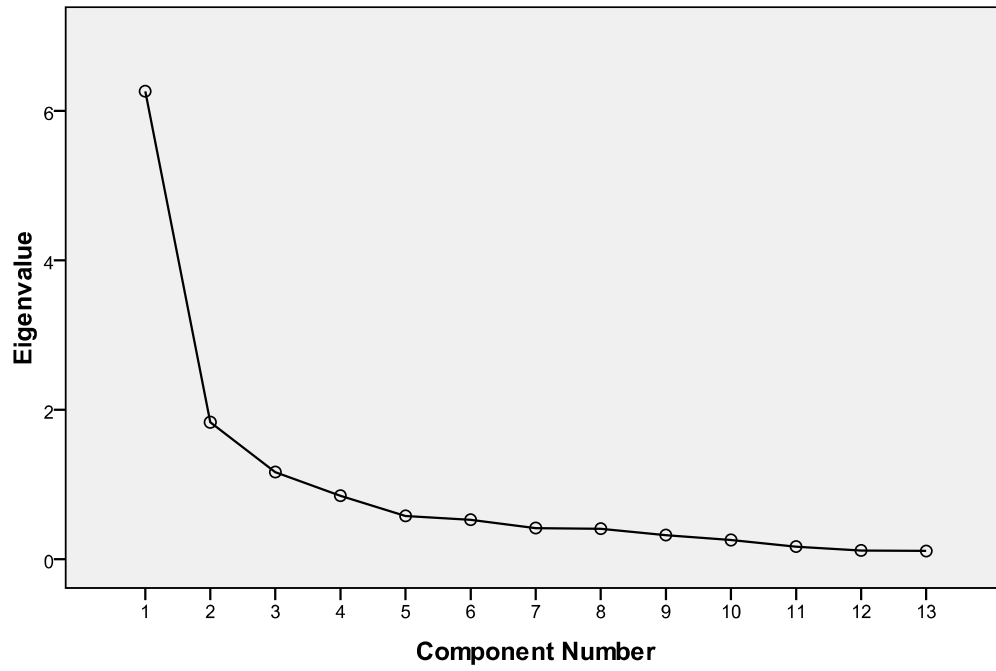
Does the mediation outcome take into account the contribution of the other party to the problem?	1	2	3	4	5
Does the mediation outcome take into account your contribution to the problem?	1	2	3	4	5
Does the mediation outcome take into account the efforts of the other party to solve the problem?	1	2	3	4	5
Does the mediation outcome take into account your efforts to solve the problem?	1	2	3	4	5

**C. Relationship improvement: To what extent...**

Did the mediation outcome improve your relationship with the other party involved in the conflict?	1	2	3	4	5
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Appendix II. Scree plot

Scree Plot



### Appendix III. Distribution of our research variables

