THE INFLUENCE OF CULTURE ON THE PRODUCTION AND PERCEPTION OF SILENT COMMUNICATION

A COMPARISON OF DUTCH AND SPANISH CULTURES

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Abstract

Cross-cultural differences in communication can lead to differences in the practice of nonverbal communication. Considering silence as an aspect of nonverbal communication, the aim of this study was to determine whether there would be differences between Dutch and Spanish people with respect to their use of silent communication when communicating with a superior. Four different functions of silence were distinguished: (1) silence to display emotions, (2) silence to disempower, (3) silence as a turn-taking principle, and (4) silence as a face-saving strategy. These functions were expected to relate to specific characteristics of several of Hall’s (1976) and Hofstede’s (1980; 1984) cultural dimensions on which Dutch and Spanish speakers were expected to differ, namely cultural context, individualism, and power distance. Individualism and power distance were found to be related to silence to display emotions. It was demonstrated that the Spanish sample was more collectivistic and that silence to display emotions was used more frequently by them than by the Dutch. Participants holding high power distance values were also found to make more use of this type of silence than those that were holding low power distance values. Silence as a face-saving strategy turned out to be somewhat related to individualism. Silence to disempower and silence as a turn-taking principle were not found to be related to cultural dimensions. The findings indicate that the cultural dimensions relevant to the present study are (marginally) related to some of the functions of silent communication. Yet, not all the expectations have been supported. A different research method might have led to other findings, considering the fact that the current data were collected by means of a self-reporting questionnaire. Moreover, alternate dimensions might also be related to the use of silence.

Introduction

People exchange information by means of verbal as well as nonverbal communication (Mehrabian, 1972). Mehrabian pointed out the importance of nonverbal communication by claiming that successful information transmission depends for 93 percent on nonverbal communication. Nonverbal communication serves as a comprehensive definition for communication consisting of many different types, of which body language, gestures, facial expressions, eye gaze, tone of voice, and physical appearance are several examples. Silence in communication can also be considered as nonverbal communication, as people are found to distinguish silent communication from verbal communication and attribute meanings to silence (Hasegawa & Gudykunst, 1998; Kivik, 1992).

Previous studies on silence in communication indicate that various communicative functions have been related to silent communication. The current study elaborates on four of these communicative functions. The first function serves the purpose of emotional display and tells us that humans are found to be able to express emotions through being silent (Schmitz, 1994). Secondly, silent communication serves the function of disempowerment (Gendron, 2011), and can be done by withholding information or ignoring relevant topics or discussions. Silence can also be used as a way to signal who ‘has the floor’, and in this way it fulfills the
objective to indicate who is to lead the conversation from here on (Wilson & Zimmerman, 1986; Maroni, Gnisci & Pontecorvo, 2008). Finally, through silent communication one can enable an effective method to leave certain things unsaid and therefore be face-saving (Ling, 2003), which means that some people prefer to use silent communication instead of speaking up. Since a conversation minimally consists of two interlocutors, the multidimensionality of verbal communication has been taken into account in the present study. The speaker’s perspective on silent communication is likely to differ from the listener’s perspective. As a result, for each of these communicative functions of silent communication the production (speaker) has been distinguished from the perception (listener). The use of silent communication is considered to depend on various determinants. Contextual and situational factors are believed to be of importance, as is culture.

Silence may be dealt with differently in different cultures. This can be assumed because how someone communicates or what someone thinks of communication depends partially on the culture (s)he is from. Both Hall (1976) and Hofstede (1980; 1984) distinguished various cultural dimensions to categorize countries based on their cultures. These cultural dimensions explain in general why members of a society behave a certain way, according to the values these members live by. Several of these dimensions can be related to a society’s communication style. In the current study Hall’s (1976) dimension of high-versus low-context (HC vs LC) and Hofstede’s (1980; 1984) dimensions of individualism (IND) and power distance (PD) are dimensions considered to affect a society’s communication style. As the cultural dimensions of HC vs LC, IND, and PD can be related to communication style, they may also be relevant in the context of silent communication. Specifically, Hall’s context-dimension is expected to be of influence on the production and perception of silence, since Gudykunst (2003, p. 84) mentions that nonverbal cues provide context to communication and, therefore, “are likely to be perceived by and have more meaning for people from HC cultures”. Moreover, the dimension of IND has been shown to be related to keeping silent instead of speaking up (Huang, 2005). Huang’s findings showed that members of collectivistic cultures are more likely to keep silent in some cases than members of individualistic cultures. These characteristics of cultures could result in intercultural differences with respect to usage of silent communication. Lastly, Hofstede’s dimension of PD is also shown to affect the use of nonverbal cues in communication as members from high PD cultures were shown to apply more nonverbal submissive behavior than members from low PD cultures. This leads to an expectation that PD also influences the use of silent communication. However, previous research has not yet shown a direct relation between PD and silent communication.
The small number of previous studies focusing on cultural differences in silence perception have mainly investigated differences among countries opposing on the dimension of HC versus LC, and to some extent IND. Findings of previous studies indicated that members of a HC and moderate collectivist culture (Japan) were found to use more silence than members of a LC and highly individualistic culture (American). It is currently unknown whether PD might be related to silent communication. This is important to know as, because of the world’s business globalization, large parts of business communication have become internationally oriented. International business communication is thus affected by cultural influences to perceive communication or communicate a certain way. The objective of the current thesis is, therefore, to contribute and extent the current knowledge regarding intercultural differences with respect to the use of silent communication in cultures opposing on the dimensions of cultural context and IND since previous studies focused only on Japan and the US. Another aim of the present study is to provide insights in intercultural differences with respect to the dimension of PD and whether this can be related to the use of silence in communication. Considering that the Dutch and Spanish cultures differ with regard to IND and PD (Hofstede Insights, 2019) and that their communication is typified by opposing characteristics of Hall’s contextual dimension, this raises the question whether people from the Netherlands and Spain differ from each other in the way in which they produce and perceive silence.

**Theoretical Framework**

**The nonverbal cue of silent communication**

Silence is an important aspect of our daily communication as it exists in (nearly) every conversation. Given that silence is so prominently present in our everyday life it is remarkable that there is not one single and conclusive definition. Generally, silence can be interpreted as being the absence of sound (Jensen, 1973) or the part of communication which lacks oral information transmission (Saville-Troike, 1995). However, the lack of oral information transmission does not mean that through silence one cannot communicate. By means of silence, one is still able to display emotions, to disempower, to indicate someone else’s turn, and to save face. In this study the focus is on silence in communication and its functions, as the objective is to discover cultural differences in the production or perception of silence. Therefore, the applied definition of silence in this study is *silent communication*. 
Functions of silence
The idea that a sender can convey a message to his or her conversation partner simply by means of silence might sound abstract. The meaninglessness that silence is sometimes considered to represent might be causing this misconception. However, depending on the situation, by means of silent communication people are able to convey various messages. To study silent communication, it is vital to determine its different functions.

A study regarding silence in general, distinguished 56 of its functions. In an attempt to discover reasons to apply silent communication, a pilot study with open-ended questions about silence in communication was conducted (Hasegawa & Gudykunst, 1998). This pilot study contained questions as “When do you use silence, interacting with [relationship]?” and “What different meanings do you convey when you are silent, interacting with [relationship]?” with relationship representing: “strangers, acquaintances, friends, close friends, and boy/girlfriends” (Hasegawa & Gudykunst, 1998, p. 672). The scholars questioned the use of silence in the context of different relationships to explore attitudes towards and uses of silence as far as possible. The pilot study led the scholars to identify 42 distinct functions of silent communication. Moreover, the examination of previous studies regarding silent communication resulted in the inclusion of 14 additional functions of silence. Because of the intention of their study, Hasegawa and Gudykunst (1998) attempted to examine the use of and the attitude toward silence, they ran an additional factor analysis. This analysis indicated that 34 functions loaded on five factors, namely silence to avoid communication, a negative view of silence, strategic use of silence, uncertainty due to others’ silence, and a positive view of talking. Hasegawa and Gudykunst (1998) used these factors to measure both the attitude towards and the use of silence among their participants. As these factors comprise more than just functions of silent communication they are disregarded in the present study. In the present study, four general functions of silent communication are considered and have been derived from previous literature.

A first function of silence is that it can be used as an indicator of certain emotions. Considering that emotions might not be verbally expressed by everybody with the same ease, silent communication can be a simple way to express them without having to wonder which words fit with the situation and the emotion. Important to recognize is that this type of silence is linked to certain situations. Expressing emotions verbally might be uncomplicated when communicating with a partner, relatives, or close friends. However, words that are pronounced rapidly without real consideration in the heat of the (emotional) moment are likely to be undesired during more formal conversations. Several studies focused on the use of silence to
display emotions. A study on silence in the workplace was carried out in order to reveal related causes and consequences (Kirrane, O'Shea, Buckley, Grazi & Prout, 2017). Kirrane et al. (2017) realized two studies that are relevant to the present study. Both contained experimental vignettes, questions that propose hypothetical situations to which participants must respond their perceptions. One study contained vignettes asking the participants to consider themselves positioned in one-on-one situations with a supervisor in which they had to remain silent. Then they were requested to rate their emotional reaction. The category of love (care, affection, and fondness) was found to be significantly related to prosocial silence, a type of silence executed with the intention to do someone else a favor. Fear and anger were the two emotions significantly related to defensive silence, a type of silence “caused by the fear of negative consequences of speaking up” (Kirrane et al., 2017, p. 356). Although these findings show that emotions are somehow related to silence, it could also be the case that these emotions are caused by the order to remain silent, as was put by the vignettes. In the other study, Kirrane et al. (2017) aimed to clarify the role of fear and anger as motivators for employees to either speak up or remain silent. This time, vignettes described an employee witnessing a transgression and experiencing varying levels of fear or anger (high vs low level). The participants indicated on a 4-point Likert scale whether they thought the transgression should lead to either remaining quiet, talking to a colleague, confronting transgressor, or talking to the manager. The results revealed anger to be negatively related to behavioral intentions to stay silent and positively to talking to a colleague, confronting a transgressor, and talking to a manager. This finding indicates that people are willing to express their anger silently to a certain extent. However, when the anger becomes too intense, an urge to express verbally arises. No such results were found for the emotion of fear. These mixed results seem to imply that silence as an indicator of emotions not only depends on the situation but also on which emotion is to be expressed. Regarding the difference between production and perception of silence, it must be said that this function of silent communication related to emotions is mainly relevant for the production of emotions. As someone is feeling his or her own emotions, (s)he might consider it wiser or less complicated to remain silent instead of speaking up. To perceive silent communication as a message from the sender about his or her current emotions without additional verbal information seems to be more complicated. It could be that emotions communicated silently are better perceived if the sender would also have a clear facial expression or body language. Very extreme emotions or personal relationships between sender and listener might facilitate the perceptibility of emotions as well without verbal communication. However, if these conditions are not present it seems likely that the listener can only speculate.
A second function of silence is that it can be applied in order to disempower (Gendron, 2011). Disempowering silence is likely to take place in situations of conflict and might relate to power and thus depends on the context. For instance, in a situation in which a CEO protects one of the senior board members who is being accused of inappropriate behavior. The CEO can remain silent when being asked by a subordinate to clarify the situation. By means of silence he covers up the rumor about his senior board member and makes clear that this is none of the subordinate’s business. Silent communication with the intention to disempower, executed by a significantly more powerful party, can be done by ignoring the addressed issues or offered resolutions, by refusing to answer questions or discuss, or by not providing sufficient information. Bies (2009) found silence to be a tool for managers in the workplace. This type of silence is called supervisory silence (Kilduff, Chiaburu & Menges, 2010) and gives supervisors the opportunity to keep their subordinates off balance and confused (Bies, 2009). Supervisory silence is said to have damaging effects on the trust levels between the different parties. Besides, disempowerment of the less powerful party can result in a rise in misunderstandings, rumors, and incorrect perceptions as silence obliges that party to fill in the missing pieces (Gendron, 2011). Considering the previously drawn situation in which the manager was disempowered by his director, it makes sense to believe that the manager’s trust levels in the CEO have decreased. As the manager is still unaware of the truth, he will continue filling up the gaps until someone else might be able to clarify the subject. Disempowering silence, therefore, seems to be mostly relevant to the production of silence as the more powerful party is able to apply this silence as a tool to maintain control and keep his or her unwitting subordinates at distance. The ambivalence of disempowering silence makes it complicated to assume its exact relevance to the perception of silence. The explained disadvantages are clearly relevant to the recipient, however, it must be said that personal characteristics may play a role in whether these disadvantages take place (Sommer, Williams, Ciarocco & Baumeister, 2001). Sommer et al. (2001) discovered that people with a low self-esteem, experience being subject to a silent treatment more frequently than those with a high self-esteem. Someone who is aware of being ostracized seems more likely to channel that awareness into something negative. Next to personal characteristics, contextual and situational factors are likely to be of importance on how silence to disempower is being perceived. It can make a difference to be disempowered as a group or alone. It is likely for disempowered groups to take it less personally than individuals would.

The third function of silent communication considered in the present study explains that by being silent one can signal who is to speak or take the turn. A turn-transition happens in
every communicative situation that consists of at least two people. To illustrate, person A starts
off with a conversation and as soon as person B interrupts or answers there was the first change
in turns. When a teacher names a student, who is to answer a question during classroom
interaction, the turn is being given verbally. However, the teacher could also have signaled the
turn by finishing the question, remaining silent and looking at the student(s) he wants to answer.
Although silence might not be as obvious and straightforward as a verbal indication, it is highly
likely to be functional. Turn taking is an important aspect regarding communicative silences,
which scholars have studied for some time already (Wilson & Zimmerman, 1986). According
to the *sequential-production model* (Sacks, Schegloff & Jefferson, 1974), “turn-taking occurs
at the point defined as the transition relevance place which is at the completion of a turn
constructional unit. Turn constructional units are characterized by syntactic, prosodic and
pragmatic aspects, that are interdependent when speaker-change occurs” (Maroni et al., 2008,
p. 60). Consequently, the concept of Complex Transition Relevance Place (CTRP) was
introduced by Ford and Thompson (1996). A mutual understanding of the CTRP leads to
perfectly synchronized turn transitions and is called ‘latching’ (Maroni et al., 2008). In turn,
when the CTRP is not shared, turn transitions will result in interruptions and overlaps. CTRP
can be developed by interaction with adults and must be shared by interlocutors for inter-turn
silence to be useful. Maroni et al. (2008) studied the rhythm of classroom interaction in Italy
and distinguished five different types of turn-taking principles, namely: latching, overlaps,
simultaneous starts, interruptions, and pauses. Latching and pauses are considered soft turn
transitions (shared CTRP) while the others remain non-soft (unshared CTRP). Latching
occurred most frequently, representing 51.9% of all recorded turn-transitions. The principles of
pauses and interruptions accounted for respectively 16.7% and 16.5% of all logged transitions.
This indicates that most of all recorded transitions occur due to a mutual understanding of inter-
turn silence, especially given the fact that interruptions were also partly based on silent
communication. A subdivision of the category of interruptions led to four different ones, among
which ‘silent interruption’. Silent interruption was defined as “absence of simultaneous
discourse; A experiences a difficulty or pauses and B takes the turn” (Maroni et al., 2008, p.
65), with A representing the teacher and B the child. Their results showed that teachers were
able to interrupt silently to give the turn to a child. These data are relevant to the present study
because they imply the importance of silence as a turn taking mechanism. The proportion of
soft turn transitions is of such an extent that it represents most of all recorded transitions. It
might as well be noteworthy to remember that this investigation studied classroom interaction
and a result, many children. However, the CTRP develops by communicating with adults,
which makes it likely to assume that adults would score even higher on latching turn transitions. Moreover, this function of silent communication is shown to be relevant to both production and perception. As the producer is able to apply silent communication to signal that the turn is to be taken by the next speaker, the listener is also able to interpret silence as an indication to take the turn.

The fourth function of silence is that by means of silent communication one can avoid losing face. This purpose originates from the possibility to leave certain things unsaid and, therefore, be face-saving (Ling, 2003). Face-saving in this case can be interpreted as a metaphor where ‘face’ stands for one’s opinion or point of view. Some people prefer to keep their opinion to themselves instead of facing the consequences of others knowing their opinion. Silent communication can thus be applied instead of showing a disagreeing opinion by speaking up. Schmitz (1994) stated that silence makes a successful indirect communicative method when dealing with relationships based on power because silence cannot be contradicted. For example, someone being afraid of the consequences of speaking up to his or her superior, might consider remaining silent as the solution to avoid these consequences. Relationships based on power can be encountered in many different environments, namely within politics, organizations, classrooms, sports teams, families, etcetera. However, silence in order to save face does not only occur due to differences based on power. It is also likely that cultural values are a reason to remain silent more often than speaking up, based on the consequences of speaking up. To Chinese people for example, mianzi is a very important concept that explains “the recognition by others of an individual’s social standing and position” (Buckley, Clegg & Tan, 2010, p. 167). In China, this function of silence would rather be to save mianzi. Because speaking up might be considered less important than saving mianzi, it seems fair to expect Chinese remain silent more often than people from cultures where speaking up is relatively more important. Silence can also be used in particular circumstances when the subject of the conversation is a taboo. As a taboo causes undesired feelings, especially to someone having a dissenting opinion, silent communication may be a solution to this person so (s)he will not lose face. This function of silent communication seems to be particularly relevant for production, as the speaker chooses for him- or herself whether to speak up and to show a dissenting opinion. This grants the speaker the possibility to balance the two options of either speaking up or remaining silent, based on the consequences. However, silence also be used in order to save somebody else’s face. Former American president Clinton’s policy, ‘Don’t Ask, Don’t Tell’, is an example of silence to save somebody else’s face. To avoid the ban on homosexuals in the military, this policy was introduced in 1993 to make a (silent) difference by letting them join the army without them
having to give up their sexuality, or losing their face (Alexander, 1994). By not asking applicants for their sexual orientation, the homosexual applicants’ orientation was silently saved. As a result, the homosexuals that were interested in joining the army reaped the benefits of silent communication. This demonstrates how silence to save face can also be very relevant to the side of perception.

Although these functions of silence are all ways to communicate something specific without verbal communication, they occur in the context of verbal communication. The context may vary for example with regard to the number of interlocutors, the personal distance towards other interlocutors, and the subject of the conversation. The context affects how silent communication is being produced and perceived. However, not only contextual factors are considered being of importance, given the fact that communication occurs throughout the world. Members of different cultures live by different norms and values so one would expect culture to be of influence on the use of silence as well. Especially when keeping in mind that the ways in which someone communicates verbally or perceives verbal communication are partly based on culture as well.

**Culture’s influence on communication**

Previous studies have shown that cultural dimensions are related to communication styles, indicating that cultures differ in their preference for specific aspects of communication. Most dimensions are believed to influence communication one way or another. The influence of a particular cultural dimension on communication differs per dimension. The focus in this study is put on dimensions which are expected to not only affect verbal communication but also non-verbal communication, as silence is considered an element of the latter. As a result, Hall’s (1976) dimension of high context (HC) versus low context (LC) and Hofstede’s (1980; 1984) dimensions of individualism (IND) and power distance (PD) are regarded of particular relevance, and therefore explained in more detail.

First, Hall’s (1976) context division indicates whether people of a certain society rather prefer to communicate directly or indirectly. HC cultures are defined as societies favoring implicit communication which rely heavily on contextual and nonverbal cues, unlike LC cultures which are found to communicate rather explicitly. Politeness is valued over honesty in HC cultures which leads to a tendency to soften a hurtful truth. Honesty is most important in LC cultures so regardless of its influence on someone else’s feelings, honesty is expected. Members from HC societies are used to reading between the lines to understand the true meaning of a message as speakers are not expected to literally say what they want or think.
However, in LC societies the speaker needs to ensure that what (s)he thinks and says are the same in order to have his or her listeners understand the message (Joyce, 2012). Several studies underpinned the influence of cultural context on communication (e.g. Margariti, Boutsouki & Hatzithomas, 2018).

Second, Hofstede’s (1980) dimension of IND implies the extent to which members of societies are either focusing on themselves and immediate family only (individualistic cultures) or relying on groups sharing the same values and goals (collectivistic cultures). These groups, on which collectivistic people rely, are called ingroups and can be described as societal entities ranging from the immediate family to religious or ethnic groups (Hui, 1998). The counterpart of ingroups are outgroups, consisting of people not belonging to those ingroups. To people from collectivistic cultures it is important to maintain harmony with the ingroup-members and not with the outgroup-members. The communication of collectivistic people differs, depending on the type of group to which the person they talk to belongs. No such trend was found for people holding individualistic values because they do not separate ingroups and outgroups likewise. Various studies found evidence for members of opposing cultures to communicate differently (e.g. Gudykunst & Nishida, 1986; Gudykunst, Yoon & Nishida, 1987).

Finally, the dimension of PD explains the extent to which unequal power distribution is accepted within societies (De Mooij & Hofstede, 2011) and distinguishes high PD cultures from low PD cultures. In high PD cultures, relationships between a boss and his or her subordinates are based on dependence. An opposing characteristic is typical for the same relationships in low PD cultures, as they are rather based on interdependence (Hofstede, 1984). Several scholars found members of opposing cultures regarding the dimension of PD to communicate differently (e.g. Bjørge, 2007; Madlock, 2012).

Based on the extent to which the introduced dimensions affect communication itself or communicative situations, the use of nonverbal cues in communication is also expected to be influenced by culture. As silent communication is considered a nonverbal cue, the following section explains the influence of these dimensions on silence.

**Culture’s influence on silent communication**

The expectation for culture to affect the use of nonverbal cues in communication makes it likely to assume that the use of silent communication might also be influenced by culture. First, previous findings regarding the influence of the dimensions of cultural context, IND, and PD on either nonverbal or silent communication are being outlined. Then, these dimensions will be linked to the four presented functions of silence.
The assumption that silent communication is applied differently among members of different cultures is supported by several scholars. Members of cultures differing on the dimension of HC versus LC were found to have a different view towards silent communication. As mentioned earlier, Hasegawa and Gudykunst (1998) studied attitudes towards and the use of silence in Japan and the United States. Intercultural differences were expected as they considered Japan a HC culture and the US a LC culture. In their questionnaire they included one question which asked the participant to rate the following statement: “I rarely use silence in conversations” (Hasegawa & Gudykunst, 1998, p. 677). Americans were found to rate this statement significantly higher, indicating that the Japanese participants reported using more silence in their conversations than the Americans.

This finding supports the claim that silent communication can be interpreted as a nonverbal cue. The empirical evidence that Hasegawa and Gudykunst (1998) found is in line with characteristics of HC and LC cultures, stating that members from HC cultures use more nonverbal cues than members from LC cultures. As a result, the first hypothesis of the present study is:

**H1:** Participants with HC values are expected to use more silent communication than participants with LC values.

In addition, Hasegawa and Gudykunst (1998) also studied whether the same Japanese and American participants differed in a possible negative view towards silent communication within conversations with either strangers (outgroup) or close friends (ingroup). They conducted two versions of the questionnaire, one asked participants to rate items regarding silence in communication with outgroup-members and the other questioned silence in communication with ingroup-members. Their intention was to measure intercultural differences regarding the attitude towards silence in communication with either members of ingroups or outgroups. A negative view towards silence was determined by seven items in their questionnaire, of which “I do not like silence in conversation with strangers” is an example (Hasegawa & Gudykunst, 1998, p. 674). Japanese and American participants differed significantly in their negative view towards silence in communication with strangers, as Japanese were more negative than the Americans. No such difference between the two cultures was found for a negative view towards silence in communication with close friends. Moreover, among the Japanese participants, a significant difference was found between their negative view towards silence in communication with strangers and silence in communication with close friends, but no such difference was
found for the negative view of the American participants. These results show intercultural differences with regard to both the production and perception of silent communication in conversations with members of ingroups and outgroups. The Japanese were shown to be more positive towards silence with ingroup-members than with outgroup-members. This positive attitude could originate from the urge to maintain group harmony. Speaking up could lead to uncertain consequences, something that seems to be rather avoided by the Japanese participants. The distinction between ingroups and outgroups has been found to be of importance for members of collectivistic cultures (Gudykunst et al., 1987; Triandis, 1988), which makes the previous findings relevant for a potential influence of the dimension of IND on silent communication. Although the scholars only made a distinction between the countries regarding the dimension of HC versus LC, a distinction with respect to IND could also be made. There is a large difference between the US and Japan on Hofstede’s IND scale (which ranges from 0 to 100, with 0 meaning extremely collectivistic and 100 extremely individualistic), as the US score 91 and Japan 46 (Hofstede Insights, 2019).

Members of collectivistic cultures are expected to remain silent more often than members of individualistic cultures. This expectation is based on the possible consequences that speaking up might entail with regard to the group harmony. The dimension of IND leads us to three hypotheses regarding silence as an indicator of emotions, silence as a turn-taking principle and silence to save-face.

Silence as an indicator of emotions is expected to be used differently as the consequences of verbally expressing emotions often remain uncertain. The consequences depend on whether the listener is on the same wavelength regarding the subject and the emotion of the speaker. In the case of both interlocutors being on the same page and sharing the same emotion, it could lead to an enhanced group-harmony. However, if emotions are verbally expressed and both parties disagree on the matter it probably leads to disharmony. Given the uncertain consequences of speaking up, it is considered that emotions are rather conveyed by messages of silent communication by members of collectivistic cultures.

**H2a:** *Silent communication to display emotions is used more often in communication by participants with collectivistic values than by participants with individualistic values.*

With regard to turn-taking principles, the effects of soft versus non-soft transitions are being compared. Silence and pauses are considered soft transitions, which in turn lead to synchronized communication. Group harmony is believed to be rather strengthened by soft
transition than by non-soft transitions, as the latter leads to interruptions and overlaps. For this reason, members of collectivistic are expected to make more use of silent communication to indicate a change in turns.

**H2b:** *Silent communication as a way to signal who is the next speaker is used more often by participants with collectivistic values than by participants with individualistic values.*

Given the nature of silence to save-face, to leave one’s opinion unsaid, it is believed that members of collectivistic cultures rather use this type of silence than members of individualistic cultures. Again, this hypothesis is based on the considered consequences that speaking up might entail.

**H2c:** *Silent communication to save face is used more often by participants with collectivistic values than by participants with individualistic values.*

The dimension of PD has not previously been linked explicitly to the use of silent communication. However, there are some scholars that make PD seem relevant to the production of nonverbal cues in communication. Mui, Goudbeek, Swerts and Wijst (2013) found participants of opposing PD cultures to differ with regard to the display of nonverbal cues. They distinguished five different types of nonverbal behaviors, namely affiliation, flight, displacement, assertion, and submission. Mui et al. (2013) conducted a study among Dutch (low PD) and Chinese (high PD) participants and analyzed video recordings of a controlled setting. The video recordings were taken while the participants played a computer game against either a professor or an undergraduate first-year student. Results of the analyses showed that members of a high PD culture appeared to be significantly more submissive in their nonverbal cues towards someone with more authority than themselves (the professor) as they were towards someone equally or lower in regard to the hierarchy (first-year student). The Dutch participants seemed to be equally non-submissive, in line with the expectation that people from low PD cultures are less sensitive to power differences. No differences were found for the other nonverbal cue-categories. Although this finding only indicates a minimal relationship between the dimension of PD and nonverbal cues in general, there might still be a reason for which to expect that PD affects silent communication. Silence is found to be possibly applied as a result of subordination and “occurs when a person or group feels unable to voice their opinions or knowledge for fear of retribution” (Pang, 1996, p. 185). It is also more likely for retribution to
occur more often in high PD cultures than in low PD cultures because solely the subordinate depends on his or her manager and not vice versa. As low PD cultures are characterized by interdependence between subordinate and manager, punishment and retribution seem counterproductive.

The difference between high and low PD cultures with regard to personal relationships is based on either dependence or interdependence. It is expected for people from high PD cultures to use silent communication more frequently than members of low PD cultures. The dimension of PD is expected to affect all four of silence’s considered functions and therefore results in four hypotheses.

Verbal expression of emotions might elucidate that interlocutors are not on the same page. When members of low PD cultures consider that verbally expressing their emotions could lead to harmful consequences, they are expected to remain silent instead. By means of silent communication, the emotions of the subordinate can remain unknown to his or her manager and will therefore less likely lead to unwanted outcomes.

**H3a:**  *Silent communication to display emotions is used more often in communication by participants with high PD values than by participants with low PD values.*

The extent to which unequal distribution of power is accepted within a society is believed to affect the use of silence to disempower. As in high PD cultures, an unequal distribution is generally accepted, silence to disempower is also expected to be present to a greater extent in these cultures.

**H3b:**  *Silent communication to disempower is used more often by participants with high PD values than by participants with low PD values.*

The difference between non-soft and soft turn transitions is expected to lead to different uses of silence as a turn taking principle between members of high and low PD cultures. As non-soft transitions lead to interruptions, they can have an adverse effect on the quality of the communication. Soft-turn transitions, to which silence belongs, are said to result in perfectly synchronized communication. This is expected to be beneficial for subordinates in high PD cultures that depend on their interlocutor.
**H3c:** Silent communication as a way to signal who is the next speaker is used more often by participants with high PD values than by participants with low PD values.

Lastly, silence to save face can be used to avoid the interlocutor to understand your true belief about something. This again can be advantageous in relationships that are based on dependence because an unwanted belief might possibly lead to unwanted results.

**H3d:** Silent communication to save face is used more often by participants with high PD values than by participants with low PD values.

**Present study**

During communication, nonverbal cues are shown to be of great importance for successful information transmission (Mehrabian, 1972). Silent communication is considered an important component of those nonverbal cues, keeping in mind that many communicative functions have been attributed to silence (Schmitz, 1994). In the present study, silent communication is considered to serve four functions: silence as an indicator of emotions, silence to disempower, silence as a turn-taking principle, and silence to save-face. Culture, in turn, has been shown to affect the way in which its members communicate. In the present study the focus is put on three cultural dimensions in particular, being Hall’s (1976) HC versus LC, and Hofstede’s (1980; 1984) IND and PD. People from cultures opposing on the dimensions of HC versus LC, IND and PD have been shown to communicate differently and, therefore, are expected to also use silent communication differently.

It is worth pointing out that a communication style may relate more to the interlocutor’s personal values and beliefs than to his or her country’s score on cultural dimensions (Gudykunst et al., 1996). Keeping in mind that most studies relevant to the present study have primarily investigated differences between the US and Japan, it must be said that these results are not necessarily generalizable to other countries that score similarly to these countries on relevant cultural dimensions. Therefore, in the present study, apart from analyzing differences based on country of origin, also the participants’ personal values and beliefs will be studied in the context of the dimensions of HC versus LC, IND, and PD. In this way a potential relationship between silent communication and somebody’s personal beliefs can be determined.

The few studies that exist on silent communication have underpinned the existence of intercultural differences with regard to the use of silent communication. However, most of these studies only investigated differences between the US and Japan. These results, therefore, are
not necessarily generalizable to the dimensions of HC versus LC and IND in general. In addition, although plausible, a direct link between the dimension of PD and silent communication has not been studied yet. The current study aims to see if there are intercultural differences between countries where the application of silent communication has not yet been studied and to discover a potential relation between PD and silent communication.

Methodology

Considering the relevance of the study and method of Hasegawa and Gudykunst (1998), the current method built on their approach. Some of their items regarding the use of silence were used in order to survey the considered functions of silent communication. The goal was to have each of the considered functions represented by at least two of the items from Hasegawa and Gudykunst (1998). A survey served as a means to collect suitable data regarding the 19 hypotheses. This research method was chosen due to its suitability for both studying large numbers of people and many characteristics.

Instruments

As the aim of the present study was to find intercultural differences with regard to silence’s four functions, four predictor variables were included. These were country of origin (Dutch vs Spanish), cultural context (HC vs LC), IND (individualistic vs collectivistic), and PD (high PD vs low PD). As individual values and beliefs can also be considered predictors of communication (Gudykunst, 1996), the cultural dimensions were not only based on country of origin but were also surveyed on an individual level. Per cultural dimension several questions were included to discover if certain cultural values could be related to silent communication (see appendices A and B for an overview of all items). The participants had to rate all items on a seven-point Likert-scale (1 = completely agree, 7 = completely disagree).

The first predictor variable, country of origin, was designed to distinguish the Dutch from the Spanish participants. The intention of this division was to have two opposing groups with regard to the cultural dimensions. It was expected for Dutch participants to represent one set of cultural dimensions (LC, individualistic, low PD) and for the Spanish to stand for the opposing (HC, collectivistic, high PD). Four items, which were derived from a study by Warner-Sőderholm (2013), were included in the questionnaire to examine whether there would be a difference in regard to the dimension of cultural context (HC vs LC) among the participants, “In our region we value honesty in meetings and discussions” and “In our region,
we believe that maintaining harmony and a positive tone in a meeting is more important than speaking honestly” are examples of the items (Warner-Søderholm, 2013, p. 30-31). The reliability of the dimension of cultural context, consisting of four items, was shown to be acceptable: α = .70. To determine whether there would be cultural differences among the participants with respect to the dimension of IND, six questions were included. The six items that covered this cultural dimension were derived from a framework to measure cultural dimensions at the individual level, designed by Yoo, Donthu and Lenartowicz (2011). An example of one of the items is: “Individuals should sacrifice self-interest for the group” (Yoo et al., 2011, p. 210). The reliability of the dimension of IND comprising six items was acceptable: α = .76. Five items were included in the questionnaire to determine the extent to which participants held either high or low power distance values. These items were also derived from the framework of Yoo et al. (2011). One of the items was: “People in higher positions should not delegate important tasks to people in lower positions” (Yoo et al., 2011, p. 210). The reliability of the dimension of PD, containing five items, was acceptable: α = .71.

To measure intercultural differences with regard to silent communication, the present study had five independent variables. Apart from the four functions of silence, the use of silent communication in general was also measured. Each of these variables was expected to be related to at least one of the predictor variables. The use of silent communication in general was measured by means of the same item as the one used by Hasegawa and Gudykunst: “I rarely use silence in conversations.” (1998, p. 677). This was an item purely intended to measure differences in the use of silence among the participants. This item was considered applicable, even by self-reporting participants, as it supported the expectations based on cultural context (Hasegawa & Gudykunst, 1998). The other dependent variables, the four considered functions of silence, were being questioned by items from the survey of Hasegawa and Gudykunst (1998). Six items were found to cover the first function of silent communication, silence to display emotions (e.g. “I use silence to tell … that I am preoccupied.” (Hasegawa & Gudykunst, 1998, p. 675). The scale questioning silence to display emotions comprising six items was found to be reliable to a moderate degree: α = .62. Silence to disempower was found to be covered by two items, namely “I convey power when I am silent with…” and “I am silent when I do not want to talk to…” The scale measuring silence to disempower, consisting of two items, was not reliable: α = .12. Silence to indicate someone else’s turn was measured by two items: “I try to talk when … are silent”, and “I use silence to tell … to talk to me.” The scale, consisting of two items, measuring silence as a turn-taking principle was not reliable: α = .20. Finally, silence in order to be face-saving was measured by three items (e.g. “I use silence to avoid upsetting …”).
This scale, comprising three items, was also not reliable: $\alpha = .31$. Given the low reliability score for silence to disempower, silence as a turn-taking principle, and silence to save face, the analyses with regard to the relevant hypotheses have been carried out on an individual item level.

The survey contained a total of 29 items, of which 15 questioned the predictor variables and 14 the dependent variables. The dependent variables were all questioned in the context of communication with a supervisor. A supervisor was considered to elicit different responses among members of opposing cultures with regard to IND and PD. A supervisor is not just the participant’s superior as (s)he is also the participant’s colleague. This makes it likely for the supervisor and the participant to have shared goals and interests, given that they both work for the same company. As a result, it is believed for supervisors to rather belong to the participant’s in-group instead of the out-group. Given the fact that a supervisor normally has a higher authority than the participants, those participants holding high PD values are expected to respond differently than those holding low PD values. An overview of all 29 items can be found in appendices A and B.

**Respondents**

The participants were either Dutch or Spanish as the Netherlands and Spain are countries characterized by opposing cultural values regarding the three dimensions relevant to this study. The Dutch sample consisted of 66 participants, 30 of whom were male (45.5%). Their ages ranged between 19 and 80, with 32 years being the mean age. The Spanish sample was slightly larger with 77 participants and slightly less diverse, as only 22 among them was male (28.6%). The mean age for the Spanish participants was 33 years and ranged between 18 and 63. The highest level of education was questioned among all participants and seemed to lead to corresponding results, as most participants among both cultures reported having had scientific education. As education is organized differently within those cultures, different answer options were enabled for both cultures. Of the 77 Spanish participants, 56 reported having had scientific education, five did medium-grade vocational learning, twelve received their bachillerato (a two-year lasting education, an entry requirement for universities), and four only had compulsory secondary education. Among the Dutch participant, 45 people indicated having had scientific education, 16 addressed higher professional education, four mentioned secondary vocational education, and only one person reported compulsory secondary education. The current work situation was also considered important, given that the questionnaire asked participants to rate communication with a superior. Therefore, the participants were asked whether they were
employed, unemployed, or retired. A Chi-square test showed no significant relation between country and work situation ($X^2 (2) = 3.18, p = .204$). Both samples were shown to have somewhat equal amount of employed, unemployed, or retired people. The Dutch sample consisted of 53 employed, 11 unemployed, and 2 retired participants. In turn, there were 54 employed, 22 unemployed participants among the Spanish sample, one of them was retired.

**Procedure**

The participants filled in an online version of the questionnaire via the program Qualtrics. As the survey was conducted among both Dutch and Spanish participants, it was translated and checked by native speakers of the respective languages. At first, the respondents were asked to answer several demographic questions before their individual values with respect to the cultural dimensions were being measured. This was done so that in case of having no cultural differences between the two countries, the participants could still be compared but then on the cultural dimension level and not on country level. Secondly, to provide insights in the usage of silent communication among the participants, they were provided with the items regarding the considered functions of silent communication.

**Statistical treatment**

To discover whether both the assumptions regarding the cultural variety among the samples as well as all the hypotheses would be supported by the data, multiple independent samples t-tests were carried out. The aim was to compare the Dutch and Spanish sample and to have two samples differing significantly on all three cultural dimensions. Because these samples did not differ significantly regarding the dimension of PD, an additional division among the participants was made regardless of the country of origin: high versus low PD. As there were always two independent groups to be compared, either Dutch versus Spanish or HPD versus LPD, the independent samples t-test was considered a sufficient analysis.

**Results**

**Cultural dimensions**

At first, the Spanish and Dutch participants were compared regarding their scores on the scales of the three cultural dimensions. For each of the cultural dimensions an independent samples t-test was carried out. Means and standard deviations can be found in Table 1 below. An independent samples t-test showed a significant difference between Spanish and Dutch
participants with regard to the dimension of cultural context \((t (141) = 5.94, p < .001)\). The Spanish participants \((M = 3.10, SD = 1.09)\) were shown to have more high context values than the Dutch participants \((M = 2.22, SD = .76)\). A second independent samples t-test showed a significant difference between Spanish and Dutch participants with regard to the dimension of IND \((t (141) = 3.29, p = .001)\). The Spanish participants \((M = 3.27, SD = 1.04)\) were shown to be more collectivistic than the Dutch participants \((M = 3.79, SD = .84)\). No significant results were found with regard to the dimension of PD \((p = .721)\), which was the reason for an additional division of a high PD sample versus a low PD sample.

Both Dutch and Spanish participants were shown to hold low PD values, as the mean scores for both the Spanish and Dutch participants were very high, as can be seen in Table 1. In order to create 2 comparable samples, all scores fairly lower (ranging between 1 and 4.994, \(n = 23\)) than the mean scores of both cultures were considered the high power distance sample (HPD) and all extremely high scores (ranging between 5.995 and 7, \(n = 77\)) were considered the low power distance (LPD) sample. Scores ranging between 4.995 and 5.994 were left out of this analysis in order to get two groups differing sufficiently from each other. Given the fact that both Spanish as well as Dutch participants have very high mean scores on the dimension of PD, only the most extreme scores have been taken into account with regard to the analyses concerning power distance.

<table>
<thead>
<tr>
<th></th>
<th>Spanish</th>
<th></th>
<th>Dutch</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural context</td>
<td>3.09</td>
<td>1.09</td>
<td>2.22</td>
<td>0.76</td>
</tr>
<tr>
<td>Individualism</td>
<td>3.23</td>
<td>1.04</td>
<td>3.79</td>
<td>0.84</td>
</tr>
<tr>
<td>Power distance</td>
<td>5.86</td>
<td>0.84</td>
<td>5.81</td>
<td>0.86</td>
</tr>
</tbody>
</table>

**Silent communication in general**

To see whether the Spanish made more use of silence in their communication in general than the Dutch (H1), an independent samples t-test was run but showed no significant results \((t (141) = .93, p = .356)\). As the expectation was for the Spanish to use silent communication more often than the Dutch, hypothesis 1 was rejected.

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1. A higher mean score on the cultural context scale means a tendency towards high context values
2. A higher mean score on the individualism scale means a tendency towards individualistic values
3. A higher mean score on the power distance scale means a tendency towards low power distance values
Silent communication to display emotions

Hypothesis 2a, which expected more use of silence to display emotions among participants with collectivistic values than participants with individualistic values, was supported. An independent samples t-test showed a significant difference between Spanish and Dutch participants with regard to silence to display emotions (t (141) = 2.17, p = .032). Spanish participants were shown to make more use of silence to display emotions (M = 4.45, SD = .86) than the Dutch participants (M = 4.77, SD = .92), see Table 2.

Hypothesis 3a, assuming that people with high PD values use silence to display emotions more than people with low PD values was also supported. An independent samples t-test showed a significant difference between the HPD group and the LPD group (t (98) = 2.30, p = .024) with regard to the use of silence to display emotions. The HPD group (M = 4.25, SD = .92) used more silence to display emotions than the LPD group (M = 4.76, SD = .93), see Table 2.

Silent communication to disempower

In order to find out whether people holding HPD values use more silence to disempower than those holding LPD values (H3b), an independent samples t-test was carried out with the HPD and LPD groups as samples. Considering the low reliability for the scale, consisting of two items representing silence to disempower, both samples were compared on the individual item level. As this division did not lead to significant findings, hypothesis 3b was rejected. The independent samples t-test showed no significant difference between the HPD and LPD for the first item (‘I convey power when I am silent with my supervisor’) (t (98) = 1.14, p = .258). The independent samples t-test also found no significant difference for the second item (‘I am silent when I do not want to talk to my supervisor’) (t (98) = 1.09, p = .278).

Silent communication as a turn-taking principle

An independent samples t-test was carried out with the Spanish and Dutch participants as samples, to find out whether participants with collectivistic values made more use of silence as turn-taking principle than those holding individualistic values (H2b). This hypothesis was rejected. The tests were run on an individual item level due to a low reliability score of the scale, consisting of two items representing this type of silence. The independent samples t-test found no significant difference between the Dutch and Spanish with regard to the first item (‘I try to talk when my supervisor is silent’) (t (141) = 1.27, p = .25 .208. Also, no significant
difference was found between the two samples with regard to the second item (‘I use silence to tell my supervisor to talk to me’) (t(141) = 0.65, p = .520).

Hypothesis 3c, assuming the HPD sample to make more use of silence as a turn-taking principle than the LPD sample, was also not supported. Considering the low reliability score that the items which question silence to disempower hold, these analyses were again run on an individual item level. There was no significant difference between the two samples with regard to the first item (‘I try to talk when my supervisor is silent’) (t(98) = 0.40, p = .694). There was also no significant difference between the two samples with regard to the second item (‘I use silence to tell my supervisor to talk to me’) (t(98) = 1.29, p = .200).

Table 2. Means and standard deviations for Spanish (n = 77) and Dutch (n = 66), as well as HPD (n = 23) and LPD (n = 77) samples for the variable of silence in general, silence to display emotions and the individual items of silence to disempower, silence as turn-taking principle, and silence as face-saving strategy.4

<table>
<thead>
<tr>
<th></th>
<th>Spanish M (SD)</th>
<th>Dutch M (SD)</th>
<th>HPD M (SD)</th>
<th>LPD M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Silence in general</strong></td>
<td>3.87 (1.59)</td>
<td>4.12 (1.64)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Silence to display emotions</strong></td>
<td>4.45 (0.86)</td>
<td>4.77 (0.92)</td>
<td>4.25 (0.92)</td>
<td>4.76 (0.93)</td>
</tr>
<tr>
<td><strong>Silence to disempower</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I convey power when I am silent with my supervisor</td>
<td>-</td>
<td>-</td>
<td>3.78 (1.70)</td>
<td>4.22 (1.60)</td>
</tr>
<tr>
<td>I am silent when I do not want to talk to my supervisor</td>
<td>-</td>
<td>-</td>
<td>2.83 (1.47)</td>
<td>3.25 (1.66)</td>
</tr>
<tr>
<td><strong>Silence as turn-taking principle</strong></td>
<td>3.32 (1.49)</td>
<td>3.03 (1.25)</td>
<td>3.09 (1.28)</td>
<td>3.22 (1.47)</td>
</tr>
<tr>
<td>I try to talk when my supervisor is silent</td>
<td>4.70 (1.70)</td>
<td>4.52 (1.74)</td>
<td>4.22 (1.86)</td>
<td>4.77 (1.77)</td>
</tr>
<tr>
<td>I use silence to tell my supervisor to talk to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Silence to save face</strong></td>
<td>4.26 (1.71)</td>
<td>5.00 (1.54)</td>
<td>4.13 (1.82)</td>
<td>4.84 (1.74)</td>
</tr>
<tr>
<td>I use silence to avoid upsetting my supervisor</td>
<td>4.04 (1.96)</td>
<td>3.56 (1.61)</td>
<td>3.35 (1.61)</td>
<td>3.92 (1.86)</td>
</tr>
<tr>
<td>I am silent when I have something I should not say to my supervisor</td>
<td>5.22 (1.56)</td>
<td>4.32 (1.72)</td>
<td>4.43 (1.83)</td>
<td>5.09 (1.64)</td>
</tr>
<tr>
<td>I use silence in communicating with my supervisor to imply my opinion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 An English translation of the items is being displayed in Table 2. The original ones can be found in Appendices A and B.

5 A higher score for silence in general indicates more use of silence

6 A higher score for silence to display emotions means less silence to display emotions

7 A higher score for the items regarding silence to disempower means less use of silence to disempower

8 A higher score for the items regarding silence as a turn-taking principle means less use of silence to as turn-taking principle

9 A higher score for the items regarding silence to save face means less use of silence to save face
Silent communication to save face

According to hypothesis 2c, silence to save face was believed to be used more by participants with collectivistic values than by those holding individualistic values. This hypothesis was found to be partially supported. Again, independent samples t-tests were run on the individual item level. There was a significant difference between the Spanish and the Dutch samples with regard to the first item (‘I use silence to avoid upsetting my supervisor’) (t (141) = 2.71, p = .008). The Spanish participants were found to make more use of silence to not disturb their supervisor (M = 4.26, SD = 1.71) than the Dutch (M = 5.00, SD = 1.54). No significant difference was found with regard to the second item (‘I am silent when I have something I should not say to my supervisor’) (t (141) = 1.60, p = .111). There was a significant difference between the two samples with regard to the third item (‘I use silence in communicating with my supervisor to imply my opinion’) (t (141) = 3.29, p = .001). The Spanish participants were found to use silence to imply their opinion when speaking to their supervisors less (M = 5.22, SD = 1.56) than the Dutch participants (M = 4.32, SD = 1.72).

Hypothesis 3d expected participants holding HPD values to use more silence as face-saving strategy than those holding LPD values. This hypothesis was rejected. Independent samples t-tests were run on the individual item level again, because of the low reliability scores. No significant difference between the HPD and LPD sample were found with regard to the first item (‘I use silence to avoid upsetting my supervisor’) (t (98) = 1.71, p = .091). There was also no significant difference between HPD and LPD with regard to the second item (‘I am silent when I have something I should not say to my supervisor’) (t (98) = 1.34, p = .185). Again, no significant difference between HPD and LPD was found with regard to the third item (‘I use silence in communicating with my supervisor to imply my opinion’) (t (98) = 1.64, p = 104).

Conclusion and discussion

Cultural dimensions

The aim of the present study was to find intercultural differences between the Netherlands and Spain with regard to their use of silent communication. In order to determine whether these two countries really differ from each other regarding the considered cultural dimensions, the Spanish and Dutch samples were compared on the constructs of three cultural dimensions: cultural context, IND, and PD.

In line with the expectations, the Dutch participants were found to hold more low context values than the Spanish participants. This means that they favor explicit communication
for the purpose of honesty more than the Spanish do, given the characteristics that Hall (1976) attributed to low context cultures. However, regardless of the fact that the Spanish and Dutch participants differed significantly on the scale of cultural context, the Spanish themselves also hold more low-context than high-context values, considering the mean score of the Spanish participants (see Table 1).

The two samples were also found to hold different values with regard to Hofstede’s dimension of IND, which leads to the confirmed assumption for the Spanish to be more collectivistic than the Dutch. This suggests that the Dutch participants have a greater focus on themselves, considering their individualistic values. Consequently, the Spanish are believed to rely more on groups that share the same values and goals, the ingroups. Colleagues that work for and represent the same company are likely to share values and goals and thus form an ingroup. As a superior is a colleague as well, (s)he can be considered a member of the participants’ ingroup. Given that relationships between ingroup-members are more devoted within collectivistic cultures (Triandis, 1988) and that the ingroup’s harmony is to be maintained, the Spanish are believed to communicate more silently with their supervisor than the Dutch.

The scores with regard to the dimension of PD were surprising, as both samples scored equally high on this construct (see Table 1). Consequently, the participants of both cultures hold LPD values, something which was expected only for the Dutch to be the case. A reason for similar PD mean scores among both samples might be that Hofstede’s PD scores are not extremely dissimilar (i.e. not one of both countries holds a very extreme score on a scale of 1-100). Both Spain (57) and the Netherlands (38) score moderately on the scale.

Considering the mean scores (see Table 1), we might conclude that cultural assimilation has possibly taken place among the samples of the present study. Many cultural behaviors and beliefs are being intertwined due to, for example, the globalization of businesses and social media. To have the participants questioned their personal beliefs with regard to the dimensions seems beneficial, as the differences between the samples were proven to not be that large as the scholars expected. In this way, a realistic understanding of the values and beliefs among the participants could be given.

**Silent communication in general**

The first hypothesis stated that the Spanish would use silent communication in general more often than the Dutch. However, no significant differences were found. A possible explanation for why the findings are not in line with the expectations is because in the present study Spain
and the Netherlands were distinguished based on the cultural context dimension of Hall (1976). Although the Spanish and Dutch sample were found to differ significantly from each other, which led to the conclusion that the Spanish sample holds high context values and the Dutch one low context values, it is important to keep in mind that the mean score of the Spanish sample still tended more towards low- than high-context values.

**Silent communication to display emotions**

As the Spanish sample was shown to make more use of silence to display emotions than the Dutch sample, hypothesis 2a was supported. As a result, we may conclude that the Dutch participants (individualistic) indeed do not hesitate with regard to the display of their emotions. This conclusion is in line with the characteristic of members of individualistic cultures, which tells that they are mostly focused on themselves only (Hofstede, 1980), as someone who puts his or her own interest first, is not expected to suppress the expression of emotions. A potential explanation as for why the Spanish sample (collectivistic) favors remaining silent over speaking up compared to the Dutch, is that the Spanish consider the expression of emotions as potentially harmful with regard to the harmony of the ingroup. In turn however, the division of ingroups versus outgroups was found to not affect the view towards silence among people from individualistic cultures (Hasegawa & Gudykunst, 1998). Future research is recommended to determine whether members of collectivistic cultures indeed perceive their supervisor as being part of their ingroup.

Hypothesis 3a, which assumed that people holding HPD values make more silence to display emotions than members with LPD values, was also supported. This finding might be explained by a difference in the relationship between supervisors and their subordinates among members from opposing cultures with respect to the dimension of PD. Hofstede (1984) claimed that those relationships are characterized by dependency in HPD cultures and by interdependency in LPD cultures. Assuming dependency, where a subordinate solely depends on his or her supervisor and not vice versa, the expression of emotions could lead to negative outcomes for the subordinate in case of a disagreeing supervisor. The confirmation of hypothesis 3a also seems to be in line with the finding of Pang (1996, p. 185), who said that silence might be caused by subordination which “occurs when a person or group feels unable to voice their opinion or knowledge for fear of retribution.” We can assume that fear of retribution takes place more frequently within relationships based on dependence than within those based on interdependence. It is important to recognize that there are numerous circumstances where differences in power play a role. Not only within organizations but also
within classrooms, sports teams, and families are circumstances in which power distance can be of importance. The current findings indicate that, within HPD cultures, it is plausible to assume that the less powerful party remains silent instead of expressing his or her emotions. It is important for the person who is higher up the hierarchy not to underestimate the possible effects of dependency, especially if (s)he expects his or her subordinates to be honest about their emotions.

**Silent communication to disempower**

Hypothesis 3b was not found to be supported, meaning that there was no difference between the HPD and LPD samples with regard to the use of silence to disempower. A reason for why the data revealed no difference might be explained by suggestions of previous scholars, claiming that silence to disempower is mainly a tool for those holding a higher position in the hierarchy (Bies, 2009; Gendron, 2011). The items of the present study were presented in such a way that the participants had to consider the communicative situations from the perspective of a subordinate. Given the fact that there was no significant difference between the HPD and LPD sample, it might actually be the case that the division of supervisor subordinate is a better predictor for more or less use of silence to disempower than is the cultural dimension of PD. However, this cannot be concluded as a result from the present study and would have to be investigated in future research.

**Silent communication as a turn-taking principle**

Hypothesis 2b, predicting more use of silence as a turn-taking principle among members of collectivistic cultures than among those originating from individualistic cultures was rejected. As was hypothesis 3c, which predicted more use of this type of silence among participants holding HPD values in comparison to those holding LPD values. This suggests that the dimensions of IND and PD do not strongly influence the use of this type of silence. The study of Maroni et al. (2008) might help in presenting a plausible explanation for why these cultural dimensions were not related to silence as a turn-taking principle. Maroni et al. (2008) found that teachers, in contrast to children, were able to use silent communication to indicate someone else’s turn. It might seem remarkable that the scholars only found the teachers to make use of this type of silence, however, silence as a turn-taking principle seems to be highly relevant when teaching. This, in turn, leads to the assumption that personal experiences might be important with regard to silence as a turn-taking principle and that those experiences might not be linked to the cultural dimensions of IND and PD. In addition, the theory on the CTRP explains that a
mutual understanding of the CTRP is believed to lead to perfectly synchronized turn transitions, transitions that are often silent (Maroni, et al., 2008). A comprehension of the CTRP is said to develop through communication with adults. This suggests that silence as a turn-taking mechanism might depend rather on communicative experiences than on the cultural dimensions of IND and PD.

**Silent communication to save face**

The analyses with respect to hypothesis 2c, which predicted more use of silence to save face among the collectivistic than among the individualistic sample, revealed mixed results. The first item, “I use silence to not upset my supervisor”, provided significant results supporting hypothesis 2c. The Dutch sample (individualistic) was found to score higher on this statement than the Spanish sample (collectivistic). This again could be explained by the assumption that the collectivistic sample perceives their supervisor as being part of the ingroup. If members of collectivistic cultures indeed view their supervisor as a part of the ingroup, this could have practical implications with regard to the perceived personalization and synchronization of the communication between them and their supervisor. Gudykunst et al. (1987) found members of collectivistic cultures to perceive the communication with ingroup-members as more intimate and better coordinated than members of individualistic cultures. Differences in the perception of intimacy (i.e. sharing secrets) might lead to differences in expectations among employees of large and international organizations, where it is likely that there are employees from many different cultures. The second item, “I am silent when I have something I should not say to my supervisor”, surprisingly did not lead to significant differences between the Spanish and Dutch. When taking a look at the scores of both samples (see Table 2), one can conclude that the scores are very average on the 7-point Likert scale. These average scores might indicate there have been misinterpretations of the item among the participants, which in turn have possibly led to avoidance of either rejection or confirmation of the statement. The third item, “I use silence to imply my opinion in conversations with my supervisor”, led to an unexpected conclusion as the Spanish were found to score higher on this statement than the Dutch. Given the tendency of the Likert scale, a higher score means less use of silence to imply an opinion in conversations with a supervisor (see Table 2). This result infringes with the assumption hypothesis 2c was based on. A reason for contradictory findings with regard hypothesis 2c most likely originates from an inadequate scale to measure the construct.

Considering the low reliability score for the construct of silence as a face-saving strategy, the PD samples were also compared on the individual item-level. More use of silence
to save-face was expected among the HPD sample, as stated hypothesis 3d, but this expectation was rejected. Although the mean scores suggest a tendency among the HPD sample to favor the use of silence as a face-saving strategy in comparison to the LPD sample (see Table 2), the difference was found not to be significant. This tendency might imply that a comparison of larger samples that might differ even more extremely from each other on the scale of PD than the present samples, could lead to results that reveal larger differences with regard to the use of silence as a face-saving strategy. Although the HPD and LPD were compared due to their disparity on the scale of PD, this difference could be larger considering that LPD sample was represented by all participants that scored up to 4.994 and the HPD sample by those scoring 5.995 and higher. It might be the case that the present sample did not differ enough with respect to the dimension of PD to reveal significant differences. Future research would have to point out whether there are indeed no differences between samples that differ more extremely from each other on the scale of PD.

Limitations

There are some general limitations to the method of this study, namely: the lack of reliable scales, the use of a self-reporting questionnaire, specific questioning in general, and the context in which the items have been questioned.

The analyses on item-level were necessary as a result from the unreliable scales that were intended to measure the constructs. Because of the low reliability scores, it was impossible to have the functions of silent communication analyzed by means of reliable scales. As a result, possible intercultural differences regarding the three functions of silent communication that lacked reliability were measured on an individual item level. In turn, this possibly contributed to the lack of empirical evidence supporting the hypotheses. In the future, the inclusion of more items per construct could help avoid unreliable scales. In addition, the inclusion of a pre-test would also be beneficial. By means of a pre-test, scholars are able to determine general understandings regarding a subject and to test whether items indeed measure the intended construct. As a result, scales leading to mixed results, as the one intended to measure silence to save face, are most likely avoided.

A self-reporting questionnaire might stimulate the participants to answer what they believe to be correct. It could also be the case that the participants respond what they believe is the answer aimed for by the scholars. Both probable effects are undesirable and could lead to findings that do not correspond with the actual use of silent communication. Another reason why a self-reporting questionnaire might not have been the most ideal research method could
be that the subject of the present study is quite abstract. As there is no generally accepted understanding of silence, it seems likely that the participant’s had different views on silent communication. A pre-test, however, could have helped to determine a general understanding among the sample.

The use of specific questions might have led to different interpretations among the participants. It is unsure whether this is completely true, yet it appears likely to assume due to very average mean scores on most individual items (see Table 2). To avoid misunderstanding of the items, a questionnaire that contains vignettes rather than statements could be a solution. Introductions to the statements might possibly lead to more comprehensibility among the participants.

The items were all asked in the context of communication with a superior, someone who is higher in the hierarchy (and not only in HPD cultures). This might have affected the findings as well, considering that all participants hold their own personal experiences with regard to superiors.

**Future research**

Countries that differ significantly on the dimensions of IND and PD are believed to silently communicate emotions differently. However, to be able to generalize the findings of the present study, future research would have to focus on the influence of both IND and PD on silence to display emotions.

To have the participants of future research watch videos in which silent communication is being manipulated would also be an adequate way to gather data. Hence, in a manipulated context, the participants would not have to judge their own use of silent communication and thus would the disadvantages of a self-reporting research be dissolved. A disadvantage with regard to self-reporting participants is that their answers are being thought over and are most probably partly based on personal experiences. Within manipulated circumstances, the participants are stimulated to react genuinely, something which might enhance the influence of (personal) cultural values and beliefs on silent communication to a greater extent.

The use of vignettes might be an option for future research to dissolve the matter of too specific items. Vignettes offer scholars the possibility to convey more information and therefore to transfer an elaborate message to the participants. A more detailed question could stimulate either rejection or confirmation of a statement if participants considered more context in their answer. An example of a vignette could be: “It is 9 o’clock in the morning and you have just arrived at work. Some of your colleagues are entering the office as well, and alongside them is
also your supervisor. Immediately you think of the article (s)he asked you to read yesterday. You realize there is not really a plausible reason why you did not do this. How likely is it that you would go tell your supervisor you did not do this?” This vignette would then be followed by a seven-point Likert-scale (very likely – very unlikely). Yet, it remains unsure whether this indeed measures the same as the item “I am silent when I have something I should not say to my supervisor”, this would have to be checked first and can again be done by means of a pre-test.

In addition, a questionnaire regarding the four functions of silent communication that manipulates the contexts of the items, could reveal the influence that different contexts might have on the functions of silence. In other words, if the current survey would have been conducted in two different contexts (i.e. communication with a supervisor and with someone at work equal in the hierarchy) the results would have revealed the possible influence that the context of communication with a supervisor possibly has. This division of context would have revealed the effects of the dimension of PD to a greater extent.

**General conclusion**

Investigating silent communication by distinguishing several of its functions and to link those to cultural dimensions has not been done before and there are still many intriguing questions waiting to be answered. Differences with regard to cultural background have been proven to be related to different uses of silent communication to some extent, given the finding that silence to display emotions is used differently among members of different cultures. Members of individualistic cultures were found to make less use of silence to display emotions than those from collectivistic cultures. Besides, people holding HPD values were found to use more silence to display emotions than people holding LPD values did. The dimensions of IND and PD have been proven to be related to silence when it comes to the display of emotions. Therefore, someone who deals with many people from different cultures could experience different, yet genuine, ways of emotional display. When cooperating with people from different cultures, do not assume right away that others use silence like you would yourself. It is important to keep in mind that everyone holds his or her own set of personal and cultural values which possibly lead them to remaining silent instead of displaying emotions or vice versa.
References


In S. Ouni, F. Berthomier, & A. Jesse (Eds.), *Proceedings of the 12 international conference on auditory-visual speech processing* (pp. 21-26). Annecy, France: INRIA.


Appendix A  

Survey in Dutch

U bent uitgenodigd om deel te nemen aan een onderzoek dat wordt uitgevoerd door Ainu van den Hurk van de Radboud Universiteit, in het kader van een master scriptie onderzoek. U neemt deel door een (online) survey in te vullen, dit duurt ongeveer 5 minuten. De survey zal met enkele algemene vragen beginnen, waarna ongeveer 30 stellingen volgen die betrekking hebben op communicatie. Geef bij elke stelling aan in hoeverre u het er mee eens bent.

Er is geen tijdslimiet en foutieve antwoorden bestaan niet. Uw deelname is vrijwillig, dit houdt in dat u op elk moment kunt stoppen. De gegevensverwerking zal anoniem zijn.

Belangrijk:

• U bent minimaal 18 jaar oud
• U hebt de bovenstaande informatie gelezen
• U stemt vrijwillig in met deelname aan dit onderzoek

Als u akkoord gaat en dus deel wilt nemen aan dit onderzoek, ga dan verder. Indien u toch niet wilt meedoen aan het onderzoek kunt u de pagina sluiten.

- Wat is uw leeftijd?
- Wat is uw geslacht?
- Wat is uw nationalism?
- Wat is uw hoogst genoten opleiding?
- Wat is uw huidige werksituatie?

Nu volgen er enkele stellingen die betrekking hebben op uw persoonlijke overtuigingen. Herinnert u zich alstublieft dat er geen foute antwoorden zijn en markeer de optie die het beste bij u past. (Alle items waren voorzien van een 7-point Likert schaal, 1 = helemaal mee eens / 7 = helemaal mee oneens)

- Daar waar ik vandaan kom, wordt eerlijkheid in meetings en discussies op prijs gesteld.
- Individueen zouden hun eigenbelang moeten opofferen voor de groep.
- Mensen op hogere posities zouden de meeste beslissingen moeten maken zonder mensen op lagere posities te raadplegen.
- Daar waar ik vandaan kom, proberen we meningsverschillen niet openlijk te tonen in discussies omdat een gevoel van groepsharmonie voor ons belangrijker is.
- Individueen zouden de groep trouw moeten blijven, zelfs in moeilijkheden.
- Mensen op hogere posities zouden niet te vaak naar de meningen van mensen op lagere posities moeten vragen.
- Daar waar ik vandaan kom, benoemen we de dingen graag 'zoals ze zijn' (zonder er omheen te draaien).
- Het welzijn van een groep is belangrijker dan individuele beloningen.
- Mensen op hogere posities zouden sociale interactie met mensen op lagere posities moeten zien te vermijden.
- Daar waar ik vandaan kom, geloven we dat de groepsharmonie en een positieve benadering belangrijker zijn in meetings, dan dat de waarheid wordt gesproken.
- Het succes van een groep is belangrijker dan individueel succes.
- Mensen op lagere posities zouden het niet oneens moeten zijn met beslissingen van mensen op hogere posities.
- Individuen zouden alleen hun eigen doelen moeten nastreven nadat ze het welzijn van de groep hebben overwogen.
- Mensen op hogere posities zouden belangrijke taken niet moeten overdragen aan mensen op lagere posities.
- Groepsloyaliteit moet worden aangemoedigd, zelfs als de individuele doelen hieronder leiden.

Stilte is een onderdeel van communicatie dat gebruikt kan worden om een boodschap over te brengen. In hoeverre denkt u gebruik te maken van stilte als een vorm van communicatie?

- Ik gebruik zelden stilte in gesprekken.

Stelt u zich nu voor dat u in gesprek bent met een leidinggevende of manager. De volgende stellingen hebben betrekking op stilte in communicatie met een leidinggevende. Markeer de optie die het beste bij u past:

- Ik gebruik stilte om mijn leidinggevende te laten weten dat ik me vermaak.
- Ik ben stil als ik verveeld ben tijdens gesprekken met mijn leidinggevende.
- Ik draag kracht uit als ik stil ben tegen mijn leidinggevende.
- Ik probeer te spreken als mijn leidinggevende stil is.
- Ik ben stil als ik bezorgd ben tijdens gesprekken met mijn leidinggevende.
- Ik gebruik stilte om mijn leidinggevende te laten weten dat ik blij ben.
- Ik gebruik stilte om mijn leidinggevende niet van streek te maken.
- Ik gebruik stilte om mijn leidinggevende te laten weten dat ik bezorgd ben.
- Ik gebruik stilte om mijn leidinggevende te laten weten dat ik verveeld ben.
- Ik ben stil als ik iets te zeggen heb wat ik beter niet kan zeggen tegen mijn leidinggevende.
- Ik ben stil als ik niet wil praten met mijn leidinggevende.
- Door middel van stilte maak ik mijn leidinggevende duidelijk dat hij of zij tegen mij moet praten.
- Ik gebruik stilte in gesprekken met mijn leidinggevende om mijn mening te laten blijken.

    Dit is het einde van de vragenlijst, u hebt nu alle vragen gehad. 
    Hartelijk dank voor uw deelname.

    Mocht u nog opmerkingen of vragen hebben, kunt u die sturen naar: 
    ainu.vanden hurk@student.ru.nl.
Gracias por participar en este estudio de Ainu van den Hurk de la Universidad Radboud. Este investigación se realiza para obtener los datos de la tesis de máster. Rellenar este cuestionario en línea no tardará más de cinco minutos. La encuesta comienza con algunas preguntas generales, seguidas de aproximadamente 30 declaraciones relacionadas con la comunicación. Indique en cada declaración en qué medida está de acuerdo.

No hay un tiempo límite y no existen respuestas erróneas. Su participación es voluntaria, quiere decir que se puede retirar en cualquier momento. El procesamiento de los datos será anónimo.

**Importante:**
- Tiene como mínimo 18 años
- Ha leído la información anterior
- Acepta voluntariamente participar en el estudio

Si está de acuerdo y quiere participar, por favor siga. Si al final decide no tomar parte en el estudio puede cerrar la página.

- ¿Cuál es su edad?
- ¿Cuál es su género?
- ¿Cuál es su nacionalidad?
- ¿Cuál es su nivel más alto de formación?
- ¿Cuál es su situación laboral actual?

Marque la opción más adecuada para usted, y recuerda que no hay respuestas erróneas. (Cada ítem fue seguido por una escala Likert de siete puntos, 1 = completamente de acuerdo / 7 = completamente en desacuerdo).

- De donde vengo, se aprecia la honestidad en las reuniones y discusiones.
- Los individuos deberían sacrificar su interés propio por el del grupo.
- Las personas de mayor jerarquía deberían tomar la mayoría de las decisiones sin consultar a los subalternos.
- De donde vengo, no tratamos de mostrar abiertamente las diferencias de opinión en las discusiones porque la sensación de armonía grupal es más importante para nosotros.
- Los individuos deberían permanecer leales al grupo, incluidos los momentos difíciles.
- Las personas de mayor jerarquía no deberían preguntar su opinión a los subalternos con demasiada frecuencia.
- De donde vengo, nos gusta nombrar las cosas ‘por su nombre’ (sin rodeos).
- El bienestar de un grupo es más importante que las recompensas individuales.
- Las personas de mayor jerarquía deberían evitar la interacción social con los subalternos.
- De donde vengo, creemos que la armonía de grupo y un enfoque positivo son más importantes en las reuniones que decir la verdad. El éxito de un grupo es más importante que el éxito individual.
- Los subalternos no deberían estar en desacuerdo con las decisiones tomadas por personas de mayor jerarquía.
- Los individuos deberían perseguir sus propios objetivos solamente después de considerar el bienestar del grupo.
- Las personas de mayor jerarquía no deberían delegar tareas importantes a los subalternos.
- La lealtad de grupo debería ser alentada, incluso si los objetivos individuales salen perjudicados.

El silencio es una parte de la comunicación que se puede utilizar para transmitir un mensaje. ¿Hasta qué punto se puede utilizar el silencio como forma de comunicación?

- Raramente uso el silencio en las conversaciones.

Ahora imagine que está hablando con un supervisor o gerente. Las siguientes afirmaciones se refieren al silencio en la comunicación con un jefe/superior.

- Uso el silencio para decirle a mi jefe que me divierto.
- Me callo cuando me aburro durante las conversaciones con mi jefe.
- Muestro fuerza cuando estoy en silencio ante la presencia de mi jefe.
- Intento hablar cuando mi jefe no habla.
- Me callo cuando estoy preocupado durante las conversaciones con mi jefe.
- Uso el silencio para que mi jefe sepa que estoy contento.
- Uso el silencio para no molestar a mi jefe.
- Uso el silencio cuando no quiero hablar con mi jefe.
- A través del silencio, le dejo claro a mi jefe que él o ella debe hablar conmigo.
- Uso el silencio en las conversaciones con mi jefe para manifestar mi opinión.

Este es el final del cuestionario, ha contestado a todas las preguntas. Gracias por su participación.

Si tiene algún comentario o pregunta, puede enviarlos a:
ainu.vandenhurk@student.ru.nl.