The absence of nonverbal cues in instant messaging:
The effect of (high context) implicit messages on the perceived degree of conflict

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Abstract
The purpose of the present paper is to study the absence of nonverbal cues in instant messaging and its implications for effective communication among international students. Specifically this research project aims to examine the effect that implicit (high context) messages have on the perceived degree of conflict, when used by international students via instant messaging. Implicit messages are hereby described as entailing only a few words and mostly conveying meaning through nonverbal communication. In instant messaging nonverbal communication is missing. Hence it is assumed that the actual meaning of the message cannot be transmitted. The study is hereby following the main claim that misunderstandings are more likely to evolve in instant messaging and further leading to conflict due to the absence of nonverbal communication. In order to test what effect implicit messages actually have on the perceived degree of conflict an online experiment is administered. The sample consists of 170 international students recruited at an international University in the Netherlands. The theoretical frameworks of high context/low context and facework are used for the further operationalization of the concepts. The findings however show no significant results and no effect of implicit messages on the perceived degree of conflict is detected.

Keywords: High context, low context, instant messaging, conflict, facework, nonverbal cues
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1. Introduction

Research has shown that the absence of nonverbal cues in instant messaging (IM) - that are of high importance for interpersonal communication - can lead to misinterpretation and misunderstandings (Darics, 2014). IM is a synchronous way of communication, representative of one-on-one interaction. The conversation parties hereby do not need to be co-present to maintain fluent conversation, as geographical and time differences can be overcome (Grebe & Hall, 2013). At the same time, IM is different than conventional interpersonal communication because it is a form of computer mediated communication (CMC) and is therefore an alternative to face to face (ftf) communication. As such, many distinct characteristics become valuable for researchers to examine between the two channels of communication (ftf and IM), particularly in the field of interpersonal communication.

IM via the mobile phone has evolved into a common way of communication for individuals. IM is used across a variety of social relationships to communicate important information about life plans. This becomes especially advantageous for students involved in educational environments. IM moreover is relevant for academic study because the frequency of usage is continuously increasing (Avrahamai & Hudson, 2006). With over one billion users worldwide (Fogel, 2011), IM has become one of the most popular ways to communicate with each other in the virtual sphere (Darics, 2014).

IM’s relative newness accounts for an uncommon use of language and a shift within the communication standards. Precisely, IM has been described with a unique two-folded character: entailing features of spoken and written language at the same time. The elements of the spoken language hereby are identified to be in the “spontaneous, often unedited, responsive, and informal” (Darics, 2014, p. 339) nature of IM, but not spoken in its literal meaning. Simultaneously IM’s are permanently saved on devices, accounting for the written feature. Though, IM does not entail nonverbal cues that are known from conventional audiovisual features (Darics, 2014). As such, observations and differing expectations among conversation participants using IM tend to lead to tension and frustration between the different parties (Lam & Mackiewicz, 2007; Reinsch, Turner, & Tinsley, 2008).

Consequently, research indicates that the absence of nonverbal cues in CMC accounts for misinterpretation of the information transacted in conversations. This misinterpretation is a phenomenon that becomes of particular interest when people from different cultures communicate via CMC, as CMC intensifies “ambiguity and misunderstanding among communication parties with different cultural backgrounds“ (Xie, Rau, Tseng, Su, & Zhao, 2009, p. 11).
Typically, the way individuals formulate a message depends on the relationship the different communication participants share, or rather the context the communication parties are in. If they know each other well, few words are sufficient to convey a message. This is the case for example, when siblings who grew up together are communicating. They only need a few words to stimulate an entire system of semantic meaning. A similar situation applies to people with equal cultural backgrounds. Research has shown that people from the same origin are following similar communication patterns and shared assumptions. This phenomenon precisely is described in the high context /low context (HC/LC) framework (Hall, 1976). The sensitivity to contextual information, for instance, determines communication effectiveness, thus whether people understand each other or not. People communicating with only a few words usually compensate with the additional use of nonverbal cues. In situations where the possibility for transmitting nonverbal cues is missing the probability of misunderstandings increases and can more easily result in conflict. The implication is that people from different cultures communicating via IM become more vulnerable to experience misunderstanding and conflict.

Conflict has been defined as “the perceived and/or actual incompatibility of values, expectations, processes or outcomes between two or more parties over substantive and/or relational issues” (Ting-Toomey, 1994, p. 360). Situations of conflict often develop from misunderstandings. Hence when people disagree over a particular issue during a conversation, because of the misinterpretation of messages, conflict is likely to arise. People have a social identity they claim for themselves and expect others to confirm. This process is defined as facework, with the social identity being someone’s face (Ting-Toomey, 1988). If this is not the case (the social identity is not confirmed) as in conflict situations, people experience emotions such as embarrassment or shame and feel their social identity to be injured/attacked. The behavior that is following such experiences is also a part of facework (Ting-Toomey, 1988).

Because CMC can increase the potential for misunderstanding between communication parties of differing cultural origins (Xie et al., 2009), it is particularly interesting to observe IM communication patterns at the educational environment of Universities. Here students from a variety of cultures come together with the need of a way for effective communication (via IM). Because young adults moreover have been reported to use IM more than adults do (Jones & Fox, 2009) international students as target population become particularly interesting and relevant in this context. The communication between friends and classmates is crucial: relationship building is related to the communication of
course information. IM is used in order to discuss assignments, literature, and problems that develop during their individual study time. The use of IM becomes more convenient, and therefore a more common method to ask their peers for clarity on the exact guidelines for assignments. Not only the relationship they have with each other can be defined by this communication, but it is also important for them to extract the right information from the messages that are exchanged via IM. This information associates with task oriented, decision making process and hence relates to the students’ academic success. It is therefore essential that the communication among students leads to expected relational outcomes, otherwise scholarly achievements can be harmed. It is therefore relevant to study the communication practice between international students via IM in order to examine to what extent implicit IM messages have an effect on the perception of conflict. This paper therefore studies the relationship that high/low context communication and Facework theory share among international students’ perceptions of conflict via IM.

Academic research has been done on the role and implications of IM for interpersonal communication in professional (Darics, 2014; Lam & Mackiewicz, 2007; Reinsch et al., 2008) as well as personal relationships (Avrahami & Hudson, 2006; Fogel, 2011; Grebe & Hall, 2013). Research on the HC/LC framework has mostly been situated within the traditional study of intercultural communications to identify cultural diversity according to context (e.g., Gudykunst, 1983; Gudykunst & Nishida, 1986; Hall, 1976; Kim, Pan, & Park 1998). Facework theory is positioned similarly, as it mostly aims to investigate cultural diversity according to conflict style preferences (e.g., Oetzel et al., 2001; Oetzel & Ting-Toomey, 2003; Ting-Toomey et al., 1991; Trubisky, Ting-Toomey, & Lin, 1991). The theories overlap in some examinations of conflict style management according to context (e.g., Chua & Gudykunst, 1987; Croucher et al., 2012), providing unique means to test both construct and concurrent validity.

Although communication effectiveness on websites and user interface design have been studied in relation to the HC/LC framework (Würtz, 2005; Xie et al., 2009; Usunier & Roulin, 2010), research lacks the inclusion of this framework in studies of other new communication media, precisely instant messaging. There are also some studies that concentrate on organizational environments (e.g., Hamdorf, 2003; Oetzel, Myers, Meares, & Lara, 2003; Chang & Haugh, 2011) but only a few that are situated in an educational environment (e.g., Richardson & Smith, 2007). Due to this clear gap in academic literature there is the need to put HC/LC and Facework theory in context with instant messaging among international students, thus giving the present study sufficient scientific relevance.
Communication patterns and the perception of conflict via IM among international students moreover are socially relevant. The increasingly high potential for misinterpretation of IM tends to associate with perceptions of conflict, due to the lack of nonverbal cues and cultural diversity. Generally, the students differ in values through various cultural backgrounds, they are subject to multiple interpretations of messages and therefore more easily exposed to misunderstandings. This in turn can result in conflict and seriously harm the students’ academic success. In order to test the perception of conflict among international students’ communication, the following research question is posed:

**RQ: How do high/low context communication and facework theory help to explain perceptions of conflict in the absence of nonverbal cues?**

First the present paper presents the theoretical background relevant for this study: a) High/Low Context, b) Facework and c) the most current application of both theories. After suggesting the hypotheses that are resulting from the review of literature, the chosen methodology – a quasi-experimental design – is described, including detailed information on the research process. The method section is followed by the results chapter, where the outcome of the statistical analyses is presented. Finally the discussion, including information on practical and theoretical implications as well as a description of the research’s limitations concludes the present paper.
2. Theory and previous research

2.1 High Context Low Context

The High Context /Low Context (HC/LC) framework has initially been proposed by Hall (1976). Theoretically, cultures of the world can fit within the continuum, ranging from low to high sensitivity to contextual information. The book *Beyond Culture* (1976) examines that by pointing towards an acknowledgement that cultural differences are crucial for the future of humankind. The limits of individual cultures must be overcome by looking at the “hidden dimensions of unconscious culture” (Hall, 1976, p. 2). Culture is determining social life and as such also interpersonal communication. The categorization of cultures being high or low context hereby is particularly important, as determining an individual’s communication patterns. Identifying an individual according to his/her cultural context being high or low equally determines his/her sensitivity towards contextual information. Context hereby is defined as “information that surrounds an event” (Hall, 1989). As such, context is important in revealing meaning. A variety of communicative systems providing context have been observed across cultures. While in LC cultures the level of programmed information used to generate context and articulate meaning, is rather low, in HC cultures it is rather high. As such more time is needed here for the programming of meaning.

Specifically a high context communication (HC) is defined to be “one in which most of the information is already in the person, while very little is in the coded, explicit transmitted part of the message. Low context communication (LC) is just the opposite; i.e., the mass of the information is in the explicit code” (Hall, 1976, p. 91). To put it in simple words, HCC contains implicit messages and therefore less contextual information than LCC, which is containing explicit messages and much contextual information. The latter is thus described as being more precise and unambiguous in meaning, while HCC can be ambiguous, because it is based on shared assumptions or experiences that are often transmitted through both, verbal and nonverbal communication. While HC people never explicitly formulate what is on their mind, all important indicators are present to let the other communication party understand the important point. Hence it is on the listener to position these indicators properly. Siblings who grew up together are communicating HC, while lawyers in a courtroom are communicating LC (Hall, 1976). This example shows that communicating HC requires a personal relationship. Two relative strangers in contrast cannot rely on a grounded relationship. They need more contextual information and additional explanation (LC). HCC however is considered to be more economical, because not as many words are needed (Hall, 1976).
Individuals’ behaviors are identified to resemble an extension of the cultural context he/she lives in. Members of LC cultures have been observed to be more individualistic and fragmented, as such less involved with other members. Individuals in HC cultures on the other hand are considered to be more involved in close personal relationships. These relationships constitute guidance for members born in such stable societies. As a result however HC individuals expect more from others than people in LC cultures do (Hall, 1976). On the HC/LC continuum cultures such as the Swiss, German or the American for instance are rather low, while the Japanese, the Korean, Arabian and Mediterranean cultures, among others, are considered to be rather high on the scale (Hall & Hall, 1990).

As HC people are using more implicit messages, they are relatively slow in articulating the crucial point. This also derives from their high expectations in others and the general idea not having to be specific. HC people’s preference to talk around the point becomes evident when considering communicating unpleasant matters. Being explicit in that case could cause embarrassment, which is highly avoided in these cultures. On the other hand individuals in LC cultures are delivering messages more straightforwardly, while coming to the point quickly and sometimes even tending to articulate too much information (Hall, 1989).

In sum, “HCC is economical, fast, efficient, and satisfying; however, time must be devoted to programming. HC actions are rooted in the past and highly stable. LC communications do not unify, but they can be changed easily and rapidly” (Hall, 1976, p. 101).

2.1.1 Application of HC/LC

Recent years of research in intercultural communication has lead to a general acceptance that communicative behavior differs and depends on an individual’s cultural background (Gudykunst, 1983). Many theories of cultural variation have been developed according to cognition, structure and behaviors. The classification of cultures being high- or low context is one of these cultural differences that account for differences in communication patterns. While considered to be a valuable starting point for future formulations of cross-cultural interaction theories (Korac-Kakabadse, Kouzmin, Korac-Kakabadse, & Savery, 2001), these dimensions of cultural variability have equally been claimed to require confirmation. As such they have been tested extensively throughout research. Many scholars have dedicated their works to test the proposed model and confirm the high/low context conceptualization of cultures (e.g. Kim et al., 1998; Gudykunst, 1985, Chua & Gudykunst, 1987, Wang 2008).
2.1.2 Empirical test

One of the most recent tests is a cross-cultural comparative study by Kim, Pan and Park (1998). While previous tests are largely of descriptive nature, this study constitutes an empirical confirmation of the HC/LC framework. This empirical test is claimed to be essential for literature, because it helps to gain more meaningful insight about the consequences and effects of cultural variability formulated in the HC/LC dimensions. Hereto first it must be confirmed whether the behavior among cultures that are claimed to be HC or LC is consistent with the patterns formulated in the original contextualization of cultures being high or low. So far the position of a culture on the HC/LC continuum according to cultural dimensions is mostly based on observations. Hereby it is unclear how such classification is made. Consequently more knowledge is needed in order to provide empirical evidence for categorizing a certain culture being on the high or low end of the scale (Kim et al., 1998). A survey instrument has been developed for an intercultural comparison including the five main dimensions within the HC/LC framework: social orientation, commitment, responsibility, confrontation, communication and dealing with new situations. Furthermore individuals of three different cultures, namely Korea, China and America, have been examined as resembling both HC and LC cultures. While Korea and China are described as being HC, America is formulated to be LC. The study first presents a re-examination of the HC/LC framework with a focus on the five dimensions, to recall the most important characteristics/tendencies of each cultural dimension (HC and LC). The survey that is conducted among participants of all the three countries constitutes the second part of the work where these tendencies are tested for consistency (Kim et al., 1998).

It is reported that previous research generally assumes individuals of HC cultures to be more involved in grounded relationships resulting in a hierarchical social structure where personal emotions and concerns are kept under self-control. Here the information is mostly shared in form of simple communication, while simultaneously entailing profound meaning. In LC cultures people are more individualistic and somehow estranged and disrupted resulting in less involvement with other members of such cultures. The information here is shared more explicitly and on a rather non-personal level. The hierarchy of a society over time thus seems to determine whether the context of a culture is high or low (Kim et al., 1998).

In order to classify a culture on the HC/LC continuum according to differences in behavior, five main aspects for cross cultural comparisons have been examined specifically: social orientation, responsibility, communication, confrontation and dealing with new situations. As for social orientation it is displayed that the deep relationships HC people are
involved in, result in a strong focus on group orientation and conformity within society. The grounded ties between individuals hereby account for commitment and goodwill. Members of LC cultures on the other hand are assumed to be more individualistic consequently have weaker ties among each other. As a result in such cultures a strong tendency to leave when things get difficult prevails. LC individuals can therefore be described as being more self-oriented rather than group-oriented (Kim et al., 1998).

In terms of responsibility it is found that in HC societies the strict social hierarchy is decisive: here people in authoritative positions are personally responsible for all actions that occur on a minor level. A commonly used decision making process from the top to the bottom hereby results as being most effective. To place responsibility in LC cultures is more difficult in contrast. Because individual’s ties are weak and the people are more individualistic in LC cultures, the social system is more disrupted. When mistakes occur mostly people from the lower level of society are made scapegoats. Self-examination is not present in such cultures (Kim et al., 1998).

When it comes to confrontation individuals of HC cultures are found to rather avoid direct confrontation in order to maintain harmony in society. A strong tendency of saving one’s face, avoiding embarrassment for example, can be identified here. Personal feelings as well as own interests are often restrained. To remain friendly and cordial is mutual understanding in such cultures with no regard on individual emotions. As a consequence showing disagreement in public is considered to be a form of losing one’s face and act against these norms of maintaining self control and harmony. However if disagreement occurs the resulting argument is often caused by meaningless incidents, while escalating quickly. People in LC cultures on the other hand rather show an enormous tendency to express themselves. Hence they are less likely to avoid confrontation, as they are concerned with defending one’s self in situations of disagreement. Criticism is hereby formulated openly and directly pointed towards the other communication party. In situations of argument members of LC communities tend to look for solutions in order to resolve the dissent (Kim et al., 1998).

As for communication it is reported that the deep ties and strictly structured hierarchy in HC societies constitute a setting for communication to occur. Information is hereby grounded in the nonverbal context and already internalized in people. Hence a message needs to be put in the right context in order to be understood. On the other side, most of the information in LC cultures is in the verbal messages. Important hereby is what is said and not how. LC people thus are considered to communicate more free of context (Kim et al., 1998).
In unknown situations members of HC cultures need more instructions, because they are characterized as being extremely focused on their traditions, while trying to stick to their old system. While in the latter they can be creative, in unusual situations it is more difficult for them to handle things. First they need to move from the higher to the lower end of the contextual scale of cultures, to be able to adapt to new situations. LC people on the other hand don’t need many instructions. They are more creative in new situations and can easily adapt. However, members of LC communities have trouble to move in old, traditional systems, because they are not so much used to a strict hierarchy and social norms that need to be followed, like those in HC cultures (Kim et al., 1998).

The survey that has been employed tests these main characteristics of HC and LC cultures for consistency with previous works. Hereto business managers from Korea, China and America are recruited as respondents. A measurement scale has been developed in accordance with the five major dimensions stressed in the study. Following the initial classification of cultures the American sample hereby resembles a LC culture, while China and Korea are considered to be HC (Kim et al., 1998). Generally, results show consistency with previously conducted research on HC/LC framework. Chinese and Korean respondents show more focus on repressing one’s self and avoid confrontation, such as HC people have formerly characterized. Chinese respondents are found to agree slightly more to execute responsibility from the top; hence more devotion to social orientation can be identified. All these tendencies are in accordance with findings about HC cultures in previous studies. The American respondents equally show consistency with tendencies identified for LC cultures. They are more creative in dealing with new situations than the Asian, who show more trouble in such positions (Kim et al., 1998). Overall it can be said that the study shows consistent results with previous works on the HC/LC framework and thus constitutes a valuable empirical test of the main cultural dimensions which serve future cross-cultural comparisons.

2.1.3 Case studies

In fact after the model has been successfully confirmed, many scholars have applied the dimensions of high versus low context cultures as analytical dimensions for intercultural analysis and numerous case studies have been conducted. So is a recent exploratory comparative analysis of communication styles by Nishimura, Nevgi, and Tella (2008), who investigate cultural attributes and communication in Finland, Japan and India. Here it is argued, based on Hall’s HC/LC continuum (1976), that misunderstandings across cultures derive from differences in communication and cultural preferences (Nishimura, Nevgi, &
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Tella, 2008). Finland and Japan are hereby considered to be high context cultures, while India is categorized on the lower scale of the continuum. The main argument hereby is that the differences in communication mainly derive from various ways of internalizing communication within a particular culture. Moreover it is claimed that the acknowledgement of these differences would result in less cross cultural misunderstandings and could generally establish mutual respect. In the extensive literature review that is presented, it is touched upon all important aspects the HC/LC framework entails. Hereby not only communication patterns are described according to high or low context, but also cultural issues, meaning a country’s societal characteristics, such as history, religion and social norms (Nishimura et al., 2008). Similar as in others works which apply the HC/LC continuum, HC cultures are described as being stable through grounded relationships and a structured social hierarchy. HC societies are deeply rooted in tradition and thus unlikely to change quickly. LC cultures on the other hand are described as being more individualistic and hence less stable as a society, because they miss that strict social structure (Nishimura et al., 2008). Although in the study it is also referred to Lewis’ Eastern vs. Western (1999) communication styles and Hofstede’s (1991) individualism vs. collectivism dimensions, the HC/LC framework by Hall’s (1976) is most central to the work and the discussion of the three countries of interests.

Findings show that the Finnish culture can be identified to have long lasting features that are decisive for HC cultures, while having a strong tendency though, towards becoming an LC culture. While being highly committed towards society, for instance, Finish people lack the grounded relationships that are characteristic for HC cultures. These findings are particularly interesting because the Finish culture is studied for the first time with regard to the HC/LC theory. Japan on the other hand is confirmed being HC by all means: an indirect communication style where only a few words are needed is determined. People relying on the context surrounding a communicative activity are reported to be peculiar in Japanese communication culture. Lastly the Indians are found to be mostly HC in their communication style. Respect for the elderly, hence for tradition and the deeply rooted hierarchical norms is identified to be the most prevalent feature in Indian communication. However their preference for direct dialogic conversation structure accounts for a tendency to move more towards a LC culture to some extent (Nishimura et al., 2008). Generally it can be said, that these findings confirm once again that the HC/LC dimensions constitute a valid measure for intercultural communication research.

Another case study that has been conducted by Wang (2008), examines daily communication between American and Chinese people. The importance of acknowledging the
right context of a communication situation, in order to prevent misunderstandings is also highlighted here. The case study hence serves as an examination of the two dimensions of high and low context within three selected cases, analyzing participant’s communication patterns and trying to give general advice for more effective cross cultural communication. The analysis of the three communication situations is hereby grounded in Hall’s (1976) work.

The distinct characteristics identified by Hall to describe a culture to be high or low are first outlined in order to apply these features to the cultures that are central to the analysis, namely America and China. Just like in previous works it is outlined that HC communication is indirect and more grounded in the relationship of two communication parties, thus highly depends on their shared knowledge. LC communication in contrast is characterized to be more direct and based on actual emotions (Wang, 2008). Further the characteristics that are provided by the HC/LC framework are described as fitting into three main categories which resemble the distinctiveness of expressing meaning. It is differentiated between direct vs. indirect, linear vs. circular, and verbal vs. nonverbal (Wang, 2008). These categories are exemplified in the further analysis of three situation of daily communication between members of American and Chinese cultures.

The analysis shows that the dichotomy direct vs. indirect becomes particularly important in conflict issues. Through respecting hierarchical structures and social norms, members of HC cultures tend not to confront conflict situations with regard on the other communication party’s “face” and maintaining harmony and respect (Wang, 2008). The linear vs. circular category further becomes evident, as LC cultures are expressing their objective directly in the beginning of a conversation, while all information that follows is given rationally and in a logical order, linearly leading to this very objective. HC cultures on the other hand have no such linear structure in conversations and “jump” back and forth within the conversation. Here people are only regarding what information is given to the other conversation party and what extent of detail. Lastly the analysis confirms the different attitudes towards nonverbal communication. In HC cultures nonverbal cues are highly important as revealing a message’s actual meaning, while in LC societies the meaning that needs to be conveyed is put into words, hence accounting for little to no use of nonverbal activity (Wang, 2008). Overall the high and low context dimensions proposed by Hall (1976) are confirmed in this study, exemplifying the distinct features by outlining three essential dichotomies that account for difficulties when different cultures are communicating in actual communication situations. It is moreover stressed that the knowledge of such differences is essential in order to prevent collision in conversations. As such practical advice for
intercultural communication strategies are given, generally proving that the HC/LC measures are useful for cross-cultural communication theory.

The cited case studies, together with a plethora of other works using the HC/LC dimensions as analytical tools for cross cultural analyses (e.g. Granlund & Lukka, 1998, Korac-Kakabadse, et al., 2001) constitute sufficient evidence that the proposed model is valuable. As such the HC/LC continuum becomes vital, not only for intercultural communication research generally, but it has also been recognized as playing an important role when analyzing cross cultural business communication contexts for instance. Additionally a great number of scholars have used the HC/LC dimensions to connect them to other existing theories, either to extend or to help explain those theories in a different light. Examples include the framework’s application to uncertainty reduction theory (e.g., Gudykunst, 1983; Gudykunst & Nishida, 2001) as well as its role as cultural dimension in face negotiation theory regarding conflict style preferences (e.g., Chua & Gudyunst, 1987; Chroucher et al., 2012). The latter however will be discussed thoroughly in section 2.2.

2.1.4. HC/LC & uncertainty reduction

Among other things the HC/LC continuum has been applied to the uncertainty reduction theory to help explain encounters with strangers (Gudykunst, 1983; Gudykunst, 1985; Gudykunst & Nishida, 1984; Gudykunst & Nishisda, 2001). Initial interactions of strangers are marked trough uncertainty towards each other. Major concerns during initial encounters are the reduction of uncertainty as well as augmenting the predictability of involved communicators’ behavior (Berger & Calabrese, 1975). This behavior during first meetings of strangers within one culture is explained by the “initial interaction theory” (Berger & Calabrese, 1975). The theory moreover assumes that with a reduced uncertainty, a change in individual’s interpersonal communication leading to a growing attraction among the communicators can be established. As a result it is claimed that if uncertainty is not reduced in initial interactions, further communication among the strangers is unlikely to happen (Berger & Calabrese, 1975). However these behaviors have initially been explained only for individuals within the same cultural surrounding. By further connecting the initial interaction theory to the HC/LC framework, the explanation is extended by including contextual sensitivity regarding strangers from different cultural backgrounds (Gudykunst, 1983; Gudykunst, 1985; Gudykunst & Nishida, 1984). In fact several studies confirm that there are differences in behavior during initial interactions comparing strangers from same cultures with those from different cultures (Gudykunst, 1985).
One of these studies, an exploratory comparative study, examines initial interactions among strangers of HC and LC culture by specifically looking at two aspects of uncertainty reduction. Here the questions that are asked and the degree of certainty to predict behaviors according to background information are central to the analysis (Gudykunst, 1983). Data is gathered from international students at an American university classifying from high context to low context. Here it is referred to previous works where it is said that uncertainty can be reduced by gathering information about the other communication party. Several strategies are identified, interrogation and self-disclosure to name but a few. However the study of these strategies is not conducted sufficiently: while extensive research is done on the strategies in one and the same culture, research lacks the investigation of uncertainty reduction and the specific strategies across cultures. Additionally most such studies are situated in the USA, which make the findings rather biased. The author herewith justifies his own work as an attempt to close this gap in research. The extension into a broader cultural context, namely comparing different cultures is claimed to be necessary for the formulation of future theory and to test generalizations of existing theories (Gudykunst, 1983).

First a literature review presents the different approaches and findings of previous works on initial interactions. The original theory that is formulated for people from the same culture, suggests that people tend to ask a lot of questions to gain information, when the degree of uncertainty is high (Berger & Calabrese, 1975). Contrasting findings propose that it is not the amount, but the kind of communication, that determines uncertainty reduction approaches: individuals from HC cultures have been reported to merely seek background information about an individual (Nakame as cited in Gudykunst, 1983).

The conceptualization of cultures into HC and LC among others is one framework of cultural diversity that explains differences in communication patterns. Here the connection to the HC/LC scheme is made in order to use these cultural dimensions to compare the variations in initial interaction behavior among different cultures. Together with the differences found in literature the HC/LC scheme supports the assumption that a variation of handling the reduction of uncertainty in initial interactions can be expected across cultures (Gudykunst, 1983).

In fact the results report such differences. Specifically it is found that people from HC culture are more restrained than people from LC cultures when it comes to initial interaction behavior between strangers, confirming assumptions that members of HC cultures generally tend to avoid such interactions. The high caution in initial interactions by members of HC cultures moreover accounts for their few use of nonverbal communication in those situations,
while their opponents show a more frequent usage of nonverbal activity. Usually nonverbal communication is very important to HC cultures, which shows that they are rather uncomfortable communicating at all in initial interactions. People in LC communities further tends less to use interrogation for seeking background information, as their HC counterparts do. The latter group further tends more than LC people to classify strangers according to their background (Gudykunst, 1983). This goes in line with the initial HC/LC framework in which it is argued that member of HC cultures are more prone to such classification, putting greater attention on the distinction of in- and outsiders (Hall, 1976). Generally the results show that the assumption that individuals from different cultural context communicate differently can be confirmed and applied to the uncertainty reduction theory.

Another study by Gudykunst (1985) shows confirms the extension of uncertainty reduction theory to an intercultural context. The HC/LC framework is hereby applied as a measurement for cultural group comparison. Reference is made to previous works which apply uncertainty reduction theory to people from different cultures to identify differences in communication patterns. Specifically a model that connects ethnolinguistic theories with uncertainty reduction is proposed here (Gudykunst, 1985). The model is tested by studying intercultural relationships between American and international students. Overall results show that the initial model constitutes a good fit for predicting initial interactions based on interpersonal interactions. However it is found that the model may not equally apply to variations in international intergroup encounters, where communicators make assumptions about behavior based on others social or cultural group status (Gudykunst, 1985).

A more recent study (Gudykunst & Nishida, 2001) that connects the HC/LC dimensions and uncertainty reduction theory examines how anxiety and uncertainty affects the perception of communication effectiveness by referring to the anxiety/uncertainty management (AUM) theory. Hereby two kinds of relationships (close friends and strangers) as well as two different cultures differing in context (USA as a LC culture and Japan as a HC culture) are investigated. As formerly argued, communicating effectively is deriving from one’s capability to manage anxiety and uncertainty, which is explained by the AUM theory. Specifically one of the major suggestions of the theory is that the manner how one is managing anxiety/uncertainty has a concrete influence on his/her communication effectiveness regarding both interpersonal and intergroup interactions. As such effective communication is expected when uncertainties are managed well and predictions about future behaviors and attitudes of others are accurate (Gudykunst & Nishida, 2001). Generally results confirm the expectations, by showing that uncertainty and anxiety have a moderate correlation
within different cultures and relationships. Additionally it is reported that perceived communication effectiveness is negatively predictable by anxiety and positively by the certainty about future behavior. It becomes evident that both, anxiety and uncertainty management, as suggested, are key to the perceived communication effectiveness. Hence generalizability of the AUM theory can be established on an intercultural and inter-relational level by making use of HC/LC dimensions to measure differences in culture.

All these case studies show that the HC/LC has been validated in a broad variety of contexts and has moreover been confirmed to be valuable across methods. Although most authors mainly base their research on Hall’s initial framework, the work of authors who have tested, and also confirmed the HC/LC dimensions result equally important. So is the work by Kim, Pan, and Park (1998) which constitutes one of the most recent tests of HC/LC categorization of cultures and is therefore often referred to.

2.2 Facework

The conceptual framework of facework or face-negotiation theory provides an explanation for behaviors during interpersonal conflict among cultures (Ting-Toomey, 1988). The literature has substantially been extended by testing and elaborating on the initial theory (e.g., Oetzel & Ting-Toomey, 2003; Oetzel et al., 2001; Oetzel, Ting-Toomey, Yokochi, Masumoto, & Takai, 2000; Ting-Toomey et al., 1991; Ting-Toomey, 1994; Ting-Toomey, 2007; Trubisky et al., 1991). In the present paper, however, it is referred to an updated version of the face-negotiation theory (Ting-Toomey & Kurogi, 1998).

Facework/face-negotiation refers to behaviors that an individual undertakes when feelings of embarrassment, shame or pride are experienced, for example during conflict situations. Precisely the theory refers to activities or strategies to negotiate one’s face, which is defined as “the claimed sense of favorable social self-worth that a person wants others to have of her or him” (Ting-Toomey & Kurogi, 1998, p. 187). Face moreover is described as being vulnerable because it can be threatened (face-thread), but also enhanced in unpredictable social circumstances (Ting-Toomey & Kurogi, 1998). Generally facework implies identity issues that concern personal or other’s identity and relations in all stages of a conflict process. Hereby three face concerns are addressed: self face, which entails a concern about one’s own self worth/image, other face, a concern for someone else’s image, and lastly mutual face which includes concerns for both, one’s self image and another person’s self-worth (Ting-Toomey & Kurogi, 1998). As such facework activities are used in order to handle those concerns: key issues are hereby saving, restoring or losing face. With a face loss
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about to happen, people are expected to undertake actions in order to maintain or save one’s face, while if face has been actually lost, the restoration of one’s face is needed (Ting-Toomey & Kurogi, 1998). The definition of face is extended in the context of conflict management styles as functioning as “explanatory mechanism” that describes differing styles according to cultural background (Oetzel & Ting-Toomey, 2003). Facework consists of communicative activities that can be verbal as well as non-verbal. These behaviors usually aim to perform and maintain one’s own face, while attacking or respecting the other party’s face. Face and facework are overall related to feelings and emotional expressions such as honor, respect, credibility, trust, loyalty, reliability, network (family & friends) and social status, as well as relational embeddedness with others (Ting-Toomey & Kurogi, 1998). Thirteen different facework behaviors are identified which are further reduced to three main categories: dominating, avoiding and integrating facework (Oetzel et al., 2000).

Furthermore the general assumptions that the face-negotiation suggests are: a) Members of all cultures equally try to maintain/negotiate face in all situations of communications; b) Situations of insecurity (conflict or embarrassment) let the concept of face result particularly problematic, when the self-proclaimed identity is questioned; c) Cultural variables (HC/LC; individualism-collectivism, power distance) are influencing an individual’s choice of face concerns, precisely the choice of face maintenance of self-face vs. other-face; d) Face concerns, the choice of face maintenance strategies are influencing conflict and facework strategies in group or interpersonal communication situations (Ting-Toomey & Kurogi, 1998). Following these assumptions, the face negotiation theory is mostly applied for the study of intercultural conflict. In fact the face negotiation theory serves as an indicator of cultural variation specifically for the examination of different conflict management styles and the role of various cultural variables.

2.2.1 Cultural dimensions and facework

It is one of the key concerns in literature of face negotiation, how facework behavior differs across cultures: several cultural dimensions have been reported to influence an individual’s behavior during conflict situations or other face related activities. While different cultural values influence the perception of personal as well as social self (self-worth vs. others) it can be specified that face is influencing conflict behavior according to such cultural differences (Ting-Toomey & Kurogi, 1998). In situations of conflict all parties are concerned with protecting personal interests and the achievement of one’s objectives, and on the other hand, either attack or respect the other party’s interest (Ting-Toomey & Kurogi, 1998).
However due to various cultural dimensions, such as individualism vs. collectivism, HC/LC, power distance, and individual level characteristics, a difference in facework can be observed across cultures.

2.2.2 Conflict style preferences

Cultural dimension are not only assumed to influence facework behavior in general, but is also explanatory for an individual’s preferences for the choice of face maintenance strategies. Face maintenance dimensions (face concerns) hereby are referred to either self-face, other-face or mutual face (Ting-Toomey et al., 1991). These dimensions in turn are equally influencing conflict style preferences. Several studies test this reciprocal relationship (e.g., Oetzel & Ting-Toomey, 2003; Ting-Toomey et al., 1991) and conflict style preferences specifically (e.g., Chua & Gudykunst, 1987; Ting-Toomey et al., 1991; Trubisky et al., 1991).

While conflict is identified to be “the perceived and/or actual incompatibility of needs, interests, and/or goals between two interdependent parties over tasks related and/or affective issues” (Ting-Toomey et al., 1991, p. 279), when referring to conflict styles, usually the style of handling a conflict is described. In most studies concerned with the relationship of cultural variables and conflict style preferences the five conflict styles of a)integrating, b)obliging, c)dominating d)avoiding e)compromising are referred to. This five-style model of describing difference in conflict styles has been provided by Rahim (1983), and is justified as providing a complete picture of intercultural conflict variation through its variety and richness (Ting-Toomey et al., 1991).

2.2.3 Individualism/collectivism & conflict style

One of the most important cultural dimensions that are relevant in explaining differing face negotiation across cultures, are the dimensions of individualism and collectivism (Trubisky et al., 1991). It is widely acknowledged that these dimensions are key variables for cultural diversity. Scholars within numerous disciplines agree that the dimensions help explain differing societal norms and relationships across cultures (Trubisky et al., 1991). In interpersonal and intercultural communication theory however the variables are reported to be particularly important for explaining differences in communication styles (Trubisky et al., 1991). Specifically the dimensions explain why the perception of self and face is differing from one culture to another. Moreover, as facework is considered to be identity-related communication behavior, the variables (individualism vs. collectivism) clarify the distinction
between “I” and “we” identities. The orientation towards either one of them explains cross cultural communication differences of everyday life (Ting-Toomey & Kurogi, 1998).

Generally it is to say that in individualistic cultures the “I” identity is more important than the “we” identity. Hereby the whole society has the tendency to put personal rights over those of a group as well as highlighting one’s self-esteem, rather than society’s self-esteem. In more collectivistic cultures on the other hand the group values are much more important: Collectivism refers to the general tendency to value the “we” identity more than the “I” identity. Specifically personal interests are less important than group interests and self concerns of others are highlighted more than one’s own self (Ting-Toomey, 1988; Triandis, Bontempo, & Villareal, 1988; Trubisky et al., 1991; Ting-Toomey & Kurogi, 1998). Such tendencies can be observed in daily situations with family, colleagues or society in general. Although every person and every culture within itself shows presence of both value tendencies, it is reported that some cultures are more individualistic or collectivistic respectively, than others. Precisely in cultures that have been characterized to be more individualistic, situation where self-esteem is expected to be enhanced occur more frequently. Similarly societies that are described as more collectivistic show more frequent occurrence of situations where social self esteem and “we” identity is expected (Ting-Toomey & Kurogi, 1998). Patterns of individualistic cultures are found predominantly in North and Western Europe as well as in the United States. Asia, the middle East, Southern Europe, Africa and South/Central America on the other hand are reported to show more tendencies of a collectivistic culture. Still, such general tendencies can differ within a single culture, according to personal and ethnic variety (Hofstede as cited in Ting-Toomey & Kurogi, 1998).

As such it has been found that individualistic cultures tend more towards using direct, verbal expression and explicit messages, follow a linear logic and are generally more autonomous from society (Hall, 1976, Ting-Toomey, 1985). Emotions and wishes are hereby expressed directly. Collectivistic cultures on the other hand are more prone to indirect, verbal expressions and rather implicit messages. Individuals in such cultures further are more group oriented and follow a more circular logic. The speech is hereby characterized through the transmission of actual meaning through nonverbal activities (Ting Toomey, 1988).

It becomes evident that the difference in communication that derives from these dimensions equally affects conflict styles (Trubisky et al., 1991, Triandis et al., 1988). Four propositions, among those formulated in the face negotiation theory (Ting-Toomey, 1988), address these cultural variables influencing conflict styles: The ninth propositions suggest that individualistic societies are more prone to a dominating/controlling conflict style than
individuals within a collectivistic society. Members of the latter on the other hand tend more towards obliging conflict style then people in individualistic cultures, as proposition ten implies. Further, while individualistic societies are more solution-oriented in conflict situations than collectivistic ones (proposition eleven), the latter group shows a greater tendency of avoiding conflict style (proposition twelve).

Research has widely confirmed these propositions, as individualistic societies generally show a preference for direct and solution-oriented communication during conflict more than collectivistic communities, who show more tendencies of avoiding conflict styles (Leung, 1988; Ting-Toomey, Trubisky, & Nishida, 1989). Considering the classification of countries in individualistic or collectivistic cultures, studies show consistency with previous literature, as Chinese people (collectivists) are more passive during conflict than people from the United States (individualists), who employ more direct strategies (Wolfson & Norden, 1984). These results overall validate the initial propositions that individualists are more prone towards direct styles as well as solution orientation, which also seems to be in line with the central values of autonomy, control and competitiveness that are predominant in individualistic societies. Collectivistic countries in contrast seem to prefer avoiding and obliging styles during conflict which consent with their values of conformity and pertaining harmony (Trubisky, et al., 1991).

2.2.4 HC/LC & conflict style

The characteristics of the HC/LC dimensions are extensively discussed in chapter 2.1.2 (Empirical test). However it is interesting to note that - with regard to the previous section that discussed individualism vs. collectivism - several similarities between individualistic cultures and LC cultures as well as collectivistic cultures and HC cultures become evident. So are individualistic cultures, such as LC cultures more direct in verbal expression than collectivistic and HC cultures for instance. Hence it can be confirmed that countries that are low in context mostly show tendencies towards individualistic values, while collectivistic values are present predominately in societies that are described as being HC (Trubisky, et al., 1991; Oetzel, et al., 2001).

Considering HC/LC for the study of conflict style preferences it is important to state that it is ascertained that conflict styles highly depend on cultural background (Croucher et al., 2012; Chua & Gudykunst, 1987; Ting-Toomey, 1985). This is formulated in the HC/LC measures that are applied to the face negotiation theory. Specifically it is reported that during
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Conflict people of HC cultures tend to use more implicit codes when communicating, while individuals in LC communities use more explicit codes (Ting-Toomey, 1985).

The theoretical propositions of the initial face negotiation theory suggest that during conflict, members of LC cultures are more prone to open and direct communication strategies while HC people rather tend to use indirect ones (Ting-Toomey, 1985). In the updated version however these propositions are extended, indicating that independent self construal is linked to LC communication and is mostly present in individualistic cultures, while interdependent self is just the opposite, namely it is linked to HC communication and usually present in collectivistic cultures (Ting-Toomey & Kurogi, 1998). These suggestion are sound as countries that have been found to be individualistic (America or Germany for instance), are equally categorized as LC cultures (Hall, 1976). For collectivistic countries such as Japan, China, Taiwan or Korea the contextual categorization as HC cultures equally applies.

Overall research confirms the initial propositions of the facework theory, reporting that people from LC cultures are more prone to use solution oriented conflict styles (direct strategies), and people form HC cultures tend to use more non-confrontation conflict styles (indirect communication strategies) (Chua & Gudykunst, 1987). Moreover it has been found that HC people favor avoiding or obliging conflict management styles more than people from LC cultures (Chua & Gudykunst, 1987; Croucher et al., 2012). Still there are some inconsistent results which indicate on one hand that LC nations prefer compromising and solution oriented conflict styles more than HC cultures (Chua & Gudykunst, 1987) while on the other hand the opposite has been reported: HC cultures prefer compromising and solution oriented styles more than LC people (Croucher et al., 2012). Although the latter statement shows inconsistency with previous findings, it is supported through evidence that LC people prefer the dominating conflict style more than their counterparts.

2.2.5 Power distance & conflict style

Power distance is defined as “the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally” (Hofestede, 1991, p. 28). Hence in cultures reported to have small-power distance, the members are not or to a very little extent accepting the inequality of power distribution, while in large-power distance cultures people overall accept such inequality. Members of the former group rather opt for equal rights and power distribution, as well as decreasing the importance of social status. Members of large-power distance communities on the other hand opt for the opposite – unequal power distribution and a strictly hierarchical social structure.
Regarding previously outlined dimensions of cultural variety, it is to note that power distance and individualism/collectivism is often interwoven within particular cultures. Collectivistic cultures are hereby reported to be rather large-power distance societies, while small-power distance communities show more individualistic tendencies (Oetzel et al., 2001). China and Japan for instance are identified as collectivistic and large-power distance cultures while the USA and Germany are classified as more individualistic and small-power distance cultures (Hofestede, 1991). It becomes evident that power distance as another important cultural variable, is important to regard when it comes to the influence of cultural dimension on facework. Although the dimensions of individualism/collectivism and power distance are highly interrelated, it is of equal importance to look at power distance individually to examine facework and conflict management strategies preferred among the distinctive cultures (Merkin, 2006).

In large-power distance societies a strong preference of maintaining conformity and harmony while communicating is found. Here a more obedient and cooperative communication style can be observed, while in small-power distance cultures no such obedience is present. The latter group further is not concerned whether a face threatening situation evolves or not, they just feel the need to express their ideas directly to establish clarity. This is different in large power distance cultures, where its members tend to use indirect messages with hidden codes (in nonverbal cues), because face threats are more of a concern in such cultures (Merkin, 2006). These preferences for communication style found in large power distance cultures and small power distance cultures show similar tendencies as collectivists and individualistic societies respectively. Logically preferences for conflict management styles equally show such similarities: it is found that small power distance communities prefer direct conflict management styles, while their large power distance counterparts rather tend towards indirectly expressing a problem, in order not to cause embarrassment. Large power distance societies moreover are observed to use more avoiding conflict styles than small power distance cultures (Merkin, 2006, Oetzel et al., 2001).

2.2.6 Individual-level variables & facework

While cultural variables are reported to play an important role in predicting the choice of specific facework behaviors, there are other factors that may influence individuals within one particular culture. These factors are positioned on the individual-level and entail for example individual’s perception of themselves and their position in society. Hence the preference for one or the other facework strategy is said to be determined by a combination of
cultural variables, as discussed previously and individual-level variables. Moreover it is to say that the individual-level factors are mediating the relationship between facework and cultural dimensions (Oetzel et al., 2001).

Self-construal for instance is one of the key factors to influence members of different cultures on an individual-level. Self-construal has been described as the image someone has of him/herself, consisting of an independent self and an interdependent self. The independent self hereby entails the perception of oneself as being an autonomous and independent being, with individual emotions, senses and reasoning. Interdependent self-construal on the other hand implies the significance of relational connections and embeddedness (Markus & Kitayama, 1991 as cited in Oetzel et al., 2001). Generally it is reported that people with high independent self-construal are more concerned with achieving their individual goals while being in charge of their external circumstances. With regard to face concerns they show a greater tendency of self-face orientation than other-face orientation. People with a higher interdependent self-construal on the other hand show more tendencies of valuing other and mutual face in conversations, specifically in problematic ones. This is mostly due their opting to maintain harmony and avoid face loss, or embarrassment in public (Oetzel et al., 2001).

When considering conflict style preferences, it is reported that avoidance, compromise and compliance share positive relationships with interdependent self-construal, while domination is positively related to independent self-construal. Integration has been found to be associated with both, while to a higher extent with interdependent self-construal (Oetzel, 1998).

2.2.7 Application of facework

As the previous outline shows it has widely been acknowledged that facework serves as an indicator of cultural variety regarding conflict behavior. As such the framework is often applied to research in conflict management as well as business- and/or diplomatic negotiations. The theory is also proven to be useful to help explain interpersonal relationship building and communicative situations such as in initial interactions (Ting-Toomey & Kurogi, 1998).

2.2.8 Empirical test

Researchers have tested the face negotiation theory extensively, while one of the most recent tests of the face negotiation theory is a study by Oetzel and Ting-Toomey (2003) where face concerns in intercultural conflict are tested empirically. Conflict behavior as well as conflict management are often subject to cross cultural examinations of facework. Conflict
management hereby is considered to be a general tendency towards specific repetitive behavior of handling a conflict. However it is claimed that research has failed to test the theory’s main assumptions empirically so far: it is assumed that the concept of face and facework serve for explaining differences in conflict observed among groups or individuals with different cultural backgrounds (Oetzel & Ting-Toomey, 2003). Although acknowledging this main argument as the theory’s strength, the study offers such empirical test to significantly contribute to intercultural communication literature. Precisely the work is conducted to investigate whether face can serve to explain cultural variability in conflict behavior as it is generally assumed in the initial theory. For this purpose data is collected in four different countries: Germany, United States, China and Japan (Oetzel & Ting-Toomey, 2003).

The argumentation is hereby based on the most recent update of the face negotiation theory by Ting-Toomey and Kurogi (1998), which proposes the four assumptions outlined earlier in this chapter as well as 32 propositions. The assumptions together with the propositions constitute the body of the theory. Proposition 1-20 entail the comparison of conflict according to cultural dimensions (e.g. individualism vs. collectivism), while proposition 21-32 entail the comparison of conflict according to the relation between personal level variables (such as self- construal) and conflict management styles. These propositions however, unlike the major assumption, have been tested and confirmed sufficiently (Oetzel & Ting-Toomey, 2003).

Further a relevant review of literature offers clarification of the different conflict styles, cultural dimensions and individual level variables respectively. Generally conflict styles are defined as an individual’s tendency towards a specific communication behavior during conflict. Hereby the preferences depend on personality traits such as one’s personal background, and the current state or situation someone is in. The main conflict styles, that are mostly referred to are based on a two dimension model where concerns for one self as well as concerns for others are entailed. This model contains the five conflict styles that have been mentioned earlier: integrating, compromising, dominating, obliging and avoiding (cfr. Rahim, 1983 as cited in Oetzel & Ting-Toomey, 2003). However in the updated questionnaire the reduced version of conflict styles is applied which includes only avoiding, dominating and integrating conflict style. The questionnaire further includes items about independent and interdependent self to examine self-construal as well as items about self face vs. other face for the investigation of face concerns. Findings confirm that in fact the cultural dimensions of individualism/collectivism influenced conflict styles directly and indirectly. Further individual
level analysis revealed that independent self-construal and self-face as well interdependent self-construal and other face share positive relationships. Moreover regarding conflict style preferences results show that self-face and dominating conflict styles share a positive relationship as well as other-face and avoiding and integrating conflict styles. Generally the results confirm the assumed relationships between cultural variables, individual level variables, face and conflict styles, proposed in the initial theory. Further the relationship between the 32 propositions can be explained. Overall the findings indicate that the face negotiation theory with its assumptions and propositions is successfully validated empirically. Consistency in findings and the updated items of the instrument consequently result of high value for the present research project, as providing an appropriate measurement scale for the operationalization of facework.

2.2.9 Case studies

Besides testing the theory for its initial assumptions, like the previously cited work illustrates, several case studies have been conducted that apply facework in a variety of different contexts. Some of these are studies that connect facework to other theories in the field of conflict and communication, namely politeness theory (Arundale, 2006), apology (Sun Park & Guan, 2006), strategic embarrassment and face threatening (Chan & Haugh, 2011) as well as cultural long term orientation (Merkin, 2004). Other works just build on the initial theory to conduct cross cultural comparative studies (e.g. Oetzel et al., 2001). However there are also case studies that look into the use of facework strategies within particular relationships, for instance between best friends and relative strangers (e.g. Oetzel et al., 2000) as well as conflict style management within organizational environments (Oetzel et al., 2003).

As facework theory is mostly situated in intercultural conflict research, it comes to no surprise that in one of those case studies the framework of facework (Ting-Toomey, 1988) and politeness theory (Brown & Lewinson, 1987) are combined in order to examine and compare apology behavior among Chinese and American research subjects (Sun Park & Guan, 2006). Cultural variables, such as individualism versus collectivism are hereby included in the analysis in order to see the cultural effects on the intention of apology. Specifically the work studies the relationship between face concerns and apology intention with regard on cultural dimensions. Hereby it is looked into the relation between the one who is offending another person and the one who is offended – the victim. Specifically in-group vs. out-group relationships are analyzed. These relationships are altered in order to see how members from different societies react in presented situations, regarding the intention to
apologize and people’s concern of self and other face (Sun Park & Guan, 2006). For this purpose different situations are presented to the research participants. Findings report that the kinds of relationships that have initially been hypothesized don’t result statistically significant, however some two-way interaction effects that haven’t been predicted previously are observed. Generally however it is to say that situational characteristics are important in predicting apology intention. Specifically Chinese subjects are found to be more troubled than American respondents when threatening someone else’s positive face concerns, while the American participants felt worse when attacking others negative face concerns (Sun Park & Guan, 2006). Basically these results imply that Chinese individuals are more concerned about maintaining positive face, while American subjects are more concerned with negative face, hence show consistency with Ting-Toomey’s (1988) initial theory.

Another interesting case study that confirms Ting-Toomey (1988) propositions of facework presents an examination and comparison of the propositions in conflict situations between best friends and strangers (Oetzel et al., 2000). Here it is aimed to generate a typology for facework behavior in conflict regarding the indicated relationships. Cross cultural comparison is employed studying Japanese and American participants. Hereby participants are first asked questions about their face negotiation during conflict with strangers as well as during conflict with best friends. The answers provide thirteen categories of face negotiation during conflict including aggression, avoiding, compromising, giving in, involving someone else and defending self, among others (Oetzel et al., 2000). These categories however are comprised into three overall themes: dominating, integrating and avoiding. In a next step participants from both cultures are asked about their perception of effectiveness of these categories. Overall results confirm that the typology created, including the thirteen categories and the overarching three topics, results appropriate, hence proving validity of the typology itself and the face negotiation theory in a broader sense (Oetzel et al., 2000).

The cited works are only two of numerous other examples where face negotiation theory has been applied and successfully confirmed. Validity of the theory hence has been proven in a variety of contexts, generating an appropriate framework for interpersonal and intercultural conflict research. The variety of methods that have been used, ranging from survey instruments, over experiments and exploratory literature reviews further validates the theory across methods.
2.3 Current application of the theory

More recent studies situated in both, cultural communication research building on the HC/LC framework and intercultural and interpersonal conflict research building on face negotiation theory have a more timely approach. These studies connect HC/LC dimensions as well as the facework framework to new communication media, such as the internet, social networking sites or computer mediated communication generally (Würtz, 2005; Xie, et al., 2009; Usunier & Roulin, 2010; Lim, Vadrevu, Chan, & Basnyat, 2012).

2.3.1 Current application of HC/LC

Several case studies engage with the application of the HC/LC framework on websites and user interfaces (Xie et al., 2009; Würtz, 2005; Usunier & Roulin, 2012). Hereby it is examined whether the HC/LC dimensions affect the design and understanding of such sites and if cultural diversity can be revealed. One of those studies specifically studies communication effectiveness on user interfaces according to the HC/LC dimensions (Xie et al., 2009). Different communication styles within computer-based communication systems are analyzed. The study has a clear focus to analyze the relationship between HC/LC and the use of verbal or nonverbal communication respectively and how this relationship affects the communication effectiveness. Results show that in fact cultural differences can be detected and are even more prominent in digital communication (Xie et al., 2009). An experiment is administered where communication effectiveness of verbal and nonverbal communication is tested. The findings report that HC people are more effective in their communication when using and understanding nonverbal cues than LC cultures are. In contrast the latter group shows higher communication effectiveness with the use and understanding of verbal messages, than their HC counterparts (Xie et al., 2009). These findings are in line with the initial theory which indicates that HC cultures generally emphasize the importance of nonverbal communication more than LC communities (Hall, 1976).

These results however appear even more valuable when looking at an earlier comparative case study that applied the HC/LC dimensions to user interface design (Würtz, 2005). Here the purpose has been on the identification of communication strategies among websites in HC cultures. The specific focus is put on the examination of visual language, expecting that visual language is used more frequently by HC cultures than LC communities which lead to a more effective communication within the first group. These expectations derive from the general assumption that HC cultures tend to value nonverbal communication, hence the visual - among others - more than LC communities do. Hereto it is analyzed how
communication strategies influence the design of websites, comparing websites of the same franchised fast food restaurant in HC cultures with those in LC cultures. It is further aimed to identify which of the strategies that are used are most efficient for communicating brand messages and marketing purposes in general (Würtz, 2005).

Results appear consistent with the previously cited work, as generally it is found that HC communities make use of visual language more frequently than LC cultures. The findings suggest that this observation is due to HC people’s preference to use visual language in order to convey nonverbal cues, such as body language for instance. Hereto it is observed that on HC websites the use of animations plays a major role. Moving images of people, such as one of a break-dancer for instance are depicted. The use of animated effects specifically for the depiction of people, as one of the communication strategies revealed on the websites, is more prominent in HC cultures. LC websites make use of animation only very preliminarily to point towards links or logos (Würtz, 2005).

Another strategy found on the websites is the promotion of individualistic and collectivistic ideals respectively. These values, as previously determined, are strongly connected to the HC/LC dimensions. The analysis of the websites reveals that websites in HC cultures tend more to display collectivistic values, while LC cultures show more individualistic ones on their sites. These findings are equally consistent with previous research. The observation of individualistic vs. collectivistic values reveals an interesting trend that is supported by the next strategy that is disclosed: presenting images of people with or without the advertised product. While on websites designed for HC communities the product is shown together with people, on LC websites the product and the people used in images are presented separately. On first sight that might seem contradictory, but in fact values of collectivistic cultures are herewith represented to emphasize relationships and the sense for community. Showing the people together with the product hereby takes the focus from the product’s qualities, towards what people get when they enjoy the product: the feeling to be part of a greater community (Würtz, 2005).

When it comes to transparency which is here referred to as the ease of navigation through a site, LC websites show more efficient usability than HC websites, which can be explained by LC cultures’ preference for direct communication. The same is observed while comparing linearity of the websites: LC cultures have a more linear design and structure than HC websites, which is grounded in their communication style: HC cultures prefer a more circular style, which sometimes results confusing for others, while LC communities have clear direct style of conversing (Würtz, 2005).
Overall the results not only show consistency with the initial theory (Hall, 1976) but they are also confirmed in a next case study which also explores communication effectiveness on websites while focusing on business sites (Usunier & Roulin, 2012). The purpose here is to give suggestions for better business communication across cultures, when it comes to interface design and website content, specifically on international websites. As it has been disclosed previously, HC cultures tend towards a circular navigation and articulation on their websites, while LC cultures have more clear and direct style (Würtz, 2005). Here findings show consistency as the same applies for the examination of business websites (Usunier & Roulin, 2012). Moreover it is highlighted that difficulties may easily result when HC cultures’ websites must be understood by LC people. Precisely the communication style used by HC culture on websites is less readable for international users for whom HC websites might appear confusing and difficult to navigate (Usunier & Roulin, 2012). Generally it is concluded that LC messages in CMC and websites specifically, are easier to understand and more transparent, because they are explicitly articulated. HC messages on the other hand are rather circular and don’t follow a clear structure, resulting in confusion. LC communication hence constitutes a better basis for developing mutual understanding between communication parties on the web, specifically among an international audience (Usunier & Roulin, 2012). Although research is lacking the implication of HC/LC framework on Instant Messaging, the latter conclusion can be applied on IM as another form of CMC. Hence, the present paper’s argument that the lack of nonverbal cues in IM is increasing the risk of misunderstandings.

Research on student’s media choice for the communication with their professors further shows that HC cultures prefer face to face (ftf) communication rather than computer based communication (CMC) (Richardson & Smith, 2007). This is mostly because of the possibility to use nonverbal cues, which is reported to be more important for HC cultures. This in turn can be explained through the use of more implicit codes and less contextual information in HC communication. Generally HC emphasizes the significance of nonverbal cues more than LC does. Here, body language, tone of voice and other cues are entailing the most important part of a message. HC student’s preference for ftf communication thus indicates that CMC is avoided because the possibility for transmitting nonverbal cues is missing. As argued previously missing nonverbal cues in CMC increase the potential for misunderstandings and conflict. Here, the paper’s main argument is supported as the risk for misunderstandings through CMC accounts for the avoidance of CMC in HC cultures.

The most recent empirical test of the HC/LC dimensions is the cross-cultural, comparative study that tests the categorization for its usefulness (Kim et al., 1998). The study
has been cited in detail in a previous section of this chapter. Still it is important to highlight once again, that this study results particularly valuable for the present research project. A survey instrument has been developed that compares cultures according to the major dimensions of social orientation, commitment, responsibility, confrontation, communication and dealing with new situations. Results show consistency with previous research on HC/LC theory which accounts for the empirical study’s high value for the present research project. By providing a survey instrument that can be used for the operationalization of the HC/LC concept, similarly a means for testing issues of validity is established.

2.3.2 Current application of facework

Research on conflict management involving face negotiation has equally been applied to new communication media. A case study has been conducted that investigates youth’s facework behavior on social media networking sites (Lim et al., 2012). The concepts of face and facework are examined within the youth’s social media usage. To be precise the study investigates the young peoples’ communication on Facebook. Research participants are recruited in Singapore, while the research concentrates on juvenile delinquents or youth at risk, because it has been recognized that facework is specifically relevant for this target group (Hwang, Francesco, & Kessler, as cited in Lim et al., 2012). Hereby their tendencies of gaining face, avoidance of losing face and giving face are examined in an online realm. Online facework has been examined because it reported to demonstrate the dynamics of power that are persistent in juvenile criminal gangs. The online environment offers the possibilities of posting, tagging, commenting, sharing status updates and the access to friendship networks, which is considered to offer opportunities for gaining, maintaining and avoiding to lose face. Results indicate that self-face, other face and or mutual face is experienced while using facework to interact and converse. Overall face is reported to be the objective, rather than the means for social interaction (Lim et al., 2012).

Specifically the findings suggest that for gaining face the juvenile delinquents mostly make use of the publishing tools, such as posting photos and sharing status updates. Here the gaining of face can be explained by the affirming comments or ‘likes’ one gets for photos or updates. Another strategy for gaining face is reported to be the mediation of disputes, where the mediator gains face after successfully eased a conflict. Giving face on the other side is observed for example in accepting friend request. Although sometimes the adolescents are not likely to accept a friend request, they feel obliged to show respect or give face, hence accept eventually (Lim et al., 2012). For the avoidance of losing face it is found that generally the
The absence of nonverbal cues in instant messaging online environment of Facebook creates more difficulties for efforts of face loss avoidance. The overlapping of public vs. private seems to results particularly problematic when it comes to accomplishing facework efforts (Lim et al., 2012). For the research subjects however the avoiding of losing face is the most important task, as they are highly concerned with maintaining a positive image, especially with respect to key observants, like authorities or rival gang members. One prominent strategy for the avoidance of loosing face is recognized to be the usage of two individual Facebook accounts one each for the communication and representation to another audience. On these accounts users behave and represent themselves as the respective audience would expect, hence satisfying an anticipated self image which ensures to maintain and definitely not to lose face (Lim et al., 2012). Another technique that is observed among imprisoned juveniles, is the delegation of others (friends or family) to maintain their Facebook account with frequent updates, due to limited time they have access to the internet (Lim et al., 2012). Overall the results indicate that transporting facework to the online realm, precisely Facebook, entails even more complex dimensions because it requires particular negotiation by the users. Moreover it is to say that the face negotiation that occurs online is highly dependent on an individual’s personal circumstances which can change rapidly (Lim et al., 2012). The case study shows that the face negotiation theory can be applied to new communication technologies, such as the internet. Specifically the framework has been validated in the context of social networking sites. As such facework is expected to be identified in a similar manner in computer mediated communication, precisely instant messaging, subject to the present research project.

In the context of the present study however the most recent empirical test of the face-negotiation theory (Oetzel & Ting-Toomey, 2003), which is also cited sufficiently in a previous section, is of particular interest as it is used for the operationalization of facework. In a cross-cultural, empirical study initial assumptions of the face negotiation theory are tested and an updated measurement scale has been developed (Oetzel & Ting-Toomey, 2003). Consistency in findings and the updated items of the instrument consequently result of high value for the present research project, providing an appropriate measurement scale.

2.4 Hypotheses

Based on the previous review of literature it is expected that the lack of nonverbal cues in IM is increasing the risk of misunderstandings among international students. Nonverbal cues become increasingly more important in HC cultures, because they help to convey a message that usually is expressed in implicit codes. Due to a lack of nonverbal cues in IM, the
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implicit messages used in HC communication might not be as clear and result in misunderstandings. LC communication on the other hand appears less dependent upon nonverbal cues, because the message is formulated explicitly. LC communication thus appears less likely to result in conflict when communicating via IM. Hereto the following hypotheses are phrased:

H1: HC communication (Implicit Codes) in instant messaging among international students is more predictive of conflict than LC

H2: Facework shares a high positive statistically significant correlation with conflict scores

H3: HC shares a higher positive statistically significant correlation with conflict scores than LC
3. Method

3.1 Research Design

The present study aims to answer the proposed research question: *How do high/low context communication and facework theory help to explain perceptions of conflict in the absence of nonverbal cues?* To answer the question and to test the previously outlined hypotheses, a quasi-experimental design is administered. Being of quantitative nature the study aims to estimate the statistical relationship between HC/LC communication and the perceived degree of conflict via IM. The quasi-experimental design further allows for the direct manipulation of variables. Hereby the sensitivity towards contextual information is manipulated in three ways, namely high sensitivity, low sensitivity and no sensitivity. As such the quasi-experiment is designed as an online survey/treatment with three groups: one control group and two treatment groups. Each of the groups has been assigned to one of the following conditions: high context, low context, and neutral (control), accounting for a repeated measurement design. Respondents have randomly been assigned to one of the three experimental conditions. The low context condition hereby corresponds with treatment 1, the high context condition with treatment 2, and the no context condition with the control group. These conditions constitute a total of three independent variables. The dependent variable is the perceived degree of conflict, which is measured by a 28-item, Likert type-scale for the concept of facework and a 12-item, Likert type-scale for the concept of conflict. A test for concurrent validity is established by simultaneously implementing the measurement procedures.

The quantitative methodology is chosen, because experiments provide an appropriate means of observation “to test descriptive causal hypotheses about manipulable cases” (Campbell, Cook & Shadish, 2002, p. 14). Quasi-experimental design hereby results as more appropriate because it fits the objective of the research question. In addition, quasi experimental design not only complies with the time constraints of the thesis, but also has the advantage to eliminate ethical concerns (Campbell et al., 2002).

3.2 Sample

A total of 170 international students have voluntarily participated in the online experiment. Hereof 60 people are in with HC condition (\(N_{\text{high context}} = 60\)), 49 in the LC condition (\(N_{\text{low context}} = 49\)), and 61 in the no context (control) condition (\(N_{\text{control}} = 61\)). Further 30 % of the respondents are men, while 70 % are women. Of all respondents 81.2 % are in the age group 21-25, 16.5 % in the age group 26-30 and only 2.4 % in the age group 15-20.
Hence most of the respondents are actually represented by the age group 21-25 ($Mo = 2$). The middle value for the score of age group is 2 ($Mdn = 2$), while the average value is 2.14 ($M = 2.14; SD = .41$). Since international students constitute the relevant target population for the present study the relatively young age of participants seems to fit the research appropriately. Further a total of 28 different nationalities are represented by participants. While a great cultural variability is recorded, the majority of participants are Dutch ($N_{Dutch} = 66$) and German ($N_{German} = 40$).

International students are sampled, because they fit the population criterion that this project aims to study. International students have appropriate experience with an intercultural, academic environment. Due to differing values through differing cultural backgrounds, they are moreover liable to multiple interpretations of messages. Fitting the frame of this research, international students hence resemble an appropriate sample. The desired sample size has been determined by taking into consideration the three experimental groups. For each group an approximate number of 30-50 subjects are required, resulting in a desired sample size of around 150 respondents. With a total of 170 research participants the desired sample size is reached. In addition a power analysis has been conducted, in order to estimate whether the sample size satisfies the statistical assumptions, to draw truthful conclusions to a larger population. The power analysis similarly reveals that the number of participants constitutes a sufficiently large sample in order to draw accurate conclusions from the results. With a value of 1.0 for the observed power, sufficient statistical power is determined and consequently the statistical assumptions are satisfied. Data are collected anonymously and treated confidentially. No reward is offered to subjects in return for participation. The subjects of research have randomly been assigned to one of the three experimental conditions.

3.3 Operationalization

For the operationalization of the variables of interest, it is necessary to define the concepts used in the hypotheses into measurable variables. The hypotheses generate three conceptual variables: high context/low context, facework and conflict. For each of the three concepts a different measure is needed resulting in three distinct instruments for the operationalization of the variables in the current research project. The independent variables hereby are high context, low context and facework. Hereby it is to note, that high and low context are operationalized by the same instrument, and therefore count as only one conceptual variable, while in fact comprising two variables in the end. On the other hand
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Conflict is employed as the dependent variable. All variables are measured on a scale level of measurement.

The independent variables high context and low context are based on the theoretical dimensions introduced by Hall (1976) which categorize cultures according to their sensitivity towards contextual information. Functioning as cultural dimensions, high context vs. low context are expected to have an effect on the perceived degree of conflict in instant messaging. Conflict is hence operationalized into the outcome variable. Hereby it is expected that high context has a stronger effect on conflict than low context. For this effect to be assumed a correlation between high/low context and conflict is equally expected. Precisely is expected that high and low context each share a statistical relationship with conflict. The independent variable facework further is based on the conceptual framework of face-negotiation theory, originated by Ting-Toomey (1988). Facework is a concept that is related to intercultural conflict research. Hence the variables facework and conflict are expected to share a statistical relationship. The dependent variable conflict is related to intercultural conflict theory and based on the generally accepted definition that describes conflict, as proposed by Ting-Toomey (1991). Specifically a new instrument for measuring conflict is developed. The specific measurements for each of the variables are presented in the following.

3.3.1 High/Low context

For the measurement of High/Low context a 16-item, Likert type-scale, ranging from 1 (strongly disagree) to 5 (strongly agree) developed by Kim, Pan, and Park (1998) is administered. The survey instrument has been developed to test the validation of cultures as having relatively high or low sensitivity to contextual information during communication activities. The 16 scale items “cover the following six possible aspects of the high/low context theory: social orientation, responsibility, confrontation, communication/commitment and dealing with new situations” (Kim et al., 1998, p. 515). Here the instrument is employed to measure the effect of the three different conditions on HC and LC.

However, in the context of the present study the overall HC/LC scale by Kim, Pan, & Park (1998) is reported to be unreliable. An unstable construct is identified with Chronbach’s alpha coefficient of .57 ($M = 3.14$; $SD = .37$) for treatment 1, .50 ($M = 3.12$; $SD = .35$) for treatment 2, and .45 ($M = 3.12$; $SD = .32$) for the control group.
3.3.2 Facework

The perception of facework in conflict situations is measured through an existing 28-items scale that has been developed by Oetzel and Ting-Toomey (2003) to test assumptions of face-negotiation theory. The instrument measures facework by covering the following seven dimensions: independent (three items), interdependent (five items), other-face (six items), self-face (four items), avoiding (three items), dominating (three items), and integrating (four items). The items are equally measured on a five-point Lickert-type scale, ranging from 1 = strongly disagree, to 5 = strongly agree. The instrument is applied in this research in order to measure the effects of the three conditions on facework.

The reliability analysis generally reveals a stable construct with Chronbach’s alpha coefficients > .60, hence indicating a moderately sufficient reliability estimate of the scale for the present study. Specifically the overall value for alpha is reported to be .66 (M = 3.55; SD = 2.6) for treatment 1, .61 (M = 3.46; SD = .26) for treatment 2, and .69 (M = 3.53; SD = .27) for the control group.

3.3.3. Conflict

Finally, a 12-item, Likert type-self-report scale, ranging from 1 (do not agree at all) to 5 (strongly agree) is created in order to gage the impact of the treatment. The instrument has been developed to measure the degree to which conflict is perceived by participants. The items are structured as followed: the 12 items are divided into six items for relational conflict and six items for procedural conflict (6 items). The factors self oriented conflict (three items) and group oriented conflict (three items) are applied to both, relational and procedural conflict, constituting a total of four additional factors: relational conflict self oriented, relational conflict group oriented, procedural conflict self oriented, procedural conflict group oriented. The chosen structure is attributed to literature, where it is suggested that HC people involved in a conflict are more likely to consider it as a relational problem, while LC cultures are more likely to see the conflict as a procedural, or issue problem (Ting-Toomey, 1997).

The reliability analysis for this instrument overall indicates stability of the construct. Chronbach’s alpha coefficients of .69 (M = 3.69; SD = .55) for treatment 1, .91 (M = 3.28; SD = .78) for treatment 2, and .91 (M = 2.26; SD = .71) for the control group are reported, demonstrating that a reliable scale for conflict measure has been created.
3.4 Procedure

The research is conducted at an international University in the Netherlands. The quasi-experiment further is created with the online software Qualtrics. The instruments are distributed in English, because it represents both the language of instruction, and the common language shared among the student body. Data collection has been conducted in the months of March and April 2015. Participants are recruited through random convenience sampling. Hereto the university’s international office is requested to promote the survey by forwarding the survey link to all international students. University related social media pages and forums for international students are further used to reach potential participants. The promotion consists of the survey link, a short description of the research and the request to participate.

When accessing the survey link, respondents are provided with a short introduction to the research, its purpose and the contact details of the researcher for eventual questions. The treatment has been administered as followed: The participant is randomly assigned to one of the three groups (low context, high context, control) and receives the suitable online survey. The first part of the survey is the treatment/control text that involves a description of a situation and an IM message. The situation is the same for all three groups, while the message text differs according to the assigned condition. After reading and understanding the treatment, the respondents complete a self-report questionnaire. Here participants are asked to provide responses associated with HC/LC communication, facework, and to what extent they perceived the situation as conflict, based on the indicated scale.

When the data collection has been completed data are imported to SPSS and cleaned. Next the data are examined to ensure that they fit the general statistical assumptions. Specifically graphical inspection of the data has revealed that the data are normally distributed. Missing values are filled in before the data are coded as followed and new variables are computed for the measures of HC/LC, facework and conflict in each experimental group.

For the HC/LC scale a total of seven new variables are computed. First, two individual variables are created for further analysis of low vs. high sensitivity towards contextual information: HCall and LCall. These variables are coded by combining the means of items with a wording towards either HC or LC following the codebook by Kim, Pan, and Park (1998). Moreover, for each aspect of the HC/LC theory individual variables are created: Social orientation (SO), responsibility (Resp), confrontation (Cnfr), communication/commitment (Comm) and ambiguity (Amb) with the prefix T1, T2 or control respectively. For further analysis of facework items a total of eight new variables are
computed by combining the applicable means. The coding includes one variable for facework overall (FWall) as well as one individual variable for each of the seven factors: independent self (FWind), interdependent self (FWinter), other face (FWotherF), self face (FWselfF), avoidance (FWavo), domination (FWdom) and integration (FWintgr) with the relevant prefix for each condition (T1, T2, Control). Lastly for the conflict items a total of seven new variables are computed: one variable for the overall conflict measure (ConAll) and one variable each for the six factors with a respective prefix for the condition: conflict relationship (ConRel), conflict process (ConPr), conflict relationship self oriented (ConRelSe), conflict relationship group oriented (ConRelGr), conflict process self oriented (ConPrSe) and conflict process group oriented (ConPrGr). For all of these new variables descriptive statistics are conducted by inspecting average scores and standard deviations.

3.5 Statistical Analysis

The first step for the data analysis is the conduction of descriptive statistics to see whether the data fits the standards of a normal distribution. The mean and standard deviation are calculated for each of the new coded variables. Further inspection reveals that the data are normally distributed and meet the general statistical assumptions. In a next step the inferential statistics are conducted. Hereby two tests are performed – one tests the model and the other tests the function. The test of the model includes factor analysis and reliability estimates to describe the stability of the constructs and treatment that define the model. Reliability estimates are calculated for each of the new coded variables and the according factors. Factor analysis is employed to test the construct of conflict that has been designed for the present study.

The test of the function comprises correlation analysis and regression analysis to test the hypotheses. Correlation analysis is employed to determine the statistical relationship each of the constructs share, as a means to establish construct validity. Specifically the correlation analysis tests \( H_2: \) Facework shares a high positive statistically significant correlation with conflict scores and \( H_3: \) HC shares a higher positive statistically significant correlation with conflict scores than LC. The regression analysis is applied in order to estimate the predictive relationship among the criterion variables, to establish concurrent validity. Hence, the analysis is testing \( H_1: \) HC communication (Implicit Codes) in instant messaging among international students is more predictive of conflict than LC.
4. Results

4.1 Descriptive statistics

Before the statistical tests are conducted the data have been inspected in order to report the descriptive statistics of the data set. The data set consists of a total of 170 responses from international research participants. Hereby 28 different nationalities are represented in the entire sample. Further 70% of the responses derive from female participants, while 30% derive from male participants. Three experimental conditions are administered. From the total sample of 170 responses 60 derive from people that have been randomly assigned to the high context condition ($N_{\text{high context}} = 60$), 49 responses derive from people in the low context condition ($N_{\text{low context}} = 49$), and 61 responses from people in the control group ($N_{\text{control}} = 61$).

Furthermore for the present research project it is important to compute new variables. For the three measuring instruments, high context/low context, facework and conflict a total of 22 new variables are computed manually in each of the three experimental groups: six variables for the conflict measure, seven for the high context/low context measure and eight for the facework measure. These 22 variables cover all important factors of each of the instruments. Four of the 22 variables are hereby identified as the main variables: Conflict overall, high context overall, low context overall and facework overall.

The other variables can be described as the factors that cover the underlying themes each of the main variables implies. For the conflict measure, in addition to the main variable conflict all the variables conflict relationship and conflict process are computed to address the distinction between relational issues of conflict and procedural issues of conflict. Moreover the two categories of self oriented conflict versus group oriented conflict are employed on the variables conflict relationship and conflict process. This way the variables for relational conflict self oriented, relational conflict group oriented, procedural conflict self oriented and procedural conflict group oriented are produced. For the high context/low context instrument, in addition to the main variables of high context and low context five more variables are needed that shall cover the five underlying factors important within the high context/low context framework. Consequently one variable each for social orientation, responsibility, confrontation, communication/commitment, and dealing with ambiguity is computed. Finally for the facework measure, in addition to the general facework variable one separate variable for each of the essential factors that are included in the instrument is needed. First it is necessary to address self construal, an individual level dimension that distinguishes between independent self and interdependent self. Hereto the variables facework independent self and facework interdependent self are computed. Next in terms of face concerns the instrument
entails the distinction between self face and other face, which leads to the variables facework self face and facework other face. Lastly the main conflict styles that have been identified to be relevant in the facework measure are addressed with the variables for avoidance, domination and integration. The descriptive statistics are conducted for all these variables in each experimental group separately. A complete overview of all the reliability estimates, means and standard deviations of each variable and factor are presented in Table 1.2 (Appendix C).

4.2 Test of the model

The test of the model comprises the calculation of the reliability estimates for further examining whether the main variables are operationalized reliably. Moreover a factor analysis is performed to test whether the 12-item conflict scale measures the same latent construct.

4.2.1 Reliability estimates

First the four main variables require a discussion of their reliability estimates at this point. The variables of interest for this discussion include conflict all, facework all, high context all and low context all considering results of the two treatments and the control group. In addition the variables for procedural and relational conflict, conflict relationship and conflict process are discussed for all three conditions. The variables computed within the conflict measure, namely conflict all, conflict relationship, and conflict process demonstrate sufficient reliability in all three experimental groups with Chronbach’s alpha coefficients > .7. For the variable conflict all the values of Chronbach’s alpha result as .69, in treatment 1, .91 in treatment 2, and .91 in the control group. Results regarding conflict relationship reveal Chronbach’s alpha coefficients of .65 in treatment 1, .82 in treatment 2 and .86 in the control group. Lastly for the variable conflict process the results reveal Chronbach’s alpha coefficients of .61 in treatment 1, .85 in treatment 2 and .90 in the control group. These results show that the instrument for the conflict measure indicate a very high reliability. On the other hand the results of the reliability estimates that are calculated for the variables high context all and low context all in the high context/low context instrument reveal reliability estimates below .6 in all three experimental groups, consequently indicating insufficient reliability for those variables. Specifically results for the variable high context all report Chronbach’s alpha coefficients of .60 in treatment 1, .38 in treatment 2, and .41 in the control group. For the variable low context all Chronbach’s alphas of .25 in treatment 1, .40 in treatment 2, and .22 in the control group are revealed. The instrument for the high context/low context dimensions
thus turns out to be not sufficiently reliable in the context of the present study. Looking at the reliability estimates of the variable for facework however, namely facework all the values of Chronbach’s alpha indicate moderate reliability. Even though the values are not as high as for the instrument of conflict, all values that are revealed are above .6 which results in sufficiently reliable estimates. For the first treatment the value of Chronbach’s alpha is reported to be .66, for the second treatment .61, and for the control group .69. The facework instrument hence is confirmed to be a moderately reliable measure in the current context. For a detailed overview the discussed reliability estimates as well as the descriptive statistics for the main variables are displayed separately in table 1.1 (Appendix C). A possible reason for these rather low reliability estimates that are revealed for the high context/low context measure as well as the facework measure might be the uneven distribution of nationalities within the sample. As indicated earlier the majority of the sample consisted of Dutch and German students, which are categorized to be rather low in context. It is quite probable that a more balanced sample that represents an even number of high- and low context cultures would lead to more stable reliability estimates.

4.2.2 Factor analysis of treatment

To test whether the 12 item conflict scale produces consistent measurement, a factor analysis is conducted. The measurement scale is applied to measure two factors: procedural conflict and relational conflict. The factor analysis examines whether participants have made the intended semantic connections as theoretically expected with the instrument, in part by differentiating the two conflict factors.

In a first step it is necessary to inspect whether the data satisfies the statistical assumptions in order to see whether a factor analysis can be conducted. To begin, the sample size is found to be large enough to meet the first important assumption necessary for factor analysis. The internal correlations of the factor analysis further reveal enough items that load > .3. Factorability is verified through a Bartlett’s test that results to be statistically significant (p < .001). A Kaiser-Meyer-Olkin value of .83 further demonstrates sampling adequacy by indicating that the data satisfy the assumptions for a factor analysis.

By employing a varimax rotation a principle component analysis is conducted on twelve items. The following items are used: Conflict Relationship Self oriented_1, Conflict Relationship Self oriented_2, Conflict Relationship Self oriented_3, Conflict Relationship Group oriented_1, Conflict Relationship Group oriented_2, Conflict Relationship Group oriented_3, Conflict Process Self oriented_1, Conflict Process Self oriented_2, Conflict
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The analysis has produced three components that show an eigenvalue > 1, hence meeting Kaiser’s criterion. The three components further explain a total variance of 74.39% and are labeled: 1) conflict process, 2) conflict relationship, 3) conflict group. These results show that indeed the factor analysis detects two factors that have initially been intended to measure (process and relationship). The third component (conflict group) further fits a factor within the conflict measure, which has been anticipated: this factor is indicated as ‘group orientation’. While developing the conflict measure, two main factors are employed to distinguish between procedural issues in conflict and relational issues in conflict, as literature has suggested. Further it has been reported that in conflict it can be distinguished between self oriented conflict and group oriented conflict, depending on whom is hold responsible for the evolving conflict. Hence the two factors named, ‘conflict group oriented’ and ‘conflict self oriented’ are applied on both main factors of relational conflict and procedural conflict, resulting in a total of six factors within the conflict measure.

Also Castell’s scree test is consistent with the disclosure of the three components, as the resulting scree plot equally indicates. It is further important to look at the item loadings of each of the components. For the first component (conflict process) the item Conflict Process Group oriented_3 shows a loading of .88, the item Conflict Process Group oriented_2 a loading of .84, the item Conflict Process self oriented_2 a loading of .76, the item Conflict Process self oriented_3 a loading of .73 and the item Conflict Process self oriented_1 a loading of .71. For the second item (conflict relationship) the item Conflict Relationship self oriented_1 shows a loading of .88, the item Conflict Relationship self oriented_2 a loading of .81 and the item Conflict Relationship Self oriented_3 a loading of .66.

Finally, for the last and third component (conflict group) the item Conflict Relationship Group oriented_3 shows a loading of .87, the item Conflict Relationship Group oriented_2 a loading of .77, the item Conflict Relationship Group oriented_1 a loading of .62 and the item Conflict Process Group oriented_1 a loading of .61.

In a last step it is necessary to test the reliability of the items. Chronbach’s alpha values of all three components which the factor analysis has produced, are all well > .7, which means that a high reliability is estimated. Specifically with Chronbach’s alpha of .89 for the first component, .81 for the second component and .83 for the third component it can be reported that the items reliably measure the same latent construct. Hence the instrument that has been created for measuring conflict turns out to be very reliable. A detailed overview of all item loadings of the complete conflict measure is presented in Table 2 (Appendix C). The
The table moreover shows the eigenvalues and Chronbach’s alphas of each of the components that are produced by the factor analysis.

4.3 Test of the function

The test of the function entails a correlation analysis in order to establish construct validity as well as a multiple regression analysis to establish concurrent validity. The correlation analysis examines the relationship each of the constructs share, while the regression analysis determines the causal effects, or rather the predictability of the variables.

4.3.1 Correlation

To test H2 and H3 a correlation analysis is employed. The analysis ought to determine the statistical relationship each of the constructs share to establish construct validity and further help to measure the strength of such associations. Specifically the analysis shall reveal how participants perceive the relationships between the variables of interest, namely facework and conflict as well as contextual sensitivity and conflict. To test H2 the main variable for facework and all the factors are applied as the independent variables, while the main variable for conflict and the corresponding factors are employed as the dependent variables. The correlation analysis is conducted for all three experimental groups using the previously indicated variables. H2 has expected a high positive statistically significant relationship between conflict scores and facework, meaning that with a high score on the facework scale a subject is expected to equally have a high score on the conflict scale. This relationship that is expected between facework and conflict ought to indicate construct validity.

Moreover, to test H3 the main variables for the measurement of contextual sensitivity, namely high context and low context as well as all the corresponding factors of that measure are applied as the independent variables, while similar to the test of H2, the main variable for conflict as well as all the factors within that scale are used as the dependent variables. The correlation analysis that ought to test H3 is equally conducted for all three experimental groups using the indicated variables. Specifically H3 implies a positive statistically significant relationship between contextual sensitivity and conflict scores. Hereby it is hypothesized that high sensitivity towards contextual information would effect the perceived degree of conflict to a higher extent than a low contextual sensitivity. Moreover it is expected that the association between the high context variable and conflict variable is perceived to be higher by the participants in the high context condition than the association of the two variables perceived by participants in the low context condition.
For the conduction of the correlation analysis further it is necessary to check all assumptions that need to be satisfied. Results show that all assumptions that a correlation analysis require are met in this case. To be precise, all variables are on a scale level of measurement so that the first assumption regarding measurement level of variables is satisfied. Next the inspection of the data reveals that the variables appear as a bivariate normal distribution within the sampled population. Furthermore the inspection of the scatter plot also indicates a linear relationship between the variables of interest and no outliers are identified. Visual inspection of the scatter plot moreover shows that the assumption for homoscedasticity is satisfied, meaning that the variance of residuals remains similar along the line of best fit.

4.3.2 Hypothesis 2

After ascertaining that the assumptions for a correlation analysis are satisfied, first the relationship between facework and conflict is addressed by testing H2. The analysis is conducted by employing all the newly computed variables for the conflict measure and for the facework measure in all three experimental groups. In order to address the hypothesis first the correlation of conflict and facework overall is inspected by looking at the scores between the two main variables conflict all and facework all. Results however show that in fact there is no statistical relationship that the two variables share. The analysis reveals that there is no statistically significant correlation between the degree of conflict subjects perceived in the treatment and their score on the facework scale. The same is true for all three experimental groups. Hence the results fail to reject the null hypothesis: $r(40) = .15, p = .180$ for treatment one, $r(45) = .19, p = .111$ for treatment two, and $r(55) = -.19, p = .081$ for the control group. These results show that facework and conflict generally do not share a statistical relationship in this case, as literature would suggest. For further inspection the results are displayed in the tables 3.1, 3.2, and 3.3 (Appendix C). The same tables also give a complete overview of all scores between the main variables as well as the factors. Hereby the table 3.1 shows the results for treatment 1, table 3.2 for treatment 2, and table 3.3 for the control group. All tables can be found in appendix C.

Procedural conflict, group-oriented

Results reveal though, that some of the variables share a statistical relationship with some of the factors. In the low context condition (treatment 1) for instance, several negative correlations for the variable for procedural conflict issues that are group oriented are detected. As such Conflict Process Group oriented is negatively associated with the variables facework
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all, facework interdependent self, faework self face and facework integration. Hence there is a significant, moderate negative correlation between the procedural conflict issues that are group oriented and the measure for facework overall. That means the more group-oriented procedural conflict issues become apparent the less facework is associated and vice versa, $r(40) = -.32$, $p = .022$. Additionally there is a significant, weak negative relationship between group-oriented procedural conflict issues and the interdependent self. In other words, the more issues of group-oriented procedural conflict are perceived the lower is the score for interdependent self construal, $r(40) = -.26$, $p = .050$. This negative correlation shows consistency with literature, where it is suggested that the interdependent self-construal is rather associated with highlighting relational connections than being concerned with procedural issues. Furthermore there is a significant, strong negative correlation between procedural conflict issues that are group-oriented and the scores for self face. To be specific, the more group-oriented procedural conflict issues one perceives the less is his/her self face concern, $r(40) = -.57$, $p < .001$. This result appears plausible because the factor “conflict group” implies, that group-orientation is more associated with a high concern of both self and other face, than only with a high concern for self face. Vice versa, the more one is concerned with one’s self face the less group-oriented is that person. Lastly there is a significant, weak negative association between group-oriented procedural conflict issues and integration. That means that the higher the score of perceived group-oriented procedural conflict the lower is the score for integration and vice versa, $r(40) = -.27$, $p = .047$. This observation can be explained by looking at the outcome from a different perspective: the more one integrates, or uses integration strategies of facework, the less group-oriented conflict issues are perceived. This seems reasonable, because integration can be assumed to help establish/maintain harmony within a group hence prevent perceptions of conflict. For a better overview all the scores that are discussed in this paragraph are displayed in table 3.1 (Appendix C).

Self face, treatment 1

For the scores of self face another interesting observation is made in treatment 1, namely a negative association between the variables facework self face and conflict process. Precisely there is a moderate significant, negative correlation between the perceived degree of procedural conflict and the concern for self face, meaning that the more one has concern for his/her own face (self face) the less procedural conflict he/she perceives, $r(40) = -.40$, $p = .005$. This finding is interesting because it is inconsistent with suggestions in theory. In fact it has been reported that individuals who have a high degree of self face concern are associated
with independent self construal and are mostly found in individualistic cultures. Those in turn show similar values and identity traits as low context cultures do. Low context cultures however are reported to be more concerned with procedural conflict issues rather than relational conflict issues, which could not be confirmed by the indicated results. The scores of these results equally are presented in table 3.1 (Appendix C).

Avoidance, treatment 1

Another salient result has been found with regard to the factor of avoidance. Facework avoidance and Conflict Process self oriented show a negative statistically significant correlation. Specifically, a moderate negative association between the degree of self-oriented, procedural conflict that is perceived by participants, and their score on avoiding facework is observed. That means that with an increasing degree of perceived self-oriented procedural conflict the degree of avoiding facework that is used, decreases, and the other way round, \( r(40) = -.48, p = .001 \).

Considering the sample that for the larger part consists of Dutch and German student who are categorized to be low in context and rather individualistic cultures, this observation appears plausible. Such cultures have been found to be more concerned with procedural conflict issues, are more self-oriented in general and are rather tending to use direct and solution oriented conflict style – not an avoiding one. The latter on the other hand has been found to prevail among high context cultures. Hence if the majority of the individualistic and low context individuals within the sample account for an increasing degree of perceived self-oriented procedural conflict, the decreasing degree of avoiding facework only seems plausible and constitutes results consistent with theoretical implications. All values of the correlation coefficients for these results are displayed in table 3.1 (Appendix C).

Independent self, treatment 1

Furthermore in the LC condition (treatment 1) a few positive correlations among some factors are detected. As such the variable for independent self shows positive relationships with some of the conflict variables: facework independent self is positively associated with conflict all, conflict process and conflict process self oriented. There is a significant, moderate positive correlation between the perceived degree of overall conflict and the score for independent self. In other words the higher one scores on the independent self, which indicates the individual level dimension of self construal, the higher is the degree of conflict one is likely to perceive, \( r(40) = .33, p = .018 \). Further the variable for perceived degree of
procedural conflict and the variable for independent self construal share a significant, moderate positive relationship, meaning that the more the score on independent self construal increases, the more increases the degree of perceived procedural conflict, $r(40) = .34, p = .017$. This observation is in line with literature, as it has been found that people with an independent rather than an interdependent self are more individualistic and are mostly associated with living in low context cultures. In these cultures people have been reported to be more concerned with procedural conflict issues. Lastly a weak positive, statistically significant association between the independent self and the perceived degree of self-oriented procedural conflict has been identified. Specifically that means that the higher one scores on the independent self, the higher is the degree of self-oriented procedural conflict one is likely to perceive, $r(40) = .27, p = .047$. These results support the previous observation and moreover confirm theoretical implications. The findings indicate that individuals with an independent self, who are more concerned with their personal ideas and values, are also more likely to perceive the self-oriented procedural issues of conflict. Hence such individuals are not only more concerned with procedural issues of conflict, but are evidently also more likely to be concerned with self-oriented conflict issues. The scores of all discussed associations are presented in table 3.1 (Appendix C) for further inspection.

Integration, treatment 1

In treatment 1, the low context condition, a last factor of the facework scale shows a few correlations with some of the conflict scores that need to be discussed, namely the variable for integration. Here the results indicate a few positive correlations as well as a negative correlation between integration and some of the conflict variables. Precisely facework integration is positively associated with conflict all as well as with conflict relationship. On the other hand, facework integration is negatively correlated with conflict process group oriented. The latter correlation however has been discussed earlier in this section already. To be specific there is a statistically significant, weak positive association between the perceived degree of conflict overall and the score of integration. This indicates that the higher the degree of conflict is that one perceives, the higher is the degree of integrating facework one is likely to use/show: $r(40) = .29, p = .035$. The results can be interpreted as revealing a tendency towards the use of integrating facework when conflict is perceived, or towards an integrating conflict style among participants. This tendency can be explained as the majority of the sample consists of Dutch and German participants, who have been classified as mostly being low on the context scale and characterized as mostly
individualistic cultures. Literature has proven that individuals of such low context and/or individualistic communities generally are more prone towards direct, solution-oriented conflict style, including integration. The positive correlation between integration and conflict overall appears reasonable and is consistent with previous theory. The variable of integration further shows a significant, weak positive correlation with the perceived degree of relational conflict. Concretely that means that the higher the degree of integrating facework one is likely to use/show the higher is the degree of perceived relational conflict, \( r(40) = .29, p = .034 \). This observation however is inconsistent with what has been discussed before. Low context/individualistic cultures are reported to be more concerned with procedural issues, rather than relational issues in conflict, conversely what the current results demonstrate. The specific scores of all indicated relationships are displayed in table 3.1 (Appendix C).

Integration treatment 2

In the high context condition (treatment 2) the integration factor is worthy to be discussed as well, because it shows similar results to what is observed in the low context condition (treatment 1). Though, all statistically significant associations that are reported are positive here. Precisely facework integration shares a statistically significant positive relationship with conflict all, conflict relationship and conflict process group oriented. There is a weak positive correlation between the degree of perceived conflict and the score for integration. Specifically the higher the degree of conflict that is perceived the more increases the degree of integrating facework, \( r(45) = .28, p = .032 \). A similar statistical relation has been observed in treatment 1 and well discussed in the previous paragraph. Additionally there is a weak positive association between the degree of relational conflict perceived by participants and the degree of integrating facework used; hence with an increasing score for relational conflict the score for integrating facework equally increases, \( r(45) = .26, p = .044 \). This correlation also corresponds with a similar result in treatment 1 indicating inconsistency with literature. The last association involving the variable for integration that is found constitutes a moderate positive association between the degree of procedural conflict issues perceived that are self-oriented and the degree of integrating facework. Consequently with an increasing score of perceived self-oriented procedural conflict the score for integrating facework also increases, \( r(45) = .33, p = .013 \). While these results are contrary to what is observed for the low context condition (treatment1), they generally confirm theoretical implications and support the previous discussion about cultural dimensions and integrating facework during conflict in general. Precisely, the sample has been identified to mostly consist of individuals
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from low context/individualist cultures, which have been suggested to use a more direct style of conflict management and rather tend to try finding solutions during conflict. Here the positive correlation between integrating conflict style/facework and self-oriented procedural conflict issues highlights two more cultural traits people from low context communities possess: On the one hand they are generally more self oriented and concerned with individual thoughts and values, on the other hand they are also more concerned with procedural issues during conflict, rather than relational issues. With the indicated correlation these assumptions can be confirmed. A complete overview of all indicated scores in this paragraph is displayed in table 3.2 (Appendix C).

4.3.3 Hypothesis 3

In a next step the relationship between contextual sensitivity and conflict scores is addressed by testing H3. It is hypothesized that a high sensitivity towards contextual information would share a statistically significant relationship with the perceived degree of conflict that is stronger than the relationship between a low sensitivity towards contextual information and conflict. For the analysis in all three experimental groups all the variables that are computed for the high context/low context scale, including all factors, as well as the variables for the conflict measure are employed. To test the hypothesis, first it is necessary to inspect the correlations between the main variables, namely conflict all, high context all, and low context all. That way the relationship conflict generally shares with high and low sensitivity towards contextual information can be investigated and compared. Similarly as in testing H2, the results reveal though, that there is no statistically significant relationship between subjects’ scores on contextual sensitivity and their scores on the perceived degree of conflict, in none of the two experimental conditions of high context and low context. Neither between high context scores and conflict exists a statistically significant relationship, \( r(42) = .17, p = .137 \) for treatment one (low context) and \( r(49) = .19, p = .101 \) for treatment two (high context), nor between low context scores and conflict, \( r(42) = .07, p = .321 \) for treatment one (low context) and \( r(49) = .09, p = .263 \) for treatment two (high context). Hence the results fail to reject the null hypothesis. Interestingly however, results in the control group show that there is a statistically significant correlation between subjects’ scores on high contextual sensitivity and their scores on the conflict scale. There is a significant, weak positive association between the degree of perceived conflict and the score of high context, meaning that with an increasing score on the high context scale the degree of perceived conflict equally increases and vice versa. To put it differently, the higher the contextual sensitivity towards
context the higher is the degree of conflict that is perceived, $r(59) = .25, p = .027$. Low sensitivity towards contextual information however, similar to the two treatment groups shows no statistically significant correlation with the subjects’ scores on conflict: $r(59) = .09, p = .259$. These results show that in the control group a high contextual sensitivity affected the perceived degree of conflict while a low contextual sensitivity has no effect. All the discussed scores for the three experimental groups are presented in the tables 3.1, 3.2, and 3.3 (Appendix C) respectively for further inspection.

Responsibility, treatment 1

Also with regard to H3 a few factors of contextual sensitivity and conflict share statistical significant relationships that need to be discussed. To begin with, in treatment 1 the variable for responsibility shows results that are noteworthy. In fact responsibility is negatively correlated with some of the conflict factors. Precisely responsibility shares a negative statistically significant relationship with conflict process, conflict relationship self oriented, and conflict process group oriented. There is a significant, weak negative association between the perceived degree of procedural conflict and the score for responsibility. In other words, the higher the responsibility someone shows, the less procedural conflict he is likely to perceive and the other way round, $r(42) = -.30, p = .028$. The results appear reasonable as it can be said that the more one is responsible about what he is doing and the more he/she behaves in a responsible way within a social group the less conflict is likely to be perceived. A relatively high score on the responsibility item indicates that a person is rather high on the context scale. High context people know their role in society and act in the way it is expected of them. This responsible behavior of high context individuals moreover results in avoidance of uncomfortable situations (conflict) in order to maintain harmony and don’t disrupt the social structure. Hence it appears plausible, that less conflict is perceived when scoring high on the responsibility variable. Another explanation could be that high context communities have been identified to be rather concerned about relational conflict issues which would explain the decreasing score of procedural conflict perceived. In addition a significant, moderate negative correlation between the score of responsibility and the degree of perceived relational conflict that is self-oriented is detected. That means that the higher one scores on responsibility, the lower the score of perceived relational self-oriented conflict, $r(42) = -.37, p = .007$. Here the results overall affirm what has been discussed previously: people who act responsibly and know their role in a social group (high context people) are generally less likely to perceive a high degree of conflict. Although here relational conflict issues are
addressed, the self-orientation component is helpful to further explain these results. People who act responsibly in a group or society (high context) are less likely to be self oriented, which is consistent with theoretical implications that suggest that high context cultures value group ideals more than individual ones. Lastly the results show that there is a negative significant, moderate association between the degree of perceived procedural group-oriented conflict and the degree of responsibility. Specifically the more responsible an individual acts the less procedural group-oriented conflict he/she is likely to perceive, $r(42) = -.32, p = .019$. These results also confirm what is discussed earlier in this paragraph: more responsibility accounts for less perceived conflict because one knows his/her role in a social group. The findings are further supported by the specification to reflect procedural conflict, because the people who are highly responsible are likely to be higher in context. These individuals rather mind relational issues of conflict. The scores discussed in this paragraph are listed in table 3.1(Appendix C) for a better overview.

### Ambiguity, treatment 1

In treatment 1 another variable shows some statistically significant correlations with some of the conflict factors and require discussion, namely ambiguity. Here all the indicated correlations are positive. Specifically ambiguity shares a positive relationship with conflict all, conflict relationship, and conflict relationship group oriented. First there is a significant, moderate positive association between ambiguity and the perceived degree of overall conflict. That means, that the more conflict one is likely to perceive the higher is his/her score on ambiguity, $r(42) = .35, p = .011$. The variable for ambiguity intends to indicate how comfortable one is in dealing with ambiguity and/or with new situations. A high score hereby indicates that the participant is not very comfortable, as a high score on ambiguity corresponds with a person to be high in context. The higher the score for ambiguity, the higher in context a subject is expected to be. High context people tend to have difficulties when they find themselves in new situations and need to deal with ambiguity. Hence these results indicating that the higher the score for ambiguity the more conflict is likely to be perceived appear to be consistent with literature. Additionally there is a significant, moderate positive association between the score for ambiguity and the degree of perceived relational conflict. Hence, the more relational conflict issues are perceived the more one is likely to have a high score on ambiguity, $r(42) = .37, p = .008$. These results are coherent with what is said before and show consistency with implications in literature: High context people are more concerned with relational conflict issues than with procedural ones. Hence an increasing score
on the perceived degree of relational conflict resulting from an increasing score on ambiguity, which is corresponding to high context people, appears to be reasonable. The last variable that shows a positive correlation with ambiguity is the variable for relational, group-oriented conflict. There is a significant, moderate positive correlation between the perceived degree of relational conflict that is group-oriented and the score for ambiguity. The higher the score on ambiguity, the higher is also the score of perceived relational group-oriented conflict, \( r(42) = .35, p = .011 \). Again the results confirm previous findings as well as theory. By adding the specification of group-oriented conflict, the proposed explanation becomes stronger. Theory suggests that individuals in high context communities are more group-oriented, rather than self oriented, which is confirmed by these results. For further inspection of all the results discussed here, the scores are presented in table 3.1 (Appendix C).

High context overall, control group

As it has been stated previously in this section the results revealed in the control group are particularly interesting. Unlike in the high context condition and in the low context condition, in the control group a correlation between the main variables of high context all and conflict all is determined. Additionally there are other positive associations between the variable high context all and two of the conflict factors that require further discussion, namely conflict relationship and conflict relationship self oriented. There is a significant, moderate positive association between the perceived degree of relational conflict and the overall variable for high context, meaning that the higher one scores on the scale for contextual sensitivity, the higher is the degree of perceived relational conflict, \( r(59) = .33, p = .006 \). These results basically affirm that high context individuals are more concerned with relational conflict than with procedural conflict, as literature suggests. Findings thus are coherent with theory. In addition to that, there is a significant, moderate positive correlation between the perceived degree of relational conflict that is self-oriented and the score of high contextual sensitivity. Hence the higher the contextual sensitivity the higher the perceived degree of self-oriented relational conflict, \( r(59) = .40, p = .001 \). Although the results are consistent with the previously discussed correlations for high context all, they are contradicting theoretical assumptions regarding the factor of self-orientation. In fact high context people have been found to be rather group-oriented, unlike it is indicated here. Although the results suggest inconsistency regarding the specific factor self-orientation, in a broader view they are in line with literature. All the relevant scores that are discussed in this paragraph are displayed in table 3.3 (Appendix C) for a complete overview.
Communication/commitment, control group

In addition to the correlations between the main variable for high context and the conflict factors, a few positive correlations between the factor for communication/commitment and the conflict factors are detected within the control group. The factor communication/commitment hereby intends to measure the communication style one uses distinguishing between a direct communication style, which is described as low context and an indirect communication style, described as high context. The wording of the items for the communication/commitment factor is towards high context. Therefore a high score on that factor implies that people are using an indirect communication style, thus being rather high in context.

Regarding the correlations that are discovered in the control group, there are statistically significant, positive relationships between the variable communication/commitment and the variables conflict all, conflict relationship, conflict process, conflict relationship self oriented and conflict process group oriented. Specifically there is a significant, weak positive association between the perceived degree of overall conflict and the score for communication. The higher one scores on communication the higher is the overall degree of perceived conflict, $r(59) = .30, p = .011$. These findings seem consistent with literature, as they suggest that an increasing score on communication, which indicates an increasingly indirect communication style, leads to an increasing degree of conflict perceived. It seems plausible that people, who not directly communicate what they intend to, are more likely to end up in misunderstandings. Furthermore there is a significant, moderate positive association between the perceived degree of relational conflict and the score for communication, meaning that the more relational conflict is perceived the more one is likely to score high on communication, $r(59) = .31, p = .008$. There is also a significant, moderate positive correlation between the score on communication and the perceived degree of relational self-oriented conflict. The higher one scores on communication, the higher is also the score of self-oriented relational conflict, $r(59) = .38, p = .002$. Theoretical implications are confirmed again by these results: It is indicated that the higher the degree of indirect communication style that is used, the higher is the degree of perceived relational conflict. Evidently high context people are more concerned with relational issues in conflict. Moreover there is a significant, weak association between the degree of perceived procedural conflict and the score of communication. Hence the more one is likely to score high on communication, the more he/she is also likely to score high on procedural conflict perceived,
Another relationship that is detected is a significant, weak positive association between the degree of perceived group-oriented procedural conflict and the score for communication, $r(59) = .24, p = .034$. Theory is confirmed again by these results as overall indicating that an indirect communication style affects the perceived degree of conflict. However, it is to note that the last two correlations that are discussed incorporate the specific factor of procedural conflict issues, which is less likely to be of concern for high context people than relational conflict issues. The difference becomes apparent as the previously discussed correlations regarding the factor of relational conflict are stronger than the latter associations regarding procedural conflict. For a better overview of all the discussed scores, the values are displayed in table 3.3 (Appendix C).

Besides the correlations that have been discussed thoroughly in the previous paragraphs, a few more statistically significant, positive and negative associations between some of the factors are observed. These however are not necessary to discuss, but can be inspected in the complete overview of all correlation scores in the tables 3.1 for the low context condition, 3.2 for the high context condition and 3.3 for the control group (Appendix C).

The correlation analysis ought to measure the strength of the relationships between the variables of conflict and facework as well as between conflict and high context or low context respectively. Although among some of the factors statistically significant relationships are detected, overall the findings reveal that none of the expected relationships between the main variables exists. There is neither an association between conflict scores and facework, nor between contextual sensitivity and conflict. As such, construct validity could not be established and H2 and H3 fail to reject the null hypotheses.

4.3.4. Regression

For the second step in the test of the function, a multiple regression analysis is conducted in order to estimate the predictive relationship among the criterion variables. Specifically, a regression helps to estimate a cause and effect relationship of two or more variables. H1 hypothesized that high context communication in instant messaging among international students is more predictive of conflict than low context communication. Precisely, an OLS regression is conducted for all three experimental groups by employing the newly computed variable for conflict, conflict all as the dependent, outcome variable and all components of the newly computed variables for high context and low context as the independent, predictor variables.
Similar to other statistical tests a multiple regression requires a number of assumptions that need to be satisfied. Overall the results indicate that all assumptions are met in this case. To be precise, all variables are on an interval measurement level, hence meeting the assumption to be quantitative variable types. The sample size also satisfies the assumptions necessary for regression analysis and further no significant outliers are identified. Visual inspection of the data moreover reveals that the general assumptions of linearity, independence and normal distribution of the data are met. Furthermore the predictors show some variation in their values and are uncorrelated with external variables. External variables are those which are not included in the regression analysis, but have been applied previously in the correlation analysis. In this case such external variables, which are not included in the regression analysis, are accounted for by the facework measure. The correlation matrix does not report any coefficients > .9. Additionally data discloses that all tolerance values are greater than .02 and all variance inflation factors are below 10, meaning that multicollinearity is unproblematic. Visual inspection of the scatter plots further discloses that the variance of residuals is evenly dispersed around zero, hence meeting the assumption of homoscedasticity.

Results of the analysis in all three experimental groups reveal that the regression model of the perceived degree of conflict as the dependent variable and high context and low context communication including all components as independent variables is not statistically significant: $F(16, 25) = .95, p = .532$ for treatment 1, $F(16, 31) = .47, p = .945$ for treatment 2, and $F(16, 41) = .76, p = .718$ for the control group. Hence the model is not useful to predict the degree of conflict stimulated by text messages in an academic setting, which is also indicated by a low predictive power: only 38 percent of the perceived degree of conflict in treatment 1 ($R^2 = .38$), 19 percent in treatment 2 ($R^2 = .19$), and 23 percent in the control group ($R^2 = .23$) can be explained by high context and low context communication. Because the model results not to be statistically significant and unemployable for predicting the degree of conflict, no further analysis or reporting is necessary at this point. However, a complete overview of all the beta values including the values for the adjusted $R^2$, which indicate the model fit, as well as the number of observations, can be found in Table 4 (Appendix C). The table specifically shows the results for all treatments, each including two models. While the first model, indicated in the table as ‘Model 1’, only includes the items of one predictor
variable, namely the high context variable, the second model, indicated in the table as ‘Model 2’, includes all items of both predictor variables that have been applied to the multiple regression analysis. Consequently beta scores in model 1 are only displayed for the items of the high context measure, while the beta scores in model 2 are displayed for all items of both, the high context variable and the low context variable. That way it can also be viewed how the beta scores change by additionally including the items of the second predictor variable.

It has been expected that high context communication and low context communication in instant messaging among international students share a predictive relationship with conflict. Precisely it has been hypothesized that high context communication is even more predictive for conflict than low context communication. Overall though, the results show that differently than expected, neither high context communication, nor low context communication in instant messaging among international students share a predictive relationship with conflict. The analysis results not to be statistically significant, hence not presenting a predictive model. To this end the results fail to reject the null hypothesis (H0). This also means that although some of the variables are perceived by participants to have an association, none of the variables result to be predictive of conflict. Hence, for the presented model in the current study no concurrent validity could be established. To be specific without a statistically significant model, or rather one which is unemployable for the prediction of other outcomes, here the degree of conflict, concurrent validity cannot be established.
5. Discussion

5.1 Conclusion

The purpose of the present research project is to study the effect of implicit (HC) and explicit (LC) messages on the perceived degree of conflict, when used by international students in instant messaging. The study’s main argument implies that due to the lack of nonverbal cues in instant messaging the probability that conflict evolves during a conversation using instant messaging is relatively high. Hereby it is specified that the use of implicit, hence high context communication, which is characterized to be imprecise, indirect and therefore rather confusing, results in a higher degree of perceived conflict than the use of explicit communication, which is described as being more direct and a rather specific articulation of messages. In high context communication most of the meaning usually is in the nonverbal part of the message which is missing during instant messaging, while in low context communication the meaning is in the spoken word. For the purpose of the study the research question: How do high/low context communication and facework theory help to explain perceptions of conflict in the absence of nonverbal cues? is posed. Furthermore three hypotheses are formulated that entail the main expectations implied in the overall argument. Specifically the hypotheses are phrased as follows: H1: HC communication (Implicit Codes) in instant messaging among international students is more predictive of conflict than LC; H2: Facework shares a high positive statistically significant correlation with conflict scores; H3: HC shares a higher positive statistically significant correlation with conflict scores than LC.

Overall the main findings report no significant results. The results are discussed in detail in the previous chapter. However, none of the statistical analyses conducted to test the three hypotheses show statistically significant outcomes. All of the three hypotheses hence fail to reject the null hypothesis. To be precise, differently than expected, neither implicit nor explicit communication shares a statistically significant relationship with conflict. Thus it can be concluded that there is no effect that implicit or explicit message have on the perceived degree of conflict within instant messaging among international students, as hypothesized in H3. Furthermore the statistical analyses have revealed that neither HC communication, nor LC communication is predictive of conflict, as hypothesized in H1. To put it differently the results indicate that HC/LC and conflict don’t share a cause-effect relationship, meaning that neither implicit (HC) message, nor explicit (LC) messages are causing a certain degree of conflict perceived in instant messaging among international students. Lastly, with regard to H2 results indicate that facework and conflict generally do not share a statistically significant relationship. No correlation has been detected as hypothesized in H2. Although some
significant correlations have been observed among factors of the relevant variables, for the main variables of facework, HC, LC, and conflict no association could be revealed. Hence it can be concluded that the results overall do not provide a relevant answer to the posed research question. As no significant results are discovered, it only can be stated that high/low context communication and facework theory do not help to explain perceptions of conflict in the absence of nonverbal cues.

5.2 Theoretical implications

Regarding the results of the statistical analyses it is necessary to discuss what implication these results have for existing theory. First of all results demonstrate that neither high context communication, nor low context communication share a statistical relationship with conflict in the two treatments. Further none of the two dimensions are observed to be predictive of conflict. In sum, none of the tests show statistically significant results hence H2 and H3 fail to reject the null. Although these results are not statistically significant, they are still important findings for literature. As such it can be stated that the HC/LC continuum is not applicable for the realm of instant messaging. Specifically, the dimensions of high/low context that have been applied according to the classification of cultures initially proposed by Hall (1976) appear to be invalid for the study of instant messaging. These none significant findings of the present study consequently point out an important limitation of that framework, which adds to existing theory to a significant extent. In fact, although the HC/LC dimensions have been confirmed in numerous case studies to be useful to measure cultural variables (e.g., Wang, 2008; Nishimura et al., 2008; Korac-Kakabadse, et al., 2001), including the digital landscape, e.g., website and user interface design (e.g., Würtz, 2005; Usunier & Roulin, 2012), in the present study of instant messaging the framework appears to be irrelevant. However, future research must be devoted to confirm this major limitation of the HC/LC framework that has been revealed in the present research project.

Interestingly in the control group significant results indicating a statistically significant relationship between high context and conflict have been detected. Still, the control group is the experimental group where people don’t receive a treatment and which is only used for comparing those with the people who do receive a treatment. Because the control group is not directly subject to the overall outcome of the study and rather used for a comparing/controlling purpose, these results are of no concern for further interpretations and the overall conclusion.
However it needs to be stated that a few significant correlations have been detected among some of the factors of the high/low context instrument and factors of the conflict measure. These in turn are important to review, because they confirm cultural values and personality traits that have been determined to prevail in certain cultures, according to former research. Overall it can be stated that certain tendencies that the present results indicate are in line with existing literature. The most salient correlations that have been detected here are among responsibility and conflict factors as well as among ambiguity and conflict factors. Precisely the results report negative correlations between responsibility and conflict scores. Generally these negative correlations indicate that with a high score on responsibility the different factors of conflict are decreasing respectively. High responsibility thus results in little conflict perceived. A high score on responsibility further can be interpreted as describing individuals of high context cultures, because literature suggest that HC individuals know their social status and act responsibly according to their role (Kim et al., 1998). It is further formulated, that members of HC cultures are rather avoiding conflict situations in order to maintain harmony and prevent embarrassment (Kim et al., 1998). Hence the decreasing score of perceived conflict through an increasing score on responsibility can be attributed to theory. In other words the results are in line with theoretical implications deriving from previous research.

Similarly the correlations between ambiguity and the conflict scores show consistency with literature. Here the relationships that have been detected are positive. A high score on ambiguity hence results in a high degree of perceived conflict. Moreover, the higher the score on ambiguity the higher an individual can be classified on the high/low context scale. People of HC cultures are reported to be uncomfortable with ambiguity and have problems to adapt to new circumstances (Kim et al., 1998). Hence it can be explained that when someone is experiencing difficulties in new situations, he/she is rather insecure and as a result more likely to perceive a high degree of conflict. Overall these findings of the present research project appear to confirm results of previous works in terms of personality traits (ambiguity and responsibility) that are described to be relevant in high context cultures.

Next it is important to discuss the results regarding the relationship between facework and conflict. In fact no statistical relationship has been detected. The findings report that in the statistical analysis no significant correlation between the two variables could be observed. These results are inconsistent with what is hypothesized in H1. Consequently the results fail to reject the null hypothesis. Although facework has been proven to be an important concept within intercultural conflict research, for this specific research project the face negotiation
theory appears to be irrelevant. Similar to the HC/LC dimensions the face negotiation theory, initially formulated by Ting-Toomey (1988), therefore yields an important limitation. It can be concluded that the framework is not applicable in the context of instant messaging. This observation is notably adding to existing literature as it point towards a clear lack within in the facework theory. Still, equally it must be noted, that future studies need to investigate whether the discovered limitations of the face negotiation framework can be confirmed.

Though, the statistical analyses also have revealed some statistically significant correlations among facework factors and conflict factors, which are worthy to discuss in terms of theoretical implications. In fact these correlations demonstrate consistency with literature on face negotiation theory. Most of the tendencies towards using certain facework behavior and/or conflict management styles, due to cultural variability, are confirmed by the present results. Here the most outstanding correlations are observed among avoidance and procedural conflict scores, independent self and procedural conflict scores and lastly between integration and a variety of conflict factors. To begin with a negative correlation is observed between procedural conflict and avoiding facework. Procedural conflict perceived is characteristic for people from LC/individualistic cultures (Ting-Toomey, 1997). The same group of people has been found to tend using a direct and solution oriented conflict style, rather than an avoiding one (Chua & Gudykunst, 1987; Croucher et al., 2012). This is here confirmed by the negative association, which shows that with an increasing degree of perceived procedural conflict the score for avoidance is decreasing. These specific results thus appear consistent with theoretical implications.

In addition, for procedural conflict positive correlations with the independent self are observed. The independent self indicates independent self construal which has been determined to prevail in LC/individualistic cultures (Oetzel et al., 2001). Similarly the concern for procedural conflict rather than relational conflict has mostly been reported for people in LC communities (Ting-Toomey, 1997). Consequently the positive correlations indicated are in line with previous studies.

Lastly, some interesting correlations that are observed between integration and conflict scores are overall inconsistent. Different outcomes between conflict scores and integration are detected: On the one hand a positive correlation between relational conflict and integration as well as a negative correlation between procedural conflict and integration is found, while on the other hand a positive correlation between procedural conflict issues and integration has been detected. However it needs to be considered that authors of earlier works neither have agreed on findings regarding integrating conflict style. Hence it can be claimed that
inconsistency in current findings about integrating conflict style can be attributed to former inconsistencies in literature. By specifically taking into account the HC/LC dimensions some of the conducted studies showed evidence that LC cultures prefer integrating conflict style more than HC cultures (e.g., Chua & Gudykunst, 1987). Other works on the other hand report that the opposite is the case, namely that people in HC cultures prefer integration more than members of LC communities (e.g., Chroucher et al., 2012). Also in the context of self construal literatures suggest that integrating conflict style applies for both, people with interdependent self construal as well as people with interdependent self construal (Oetzel, 1998). So far it seems that integrating conflict style/facework has not been categorized into one or the other culture consistently, which may explains the contradicting outcomes in the present study and clearly needs further investigation.

In sum it can be stated though, that literature on avoiding conflict style and independent self construal are confirmed by the present results. While being in line with previous works, these results don’t add anything new to existing theory. Findings reported for an integrating conflict style moreover show the same inconsistency that already exists in literature. Thus the present study is not useful to add new findings to that matter. Still the majority of findings that are discussed in detail in the results chapter are in line with literature on facework, the influence of cultural dimensions on conflict style preferences, as well as personality traits and social values.

Moreover it is important to discuss the conflict measure that has been developed for the present research project. The instrument that has been created to measure conflict evolving during instant messaging among international students has been reported to be strongly reliable. As such the development of this measuring instrument adds significantly to existing literature, as it is an innovative scale that can be used for future studies. Researchers can hereby use the scale to address conflict within communicative situations in general, for research projects in the realm of intercultural conflict theory as well as on conflict management styles. However, further it needs to be examined whether the measurement scale can equally be applied to face-to-face communication, or if it is only applicable for computer-based-communication, as in the present study. Hereto additional studies are needed to be conducted in the future.

With regard to the measurements scales and their reliability one last issue needs to be addressed at this point. Although the facework and the HC/LC measures have been confirmed in previous works to constitute reliable scales, in the context of the present study both scales yield only moderate to low reliability. These results indicate a major irregularity indicating
that the current findings are not in line with what has been found in former works. In fact the low reliability of the two indicated measurement scales appears contradictory to established theory and therefore requires clarification. A possible explanation for that observation can be attributed to the sample that has resulted from this research project. In fact it has been noted, that although the sample represents a variety of different cultures, more than half of the total sample consists of Dutch and German students. The sample hence represents and uneven distribution of different nationalities on the HC/LC continuum. Germany and Netherlands are hereby recognized to be LC cultures (Hall, 1976). Therefore the sample of predominantly LC individuals is not only likely to have influenced the overall research outcome, but most probably also accounts for the rather low reliability estimates revealed for the HC/LC and the facework instrument. Hence it must be clarified in future research, whether a more evenly distributed sample, including a similar proportion of individuals from low and high context cultures would be more consistent with previous findings and reveal stronger reliability estimates.

5.3 Practical implications

The practical implications entail what the results mean for the international students in their academic life in practice. Generally it can be stated that with regard to the HC/LC dimensions, it is of no concern for international students whether to use implicit or explicit messages for communication via instant messaging, because no effect on the degree of perceived conflict has been detected. Still it must be noted, that the present conclusion is solely based on the current study, which is conducted referring to the HC/LC continuum to describe implicit and explicit messages. There is the possibility though, that other variables concerning implicit vs. explicit communication would influence the perceived degree of conflict in communication via instant messaging. Consequently it is advisable to address these concerns in future studies devoting research projects to communication effectiveness among international students via instant messaging. The topic generally is quite unexplored and hence leaves room for numerous investigations.

Similar implications result when regarding the concept of facework. In previous studies the framework of negotiating one’s face has been acknowledged to be of concern for international students. The acknowledgement and understanding of differing facework behavior/preferences in different cultures is reported to be essential for international students to generally avoid misunderstandings. Although the present study shows some correlations among the factors of facework and conflict the overall results suggest that facework is of no
concern for international students in instant messaging. While international students must be aware of negotiating face in face-to-face conversation it needs to be clarified in future studies whether they need to acknowledge facework during instant messaging, or if the results of the present study would be confirmed, indicating that no acknowledgement of facework is needed.

Overall it can be concluded that international students don’t need to be concerned about conflict evolving via instant messaging, regarding high vs. low context communication, neither must they pay attention to culturally varying facework preferences as no associations have been discovered.

5.4 Limitations

To conclude this paper, attention must be devoted to possible limitations that might have influenced the outcome of the present research project. In fact there are a number of things that could have impacted the results and that need to be discussed in terms of its generalizability to a greater population. First of all the sample generated in the study must be re-evaluated. For one, the sample consists of 70% female respondents while only 30% of the total participants are male. It appears evident that the distribution of gender is unbalanced, including a strong majority of female participants. As a consequence of this imbalance, a generalizability to a greater population results rather problematic. With a greater part of female respondents it appears that the results are foremost applicable to a female population. Hence it must be noted that with a wider range of disbursement, where male and female participants are similar in proportion, a different research outcome could be possible.

In addition, although the sample yields great cultural variability regarding the number of differing countries represented the majority of the participants are Dutch and German, while other nationalities are few in number. Here again a clear imbalance of nationalities becomes evident and is likely to have influenced the overall outcome. This becomes specifically relevant when considering the classification of HC/LC which ranges Germany and the Netherlands as mostly LC cultures as it has been addressed in the previous section. Hence it could be assumed that a more even distribution of various nationalities ranging from high to low on the context scale could have resulted in different findings.

With regard to the sample it can generally be claimed that with the choice of another target population, different than international students, the outcome could have been more homogeneous, and thus more reliable. Not only must the target population be considered at this point but also the choice for the whole research context. If another setting would have
been chosen, for example a big corporation, the findings might show different outcomes. It is possible that a similar study conducted in a working environment, investigating instant messaging among colleagues, would have had differing results and the HC/LC dimensions as well as face negotiation theory might be applied to instant messaging. However such assumptions constitute a great program for future research, with this study as a starting point.

Furthermore the design of the treatment can be considered to be somewhat problematic with regard to the formulation of the treatment messages. Although relevant literature on high/low context, hence to high/low sensitivity towards contextual information has been consulted prior to the formulation of the either implicit (HC) or explicit (LC) message, it can be claimed that the wording of the treatment messages is subjective. Another researcher might have chosen a different formulation of the messages which would have brought about different results.

Lastly it needs to be pointed out that the present research project is the first study that has been conducted applying Hall’s (1976) HC/LC dimensions and Ting-Toomey’s (1988) face negotiation theory together to the context of instant messaging. As such it is advised to conduct future studies that involve a similar research topic with regard to the use of theory and the context of instant messaging. This way the present findings could be tested for their validity and a more complete picture could be drawn. Overall it can be concluded though, that the present study constitutes a valuable starting point for future research in the field of intercultural communication and conflict theory applied to the realm of instant messaging, which generally has remained understudied to the present moment.
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The absence of nonverbal cues in instant messaging

http://dx.doi.org/10.1108/13527600110797218


The absence of nonverbal cues in instant messaging


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http://dx.doi.org/10.1111/j.1083-6101.2006.tb00313.x

Appendix A: Measuring instruments

1. High Context/Low Context
16-Items, 5-Factor Instrument

Social orientation:

- It is very important to me to understand my role as a member of a group
- My social status is an important part of my life
- It is rare for me to ignore the things going on around me.
- Being able to work in harmony with others is more important than doing the job well.
- In general it is more important to understand my place in society than to be famous, powerful, or wealthy.

Responsibility

- The final assessment of group-projects is the leader’s responsibility, even if group members make errors.
- It is wise to sacrifice one’s interest for the benefit of the organization he/she belongs to.

Confrontation

- I conform to social norms even when they conflict with my personal desires.
- Insults are not always important enough to bother about.
- It is unnecessary for people to raise questions about personal matters.

Communication/commitment

- Requesting people to explain agreements in detail to make sure they behave as promised is unusual and strange.
- People can only communicate clearly if ideas can put it into words.

Dealing with ambiguity
The absence of nonverbal cues in instant messaging

- Learning new ways to explain my point of view is usually unnecessary.
- I have difficulty communicating in new and unfamiliar situations with people I have never met before.
- I try to anticipate and avoid situations where I am uncertain about how to communicate with others.
- It is not necessary for people to explain everything to me in new situations

2. Facework

28-Items, 7-Factor Instrument

Independent

- It was important for me to be able to act as a free and independent person.
- I preferred to be self-reliant rather than depend on others.
- I tried not to depend on others.

Interdependent

- I respected the decisions made by the other person.
- I was sensitive to the wishes of the other person.
- My relationship with the other person is more important than winning the conflict.
- My satisfaction would depend on the satisfaction of the other person.
- I sacrificed my self-interest for the benefits of our relationship

Other-face

- I was concerned with maintaining the poise of the other person.
- Maintaining humbleness to preserve the relationship was important to me.
- Helping to maintain the other person’s pride was important to me.
- Maintaining peace in our interaction was important to me.
- I tried to be sensitive to the other person’s self-worth.
- I was concerned with helping the other person to maintain his/her credibility.

Self-face

- I was concerned with not bringing shame to myself.
- I was concerned with protecting my self-image.
I was concerned with not appearing weak in front of the other person.
I was concerned with protecting my personal pride.

Avoiding
I tried to ignore the conflict and behaved as if nothing happened.
I tried to pretend that the conflict didn’t happen.
I pretended as if the conflict didn’t exist.

Dominating
I tried to persuade the other person that my way was the best way.
I dominated the argument until the other person understood my position.
I insisted my position be accepted during the conflict.

Integrating
I tried to meet the other person halfway.
I tried to use “give and take’’ so that a compromise could be made.
I proposed a middle ground for breaking the deadlock.
I tried to find a middle course to resolve

3. Conflict
12-Items, 4-Factor Instrument

Relational conflict issues
self oriented
• The message makes me feel like I have personally caused a conflict
• The group is irritated with me as a group member
• The message makes me believe that there are conflicting emotions about me personally.

group oriented
• It is obvious that the group members do not like me
• The message is personally disrespectful and makes me upset
• The group has accused me of being useless
Procedural conflict issues:

self oriented

- There is a conflict about the work I have done
- The group is upset with my effort as a group member
- The group is frustrated with my performance

group oriented

- The group is rude and unfairly complaining about my work
- There is conflict about how the overall task should be accomplished
- There is an unresolved and emotional argument about how work is shared
Appendix B: Distributed Questionnaire

1.
You are invited to participate in a research about the absence of nonverbal cues in Instant Messaging. Your participation in this study will take approximately 10 minutes. You may discontinue your participation at any time.
The information must remain anonymous, therefore do not identify yourself in any way. Your individual privacy will be maintained in all published written data resulting from the study.

For questions about the study, please contact:
Valentina von Lutterotti
408517vl@student.eur.nl
Erasmus University Rotterdam

2. What is your gender?
☐ male
☐ female

3. What is your age range?
☐ 15-20
☐ 21-25
☐ 26-30

4. What is your nationality?
____________________

5. Situation
Think about the last group in which you participated for a group assignment/paper for one of your classes in University. Imagine you were to receive the following text message from a group member. Please read the message below and respond to the following questions about the message.

6. Message treatment 1 – low context (if applicable)
Every member had the same amount of work to do and we all agreed to it. All the others already send me their parts, but I got nothing from you. We don’t have much time anymore
and pressure is increasing. Now we have to cover your part, and it gives us extra work. We feel really disappointed in you, since you are the only one of the group who didn’t accomplish the task. You turned out to be unreliable and you just let us down. You don’t seem to care that you caused extra work for us.

7. Message treatment 2 – high context (if applicable)

Hi.

We will cover your part. Thank you so much for your effort.
See you in class.

8. Message treatment 3 – control group (if applicable)

Hi.

Do you have time to meet tomorrow at 12:00 in the library?
Please let us know.

9. Please indicate on a scale from 1 to 5 how much you agree with the following statements about the message.

1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

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<th>The message makes me feel like</th>
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<td>I have personally caused a conflict</td>
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<td>there are conflicting emotions about me personally.</td>
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<td>The message is personally disrespectful and makes me upset</td>
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<td>The group has accused me of being useless</td>
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<td>There is a conflict about the work I have done</td>
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<td>The group is upset with my effort as a group member</td>
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<td>The group is frustrated with my performance</td>
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The group is rude and unfairly complaining about my work
There is conflict about how the overall task should be accomplished
There is an unresolved and emotional argument about how work is shared

10. Please answer the following questions about your sensitivity to contextual information during communication activities.

Please indicate on a scale from 1 to 5 how much you agree on the following statements about social orientation.
1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

| It is very important to me to understand my role as a member of a group |
| My social status is an important part of my life |
| It is rare for me to ignore the things going on around me. |
| Being able to work in harmony with others is more important than doing the job well |
| In general it is more important to understand my place in society than to be famous, powerful, or wealthy |

Please indicate on a scale from 1 to 5 how much you agree on the following statements about responsibility.
1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

| The final assessment of group-projects is the leader’s responsibility, even if group members make errors |
| It is wise to sacrifice one’s interest for the benefit of the organization he/she belongs to |
Please indicate on a scale from 1 to 5 how much you agree on the following statements about confrontation.

1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

1  2  3  4  5

I conform to social norms even when they conflict with my personal desires

Insults are not always important enough to bother about

It is unnecessary for people to raise questions about personal matters

Please indicate on a scale from 1 to 5 how much you agree on the following statements about communication/commitment.

1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

1  2  3  4  5

Requesting people to explain agreements in detail to make sure they behave as promised is unusual and strange

People can only communicate clearly if ideas can put it into words

Please indicate on a scale from 1 to 5 how much you agree on the following statements about dealing with ambiguity.

1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

1  2  3  4  5

Learning new ways to explain my point of view is usually unnecessary

I have difficulty communicating in new and unfamiliar situations with people I have never met before

I try to anticipate and avoid situations where I am uncertain about how to communicate with others

It is not necessary for people to explain everything to me in new situations
11. Please answer the following questions about your behavior in conflict situations.

Please indicate on a scale from 1 to 5 how much you agree on the following statements about the independent self.

1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

1. It is important for me to be able to act as a free and independent person
2. I prefer to be self-reliant rather than depend on others
3. I try not to depend on others

Please indicate on a scale from 1 to 5 how much you agree on the following statements about the interdependent self.

1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

1. I respect the decisions made by other persons
2. I am sensitive to the wishes of other persons
3. My relationship with other persons is more important than winning a conflict.
4. My satisfaction would depend on the satisfaction of other persons
5. I sacrifice my self-interest for the benefits of a relationship

Please indicate on a scale from 1 to 5 how much you agree on the following statements about other-face.

1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

1. I am concerned with maintaining the poise of other persons
2. Maintaining humbleness to preserve a relationship is important to me
Helping to maintain other persons' pride is important to me.
Maintaining peace in an interaction is important to me
I try to be sensitive to other persons' self-worth.
I am concerned with helping other persons to maintain their credibility

Please indicate on a scale from 1 to 5 how much you agree on the following statements about self-face.
1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

I am concerned with not bringing shame to myself
I am concerned with protecting my self-image
I am concerned with not appearing weak in front of other persons
I am concerned with protecting my personal pride.

Please indicate on a scale from 1 to 5 how much you agree on the following statements about avoidance
1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

I try to ignore conflicts and behave as if nothing happened
I try to pretend that a conflict didn’t happen
I pretend as if a conflict didn’t exist

Please indicate on a scale from 1 to 5 how much you agree on the following statements about domination
1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

I try to persuade other persons that my way was the best way
I dominate the argument until the other person understands my position
I insist my position to be accepted during conflict

Please indicate on a scale from 1 to 5 how much you agree on the following statements about integration
1 = strongly disagree; 2 = disagree; 3 = neither agree, nor disagree; 4 = agree; 5 = strongly agree

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<tr>
<td>I try to meet other persons halfway</td>
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<td>I try to use “give and take” so that a compromise can be made.</td>
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<td>I propose a middle ground for breaking the deadlock</td>
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<td>I try to find a middle course to resolve</td>
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12. Thank you for participating in this survey. For further questions please contact:
408517v1@student.eur.nl
Appendix C: Tables for the statistical analyses

1. Descriptive Statistics

Table 1.1: Descriptive statistics - main variables of interest

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2. Factor analysis

Table 2: Control conflict overall: item loadings

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*Cronbach’s alpha*  

|               | .89 | .81 | .83 |

*r (p < .01)*

| Eigenvalue     | 6.18 | 1.61 | 1.14 |
3. Correlation analysis

Table 3.1: Correlation Treatment 1: HC/LC - Conflict; Facework - Conflict

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Significance: *p < .05, **p < .01
Table 3.2: Correlation Treatment 2: HC/LC - Conflict; Facework - Conflict

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Significance: *p < .05, **p < .01
Table 3.3: Correlation Control: HC/LC - Conflict ; Facework - Conflict

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Significance: *p < .05, **p < .01
4. Regression analysis

Table 4: OLS Regression of perceived degree of conflict

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