

**Multicultural personality & intercultural communication:
A cabin crew's perspective**

Relations between KLM cabin crew's multicultural personality, job performance, job satisfaction & the mediating role of effective intercultural communication and job-related stress

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Master's Thesis

21 June 2018

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ABSTRACT

In today's world intercultural communication is everywhere. The way a person deals with and adjusts to intercultural settings is dependent on one's personality. The role of personality traits has been studied by many scholars and has proved to predict several outcomes such as job performance, job satisfaction, and job-related stress. However, the intercultural communication component remains little-known. In highly intercultural workplaces, such as the cabin on board of an international airline where contact between the cabin crew and culturally diverse passengers takes place, the importance of carrying a multicultural personality and performing effective intercultural communication should not be overlooked. A survey was conducted amongst KLM cabin crew members (N = 227) to examine the relation between a multicultural personality and job performance/satisfaction and the mediating role of intercultural communication and job-related stress. It was examined whether individual scores on the Multicultural Personality Questionnaire (MPQ, van der Zee & van Oudenhoven, 2000; 2001) predicted cabin crew's job performance and job satisfaction. A new scale was constructed to measure the effectiveness of intercultural communication between cabin crew and passengers on board. Through a mediation analysis, the role of both effective intercultural communication and job-related stress was defined. Results showed that there is a positive relation between the five MPQ scales, i.e. having a multicultural personality, and levels of self-reported job performance and job satisfaction. The trait Cultural Empathy appeared most consistently as a predictor amongst the cabin crew. Furthermore, as was expected, it can be concluded that effective intercultural communication and job-related stress mediate the relation between a multicultural personality and job satisfaction. Intercultural communication, in contrast to job-related stress, also mediates the linkage between multicultural personality and job performance. In sum, cabin crew's personality is related to the way they perform the job and the likeliness that they are satisfied with the job. This relation is partially caused the ability of KLM cabin crew members to effectively communicate with the passengers, but, considering job satisfaction, the level of job-related stress that is experienced by the crew is also of influence.

KEYWORDS: Intercultural Communication, Multicultural Personality, Job Performance, Job Satisfaction, Job-related Stress

List of abbreviations

CE = Cultural Empathy

ES = Emotional Stability

FX = Flexibility

H = Hypothesis

IWPQ = Individual Work Performance Questionnaire

KLM = Koninklijke Luchtvaart Maatschappij / Royal Dutch Airlines

MPQ = Multicultural Personality Questionnaire

OM = Open-mindedness

SI = Social Initiative

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1. Introduction

Desperately looking for a new adventure? Book a ticket, hop on a plane and you will be on the other side of the world in a couple of hours. Back home and missing your newly-made foreign friends? Keep in touch via Facebook, WhatsApp, Twitter or through video calling. With the rise of globalization and the growing ease to travel the world, contact between different cultures is more common than ever before. The idea of a “global village” – first introduced in 1948 by Wyndham Lewis – is turning into a reality. Our planet is becoming more connected and therefore smaller, due to technological changes that enhance worldwide communication. These innovative ways of telecommunication – ranging from the first telephone in the old days to social network sites like Facebook and Snapchat nowadays – all play an important role in the “decentralization of disseminating information across local, national, and international borders”: it can be said that this sharing of information “empowers people” (Neuliep, 2017, p. 4). The result is a rising number of people across the globe who now have access to information that used to be unavailable. Communication between all these people of different cultures is more common than ever before (Neuliep, 2017).

Confusion and struggle on the one hand, and understanding and empathy on the other influence the effective communication between these cultures (Ulrey & Amason, 2001). This is where the concept of intercultural communication comes to mind. As Trompenaars explains in his book ‘Riding the Waves of Culture: Understanding Cultural Diversity in Business’ (1993), communication is the “exchange of information” and information is the “carrier of meaning” (p. 67). In order to achieve effective communication, a shared understanding of meaning is needed. With this notion of a shared meaning, the concept of culture enters the discussion. Intercultural communication occurs when people from different cultural backgrounds communicate (Koester & Lustig, 2015). This happens in daily life on the streets or during travels, but also the business world gets influenced by the increasing intercultural interactions (Trompenaars, 1993). As businesses are increasingly operating in an international environment, more interactions between cultures in the workplace occur. One of the business fields where communication between different cultures is highly present is the international airline industry. It can be found on the airports, but also during flights on board. Intercultural communication is inevitable in interactions between the cabin crew and their different international passengers on board of an airplane (Chong, 2007).

This Master thesis will consequently focus on intercultural communication in the airline industry. Moreover, it will unravel which personality traits enable airline cabin crew to

be more successful at intercultural communication with their passengers on board of an airplane. Furthermore, it will investigate whether high levels of job-related outcomes such as job performance and job satisfaction of a cabin crew member with a high multicultural personality is partly explained by this effective form of intercultural communication, or whether the relation between personality and these two outcomes can also be explained by lower levels of stress caused by the job. By making use of the Multicultural Personality Questionnaire (MPQ) (van Oudenhoven & van der Zee, 2000; 2001) the multicultural personality of the cabin crew of KLM Royal Dutch Airlines will be assessed. The remaining of this introduction will explain the research in more detail by shedding a light on the societal and academic relevance of this study. It will reveal the existing knowledge gap and explain how this research will contribute to the academic literature. After presenting the research question and its sub-questions, explanation will be given on how to fill the knowledge gap and how to provide an answer to the proposed research questions.

The topic of personality and intercultural communication effectiveness is important to study and relevant for society as it provides us insights in the process of intercultural interaction within the aviation industry and how to enhance the customer and employee experience by improving the interaction of staff with customers – or as specifically studied in this research; interaction between crew and passengers. This research might reveal whether certain personality traits should be avoided or looked for in the recruitment process of intercultural workplaces. Furthermore, the importance of having effective intercultural communication and low levels of job-related stress can be determined. The results can be used for the development of intercultural trainings in order to improve intercultural communication (van der Zee & van Oudenhoven, 2013). Fisher (2011) proved that personality can influence the success of such trainings. In addition, the results of this study might call for providing professional guidance to decrease high levels of stress caused by the job in order to improve job performance and increase job satisfaction, as this will have an effect on employee turnover (Lambert, Hogan, Barton, 2001) and absenteeism (Sagie, 1998).

Expatriates have so far been the most popular target group for studies on intercultural training (van der Zee & van Oudenhoven, 2013). Van der Zee & van Oudenhoven call for more research that “show[s] to what extent and how intercultural traits can be trained in other important target groups” (p. 937). Therefore, this knowledge gap will be filled by focussing on the target group of cabin crew. Previous research showed the prominent role of personality traits in levels of job-related outcomes such as job performance (e.g. Salgado, 1997; Hurtz & Donovan, 2000) and job satisfaction (e.g. Judge and Mount, 2002). However, an understudied

area in the field of multicultural personality is the intercultural communication component and its role regarding the relation between personality traits and job-related outcomes.

Therefore, this thesis will dive into the effectiveness of cabin crew's intercultural communication in order to determine the importance of this concept with regard to personality, job performance, and job satisfaction. In addition to the effects of intercultural communication, it is known that stress may have an influence on employee productivity and absenteeism (e.g. Schuler, 1980), and that personality and stress are related to each other (e.g. van der Zee & van Oudenhoven, 2013). However, the mediating role of job-related stress on the relation between these concepts in the context of the airline industry is still unknown.

Previous research on the role of intercultural communication has focussed on for example the hospitality industry (Vassou, Zopiatis, Theocharous, 2016), or the health care industry (Ulrey & Amason, 2001). Arasaratnam (2015) explored the most discussed themes in intercultural communication research between 2003 and 2013 in her article "Research in Intercultural Communication: Reviewing the Past Decade" (2015). From the findings of this literature review it can be concluded that a number of studies focussed on intercultural interactions in the workplace (e.g. Luijters, van der Zee & Otten, 2008). However, intercultural communication in the aviation industry in general, and on board of an airplane specifically, has not yet been discussed. Therefore, the topic of intercultural communication in the airline industry is worth further research as this industry is yet an undiscovered workplace.

Recent studies on the aviation industry have focussed on several angles, including the influence of new technology (Alam, 2015), business model innovation (Schneider, Spieth & Clauss, 2013), or customer satisfaction (Nicolini & Salini, 2006; Madikwe, 2015). The role of communication was primarily of interest in cockpit crew communications in relation to flight safety (Cheng, 2014), controller-pilot communications (Morrow, Lee & Rodvold, 2009), the effects of expertise and age effects (Morrow, Menard, Ridolfo, Stine-Morrow, Teller & Bryant, 2009), or cockpit-cabin crew communications (Chute & Weiner, 1995). Effective cabin crew communications with passengers is still a grey area in this field, as most research regarding cabin crew focussed on team efficacy and communication within the crew (Ku, Chen & Wei, 2014). The effects of job-related stress amongst cabin crew members has for example been studied by Chen & Kao (2011). However, the effects of job-related stress and the role of personality traits and job performance/job satisfaction amongst this particular group of interest has not been studied so far. This study will therefore fill the gap in aviation literature by focussing on crew-passenger communications and job-related stress. It will do so by investigating the role of effective intercultural communication as a mediator, through

which more detail can be given to the cause of the relation between multicultural personality traits and job performance and job satisfaction. In addition to that, levels of stress may, in turn, also have an impact on these two job-related outcomes and will therefore be included in the analyses.

The aforementioned aspects and gaps in literature prove this research' academic relevance. Based on these gaps, this thesis will answer the following research question and sub-questions:

Research Question: Focussing on international airline cabin crew, what is the mediating role of effective intercultural communication with passengers on the relation between a multicultural personality and job performance/satisfaction?

Sub-question 1: To what extent does a multicultural personality of the cabin crew relate to their job performance and job satisfaction?

Sub-question 2: To what extent can the relation between a multicultural personality of the cabin crew and their job performance/satisfaction be explained by the mediating effect of job-related stress?

Through the use of a mixed-method research design an answer to the above-mentioned questions will be formulated. First, a new scale to measure intercultural communication of the cabin crew will be made through conducting in-depth semi-formal interviews. After that, a quantitative analysis will be conducted through a survey in order to test the hypotheses that will be presented in the next chapter. The population of interest consists of cabin crew members working on international flights and a sample will be taken from the Dutch cabin crew of the KLM international airline. With the use of IBM SPSS, several analyses will be performed through which an answer to the proposed research question can be formulated and the existing knowledge gap in the academic world can be filled.

The remaining of this thesis will discuss more existing literature and previous theories in the Theoretical Framework (Chapter 2). The central concepts in this study – multicultural personality, effective intercultural communication, job performance, job satisfaction, and job-related stress – will be further defined, after which several hypotheses have been formulated. These hypotheses will be visualised in a conceptual model. Chapter 3 will elaborate on the methodological decisions made in this research. It will present the research design, procedures, sampling method, and measurements. Chapter 4 will show the results after analysis in a descriptive way. Finally, Chapter 5 includes the answer to the aforementioned research question, and will discuss theoretical and practical implications, limitations, future research, and strengths.

2. Theoretical Framework

This research will focus on the role of personality traits in several aspects related to the job as a cabin crew member. The theoretical framework will give a preliminary overview of the existing literature through which the key concepts of this research will be explained. First, the term intercultural communication will be further explained, as the role of this phenomenon will be thoroughly examined in this thesis. Second, the purpose of the MPQ will be explained and validated with empirical research. Next, job performance and job satisfaction will be explained by their definition and related to personality traits. Then, effective intercultural communication will be discussed through diving into the aspects that facilitates or barricades effective intercultural communication. By that, it can be defined when intercultural communication can be labelled as effective. Finally, the role of job-related stress will be evaluated. A conceptual model will visually summarize all variables and proposed hypotheses and show their relations to each other.

2.1. Defining Intercultural Communication

Understanding the concept of intercultural communication has become more important in the academic world and the use of the term in academic research is widely discussed (e.g. Alexander et al., 2014). Intercultural communication would not have been important to understand if different groups of people living on this planet would never be in contact with each other. However, globalization and mass communication technologies have led to an increased interconnectedness between people that resulted in vanished linguistic and cultural boundaries (Lauring, 2011). Consequently, interaction between different cultures has become inevitable and the diversity within groups of people cannot be denied. Supported by Edward Hall's (1959) statement that culture is communication and communication is culture, the inseparable connection between the two is obvious.

There is a lot of disagreement in the academic world around the term and the definition of intercultural communication. Intercultural communication can be defined as interactions between people from different cultural or linguistic backgrounds (Bowe, Martin & Manns, 2014). This definition, or a similar one, is used by many scholars who write about intercultural communication. Most scholars perceive intercultural communication on an interpersonal level; one on one communication (e.g. Oetzel, Halualani & Arasaratnam in Alexander et al., 2014). In this research, the face to face interaction between a crew member and a passenger will be examined, meaning that the interpersonal level will be central. The

term intercultural communication should not be confused with international communication, because this term refers to the communication between different governments and nations instead of individuals from different cultures (Chaney & Martin, 2011).

With this information, a solid understanding of the term intercultural communication in this thesis has been formulated. However, according to criticus Pinto (2004), the definitions as used by Bowe, Martin, and Manns (2014) or similar are too broad and are therefore open to interpretation. He argues that the final goal or aim of doing research in the discipline of intercultural communication is important to add to the definition. That is, to increase intercultural awareness and by that increasing the effectivity of communication between people of different cultures (Pinto, 2004, p. 20). In this thesis, this addition to the definition of intercultural communication is important, because the cabin crew should carry a high level of intercultural awareness, and effective communication is one of the main ingredients for satisfying passengers. Consequently, this specific research will define intercultural communication as the interaction between culturally diverse people on board of an airplane and will label this communication as effective or successful when the cabin crew is aware of the intercultural setting and is able to effectively deal with the intercultural interactions. Section 2.5 will discuss this definition in greater detail.

Nonetheless, flawless communication is challenging, as cultural misunderstandings are unavoidable. As Bowe, Martin, and Manns (2014) describe, “[a]lthough speakers engaged in intercultural communication typically choose a single language in which to communicate, individuals typically bring their own sociocultural expectations of language to the encounter” (p. 1-2). This often results in conflicts due to the notion that culture determines the way in which messages are interpreted (Lauring, 2011). Nunez, Nunez Mahdi and Popma (2015) describe this process as the “distortion by cultural noise” (p. 18). This implies that cultural values and understandings influence the message that one tries to convey. Those values affect both a person’s communication decisions as well as their interpretation of what is being communicated (Jandt, 2001).

The widespread diversity and different cultures around the world also have their effects on businesses, governments, and other profit- and non-profit organizations. The culturally diverse composition of employees in a company will have an influence on the business culture (Pinto, 2004). On board of an airplane, where direct contact with the customer is inevitable, cultural diversity is not only present within the crew itself but mainly between crew and passengers. A culturally diverse composition of the workplace, such as an airplane, will have an impact on the business culture. Aiming for a “diversity climate” in

which employees are open towards diversity is preferred to reach better outcomes on factors such as job satisfaction of the employees (Hofhuis, van der Zee & Otten, 2011).

It is known that some people are better at dealing with intercultural interactions than others. “Navigating intercultural spaces requires flexibility, humility, “mindfulness” as Gudykunst (1995) calls it, empathy, motivation” (Arasaratnam & Doerfel, 2005, p. 16). Hence, it is interesting to dive into a person’s competence in intercultural communication and specific personality traits to determine whether communication between people from different cultures is seen as effective or not (see section 2.5).

2.2. Multicultural Personality Questionnaire

In this research, the Multicultural Personality Questionnaire (MPQ) will be used in order to reveal a possible relationship between personality traits and job performance/satisfaction of the cabin crew. The MPQ was originally developed to measure multicultural effectiveness (van Oudenhoven & van der Zee, 2000). It includes five personality dimensions that seem relevant for predicting multicultural effectiveness (van der Zee, Zaal & Piekstra, 2003), which will be referred to later on.

In past research, this questionnaire has been used to measure success in adjusting to an international environment amongst students (van Oudenhoven, van der Zee, 2002) or expatriates (van Oudenhoven, Mol & van der Zee, 2003; van der Zee, Ali, & Haaksma, 2007). Furthermore, the MPQ proved to be useful in the context of personnel selection (van der Zee, Zaal, Piekstra, 2003), and to assess students’ reactions to stressful intercultural situations (van der Zee, van Oudenhoven, de Grijs, 2004). In all aforementioned studies, the MPQ proved to be a reliable and valid instrument to measure multicultural effectiveness. Moreover, the MPQ proved to be cross-cultural valid, as a study showed that the five dimensions were stable in two different countries: Italy and The Netherlands (Leone, van der Zee, van Oudenhoven, Perugini, Ercolani, 2004). In short, previous research has showed that the personality traits as measured by the MPQ have an effect on multicultural effectiveness and success in international situations.

This research aims to find out whether certain personality traits are related to intercultural communication, job performance, job satisfaction, and job-related stress. Since the MPQ proved to be valid in the study of intercultural success in general, this research provides a link towards the successful interactions between culturally diverse cabin crew members and passengers, and its effect on cabin crew’s job performance and job satisfaction. In order to ascertain cabin crew’s multicultural personality and the extent to which they can

effectively deal with intercultural situations, the five dimensions of the MPQ will be examined. These dimensions include *Cultural Empathy* (CE), *Flexibility* (FX), *Social Initiative* (SI), *Emotional Stability* (ES), and *Open-mindedness* (OM).

Cultural Empathy means having the ability to “empathize with the feelings, thoughts, and behaviours of members from different cultural groups” (van der Zee & van Oudenhoven, 2000, p. 294). This dimension is probably most often referred to in measuring cultural effectiveness and is sometimes referred to as cultural ‘sensitivity’.

Flexibility is an important trait in intercultural settings, since a person must be able “to switch easily from one strategy to another because the familiar ways of handling things will not necessarily work in a new cultural environment” (van der Zee & van Oudenhoven, 2001, p. 279). In other words, this dimension measures one’s ability to adapt to new situations and to interpret these situations as a positive task (van der Zee, van Oudehoven, Ponterotto, Fietzer, 2012).

Social Initiative refers to one’s ability to “actively approaching social situations and demonstrating initiative in these interactions” (van der Zee, van Oudehoven, Ponterotto, Fietzer, 2012, p. 118). This dimension is originally composed out of two different dimensions: Extraversion and Orientation to Action. However, a factor analysis showed that the items of these two dimensions could be placed in one factor labelled as *Social Initiative* (van der Zee & van Oudenhoven, 2001).

Emotional Stability is the fourth dimension of intercultural effectiveness and reflects one’s ability “to stay calm under novel and stressful conditions” (van der Zee, van Oudehoven, Ponterotto, Fietzer, 2012, p. 118). In other words, does a person have a tendency to show strong emotions during a stressful situation or is one capable of remaining calm (van der Zee & van Oudenhoven, 2001)?

Open-Mindedness is the fifth and final requirement for working in an intercultural environment. It refers to “an open and unprejudiced attitude toward out-group members and different cultural norms and values” (van der Zee & van Oudenhoven, 2000, p. 294). Cultural differences are accepted and are perceived in an open-minded way.

In this research, the MPQ is used to measure one’s personality instead of other scales that measure such as the Five-Factor Model of Personality, better known as the Big Five. This instrument includes scales to measure Neuroticism, Extraversion, Openness, Agreeableness, and Consciousness (McCrea & Costa, 1987) and is widely used in the academic world to measure one’s personality. However, this study will make use of the beforementioned MPQ, because the dimensions of the MPQ focus on intercultural success, making this scale more fit

for this specific research domain. As Ashton (1998) argues, narrower traits reveal higher validity, making the general traits of the Big Five less appropriate to access intercultural attitudes. This is in line with the more recent findings of a meta-analysis by Wilson, Ward, and Fischer (2013), that show that specific culture-relevant factors in personality traits are better for measuring intercultural effectiveness. They found that factors like cultural empathy and cross-cultural self-efficacy are higher correlated to a person's cultural competence than the general dimensions of the Big Five. Furthermore, Leone, van der Zee, van Oudenhoven, Perugini, and Ercolani (2004) prove a higher validity for the MPQ dimensions above the general Big Five personality dimensions. In the context of personnel selection, van der Zee, Zaal, and Piekstra (2003) found similar results. In short, because of the ability to predict multicultural effectiveness it can be concluded that the use of the MPQ in this research is a valuable tool to examine the level of cabin crew's multicultural personality.

2.3 Job Performance

In addition to investigating whether personality improves intercultural communication and reduces job-related stress (see section 2.6), this research aims to find out whether these possible relations improves job outcomes, including job performance and job satisfaction (see section 2.4). In order to find the mediating effect of intercultural communication and job-related stress, this research's goal is to elucidate the linkage between having a multicultural personality and levels of job performance of the cabin crew (sub-question 1). The concept of 'performance' knows many variations, such as team performance, group performance, employee performance, job performance, etc. As the focus will be on individuality in this research, the term job performance will be utilized. Job performance can be defined as "the total expected value to the organization of discrete behavioural episodes that an individual carries out over a standard period of time" (Motowidlo, 2003, p. 39). In other words, it is an individual's contribution to the organization's goals (Campbell & Wiernink, 2015).

Several studies have focussed on job performance in relation to for example mindfulness (King & Haar, 2017; Reb, Narayanan, Chaturvedi & Ekkirala, 2016), cross-cultural service encounters (Sizoo, Iskat, Plank & Serrie, 2004), and personality (Salgado, 1997; Hurtz & Donovan, 2000). The influence of one's personality on job performance is an interesting topic for this study. Previous research looked at the influence of the aforementioned Five Factor Model of Personality, by conducting a meta-analysis (Hurtz & Donovan, 2000; Salgado, 1997; Barrick & Mount, 1991). Their results showed a positive effect between the Big Five personality dimensions and job performance. For example, the

higher a respondent scored on the Big Five dimension Conscientiousness, the higher his or her job performance (Hurtz & Donovan, 2000). However, these studies were conducted among occupational groups like police, managers, and sales employees. Taking a more international angle, Mol, Born, Willemsen & van der Molen (2005) found the same predicting effect of Conscientiousness on job performance of expatriates dealing with intercultural situations. The airline industry, which also deals with a great amount of interculturalism, has not yet been studied. Moreover, the aforementioned studies made use of the Big Five dimensions to measure one's personality instead of the MPQ. To answer the call for more research on the role of intercultural personality traits in work outcomes such as job performance by van Oudenhoven, Mol, and van der Zee (2003, p. 186), this thesis will make use of the MPQ to measure cabin crew's intercultural traits. That is because the five dimensions in this questionnaire are designed to focus on multiculturalism, which makes it applicable to the culturally diverse setting on board of an airplane.

As was explained in section 2.2 the MPQ will provide information on cabin crew's personality and how they deal with intercultural settings. Now, it is interesting to find out whether a cabin attendant who has a high score on the MPQ performs his or her job in a better way. Therefore, the following is expected:

Hypothesis 1: There is a positive relation between a multicultural personality of the cabin crew and job performance.

2.4 Job Satisfaction

In addition to job performance, the proposed sub-question 1 also focuses on the possible effect of a multicultural personality on cabin crew's job satisfaction. Job satisfaction is a widely discussed topic in academic literature for many years. As pointed out by Judge and Mount (2002), as early as 1935 a researcher named Hoppock concluded that there is a strong relation between job satisfaction and people's emotional adjustment (p. 530). In 1969, Edwin A. Locke defined job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values" (p. 316). This definition will be kept in mind when considering job satisfaction of employees in the airline industry.

In previous meta-analytic research, Judge and Mount (2002) found a significant correlation between the Big Five personality traits and job performance, in which the trait Neuroticism showed the strongest correlation. In addition, in more recent research many other scholars found a relation between personality traits and employees' job satisfaction (e.g.

Mathieu, 2013; Zhai, Willis, O'Shea, Zhai & Yang, 2013; Avery, Smillie & Fife-Shaw, 2015). Focussing on intercultural personality traits in an international workplace, Sizoo, Iskat, Plank & Serrie (2004) conducted a study among employees in the hospitality industry to measure whether higher levels of intercultural sensitivity would result in a higher level of service to their international guests in which they also tested the role of job satisfaction. Their results showed that people with higher intercultural sensitivity score significantly higher on, amongst others, job satisfaction. Deriving from this finding, they conclude that employees with high levels of intercultural sensitivity provide better service to their guests, resulting in higher levels of job satisfaction. In this thesis intercultural sensitivity will be tested through the *Cultural Empathy* dimension of the MPQ. Van Oudenhoven, Mol, and van der Zee (2003) conducted a research using the aforementioned MPQ to measure intercultural effectiveness amongst expatriates. They concluded that the dimension *Flexibility* is a significant predictor of one's job satisfaction. In other words, a person who can easily accept and adapt to new cultural conditions is more satisfied with the job as an expatriate.

However, *Cultural Empathy* and *Flexibility* are only two of the personality traits that will be tested for its influence on job satisfaction. It is interesting to see whether these findings that were based on the international settings of the hospitality industry and expatriates also hold for the airline industry. Similar to the level of job performance, it is worthwhile to discover whether a cabin crew member who has a multicultural personality, i.e. who scores high on the MPQ, is more satisfied with his or her job. Consequently, the following hypothesis will be tested:

Hypothesis 2: There is a positive relation between a multicultural personality of the cabin crew and job satisfaction.

2.5 Effective intercultural communication

Most of the respondents in this study work for the same airline and hold the Dutch nationality, which means that, focussing on communications within the cabin crew itself, intracultural communication is taking place – the opposite of intercultural communication. On board of KLM flights, the crew generally shares the same culture and communicate in the Dutch language. According to Lewis (2006), this means that the Dutch cabin crew shows typical Dutch cultural values such as openness, informality and punctuality, meaning that the Dutch are mostly tolerant, but opinionated (p. 245). These cultural values may be very different from passengers with diverse cultural backgrounds on board. A Mexican passenger may have a very different view on punctuality, a Japanese passenger might be offended by the

Dutch informal way of speaking and an orthodox Jew might react differently to a female crew member (Lewis, 2006). These cultural differences may influence the efficiency of their communication with each other, although it has to be noted that these cultural differences are based on stereotypes and that the efficiency of communication should be based on an individual level.

Having the most effective communication is key for successful interaction between the cabin crew and their passengers. However, as Guirdham (2005) implies, “perfect communication is probably unattainable” (p. 249). There are numerous aspects and barriers that influence the communication between people which will be discussed in more detail in this section. As indicated above, the most effective form of communication is what we aim for. This is desired in order to create mutual understanding and respect. In the case of the airline industry, having an effective intercultural conversation between the cabin crew and a passenger will result in satisfied customers who feel understood and appreciated and will therefore choose the airline again in the future. In sum, intercultural communication is labelled effective when both participants in the conversation attach similar meaning to the messages (Guirdham, 2005, p. 251).

In this study, the focus will be on only one participant in the intercultural conversation: the cabin crew. The interactions between the cabin crew and passengers will be assigned effectively when a cabin crew member is perceived as a competent communicator in intercultural encounters. When a person is competent in communication, one must be able to produce both effective and appropriate communication behaviour. As Spitzberg & Cupach (1984) argue, one should know what is expected and accepted in certain situations. This is dependent on one’s culture. Hence, intercultural communication competence is defined as one’s ability to effectively adapt to the appropriate cultural context through verbal and non-verbal messages (Neuliep, 2017). In the academic world there is some ambiguity regarding the right phrasing of the term: cross-cultural competency (e.g. in Sucher & Cheung, 2015) or intercultural communication competency (e.g. in Arasaratnam, 2009). In this research the term intercultural communication competency is more appropriate, because it focusses on “interaction among people from two or more cultures” (Koester & Lustig, 2015, p. 20), being interactions between cabin crew and passengers.

There are several predictors of intercultural communication competency (Chen, 1988). For example, the degree to which a person is able adapt to new and unfamiliar situations. Or one’s ability to show respect, to show empathy, to be non-judgemental and to maintain flexibility (Guirdham, 2005, p. 252). These competences are highly related to the personality

dimensions of the MPQ as discussed above. However, the above noted predictors remain broad and general, and mostly include factors focussed on personality traits and attitudes. This research aims to measure actual behaviour of the cabin crew when interacting with their passengers, in order to make statements on the effectiveness of their intercultural communication. This latter aspect is of high importance for the airline industry, because communication is key for flight safety and must therefore be efficient and effective (Cheng, 2014). However, this argument is mainly true for the cockpit crew. As a member of the cabin crew, having effective intercultural communication is needed for satisfying and connecting with the passengers (Ferrer, 2017).

Focussing on the concept of effective intercultural communication, several cultural aspects could possibly have a negative influence. These are also referred to as communication barriers, which are inevitable during communication between the cabin crew and passengers. A communication barrier can be defined as an “obstacle to effective communication” (Chaney & Martin, 2011, p. 13). An example of such a barrier is ethnocentrism; this has a negative influence on intercultural communication (Neuliep, 2017), as people perceive their culture or ethnicity at the centre of everything. An ethnocentric person believes his or her culture is superior over another (Segall, 1979). According to Gudykunst and Kim (2003) the cultural values that we all possess function as a filter for the processing of messages, as all cultures have a tendency to ethnocentricity (Neuliep, 2017). This means that all intercultural exchange of messages is concerned with ethnocentrism. Being an ethnocentric will make intercultural communication less effective, as it will create communicative distance between the participants (Peng, 1974). Other obstacles to effective intercultural communication may be linguistic, perceptual, experiential, or emotional differences between people (Chaney & Martin, 2011). These barriers must be minimalized as much as possible in order to reach mutual understanding and respect. Only then, intercultural communication can be effective.

In order to have effective intercultural communication, one’s personality may play a role. This topic is an increasingly discussed topic in the academic world (Ones & Viswesvaran, 1997; Ward & Chang, 1997; Arthur & Bennett, 1995). Chan and Sy (2016) conclude that certain personality traits, i.e. the Big Five Agreeableness, Openness, and Conscientiousness, contribute to effective intercultural communication amongst nursing students. Other studies have made use of the five dimensions of the MPQ in order to determine multicultural effectiveness. For example, Dieleman (2015) used the MPQ in order to see whether there is a difference in effective intercultural communication among exchange students. Dieleman concluded that “a semester of immersion in a different culture increases a

student's ability to empathise with the feelings, thoughts and behaviours of members of other cultures" (p.1). In addition, a research conducted by Ulrey and Amason (2001) found a relation between effective intercultural communication and cultural sensitivity among health care providers and their patients. As was explained in section 2.2 and 2.4, cultural sensitivity can be seen as the MPQ dimension *Cultural Empathy*. This research will use the same line of thought by focussing on all five of the personality dimensions of the MPQ and its relation to effective intercultural communication among cabin crew members. Therefore, the following hypothesis has been formulated:

Hypothesis 3: There is a positive relation between a multicultural personality of the cabin crew and effective intercultural communication.

However, this thesis will also take a step further by concentrating on the mediating effect of effective intercultural communication on the relation as proposed in H1 and H2. In other words, is there a mediating effect of intercultural communication on the relation between personality and job performance and job satisfaction? To find this effect, a relation must exist between effective intercultural communication and job performance/satisfaction. In 1986, Pincus examined the role of organizational communication on job performance and job satisfaction among nurses. He found that different aspects of communication had an influential effect on job satisfaction, and on job performance as well, being it to a lesser degree.

Concentrating on job performance, Ang et al. (2007) found that cultural intelligence, meaning the "capability to function effectively in culturally diverse settings" (p. 335), predicts task performance in a culturally diverse setting. Based on this conclusion regarding cultural intelligence, a link can be made towards effective intercultural communication, which is reached when the cabin crew is perceived as a competent communicator in intercultural situations. Consequently, the following predictions regarding effective intercultural communication of the cabin crew and their job performance are made:

Hypothesis 4: There is a positive relation between intercultural communication and job performance.

Hypothesis 5: Intercultural communication mediates the relationship between multicultural personality and job performance.

Is this also expected for job satisfaction of the crew? A study done by Froese and Peltokorpi (2011) showed that cultural misunderstandings and distance had a negative impact on job satisfaction of expatriates. When effective intercultural communication is established,

cultural misunderstandings will be diminished. This could possibly result in higher job satisfaction of the cabin crew. Therefore, it is hypothesised that:

Hypothesis 6: There is a positive relation between intercultural communication and job satisfaction.

Hypothesis 7: Intercultural communication mediates the relationship between multicultural personality and job satisfaction.

2.6 Job-related stress

This thesis' aim, apart from finding the mediating effect of effective intercultural communication, is to find the mediating effect of job-related stress on job performance/satisfaction. If cabin crew members have a high score on the MPQ, this might help them to perform their job on board better and make them like the job more (H1 and H2). This could be partly caused by the fact that they perform effective intercultural communication with the passengers, however, it could also be explained by the fact that they experience less job-related stress. In previous research, stress has been defined as “a non-specific response of the body to any demand” (Seyle, 1983, p.2). Job-related stress is stress caused by the activities relating to one's profession. Parker and DeCotiis (1983) build upon Seyle's definition but define stress caused by one's job as “the feeling of a person who is required to deviate from normal or self-desired functioning in the work place as the result of opportunities, constraints, or demands relating to potentially important work-related outcomes” (p. 165). As the cabin crew always deals with intercultural communication during their job on board, anxiety and stress are a result of these intercultural interactions (Ulrey & Amason, 2001). Besides, working in the air, the highly irregular schedule, the time differences, and night-shifts may contribute to high levels of job-related stress of the cabin crew. Previous research on the topic has looked for example at the effects of job-related stress on health- and organizational issues such as low productivity, turnover, discontent, and absenteeism (Beehr & Newman, 1978; Schuler, 1980).

A person's personality plays a prominent role in the level of stress that people may experience. As van der Zee, van Oudenhoven, and de Grijs (2004) indicate, “[p]ersonality has an impact on the subjective appraisals of stressful situations [...]” (p. 1070). In addition, Karimi, Leggat, Donohue, Farrell, and Couper (2013) conducted a research amongst community nurses and concluded that a person's emotional intelligence, which is a valuable trait for handling work-demands, has a significant effect on perceived job stress. Their research showed that the higher a person's emotional intelligence, the lower their job-related

stress. A research based on the personality traits of the MPQ shows that two of the five traits are responsible for reducing stress in intercultural situations (van der Zee & van Oudenhoven, 2013). These so-called “stress-buffering traits” (p. 931) include *Flexibility* and *Emotional Stability*. If a person scores high on these dimensions, less stress will be experienced as a result of intercultural encounters. In this thesis, the cabin crew will be tested for their multicultural personality traits through the five dimensions of the MPQ. Consequently, the following is hypothesized:

Hypothesis 8: There is a negative relation between a multicultural personality of the cabin crew and levels of job-related stress.

To test whether job-related stress has a mediating effect on the relation between a multicultural personality and the job-related outcomes as proposed in H1 and H2, a relation must exist between job-related stress of the crew and their job performance/satisfaction on board. Focussing on job performance first, a study focussed on the airline industry conducted by Alam (2015) concluded that stress caused by the use of new technologies will negatively influence the crew’s productivity, and thus their performance. Another interesting aspect in the linkage between job-related stress and cabin crew’s performance is job crafting. If employees experience a lot of job-related stress, this may lead to engaging in job crafting. This means that they will try to optimize their work environment. The perceptions of job crafting by flight attendants has, according to Karatepe and Eslamlou (2017), a positive effect on their work engagement. As argued by Menguc, Auh, Fisher, and Haddad (2012) work engagement is a concept representing employees’ performance in the workplace, as people who are engaged perform their job better than employees who are not engaged. Based on these findings, it is expected that having a high amount of job-related stress will consequently negatively influence cabin crew’s job performance.

Hypothesis 9: There is a negative relation between levels of job-related stress and job performance.

Hypothesis 10: Job-related stress mediates the relationship between multicultural personality and job performance.

In order to find a mediating effect on the relation between one’s multicultural personality and job satisfaction, there must be a significant effect between job-related stress and job satisfaction. Chen and Kao (2011) conducted a research on the consequences of job stress among flight attendants. They concluded that job stress is negatively related to job satisfaction of Taiwanese flight attendants. Based on this, the following is expected:

Hypothesis 11: There is a negative relation between levels of job-related stress and job satisfaction.

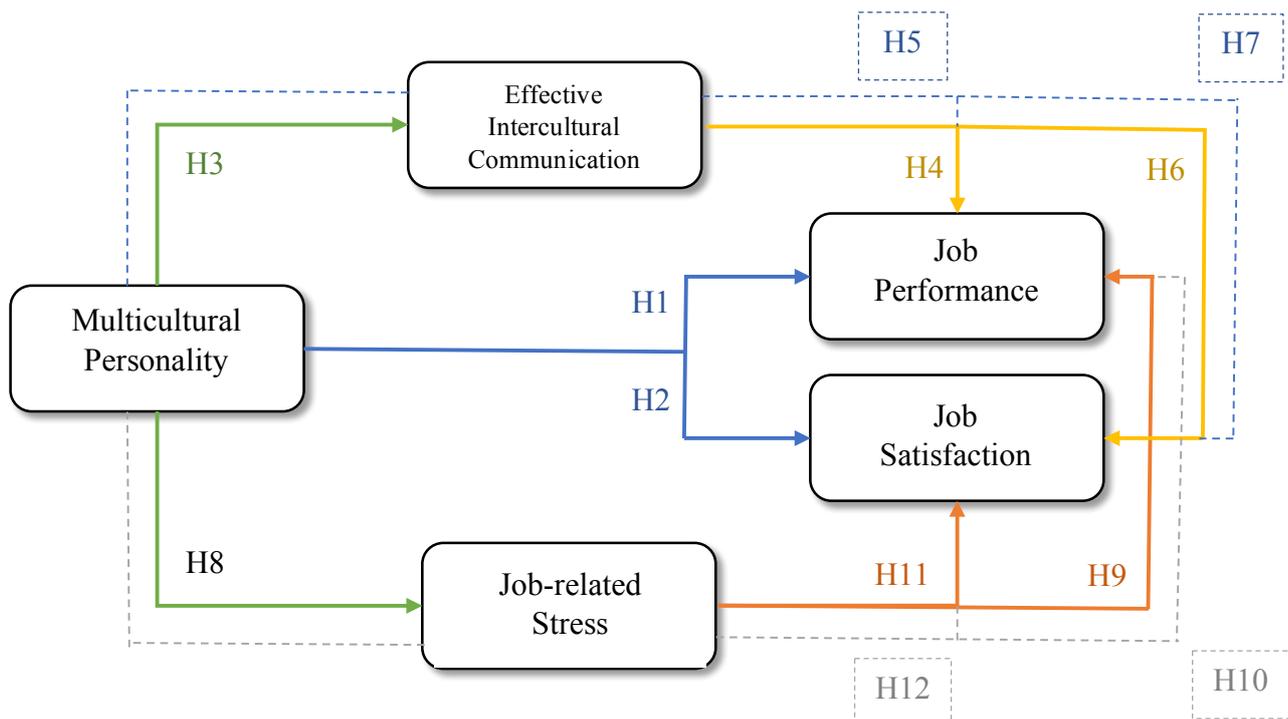
Hypothesis 12: Job-related stress mediates the relationship between multicultural personality and job satisfaction.

2.7 Conceptual model

All 12 hypotheses are composed in one conceptual model (see Figure 1). Each hypothesis in this model will be tested in order to formulate an answer to the research question as proposed in the introduction. The model entails all five key concepts. The arrows indicate a relation between two concepts. A dotted line indicates an expected mediating effect.

The model in Figure 1 can be divided into two different parts. First, H1 and H2 look for a main relation between job performance and job satisfaction. H3, H4, H5 are related to the mediating effect of effective intercultural communication on job performance, and H3, H6, and H7 on job satisfaction. Looking at the bottom part of this model, H8, H9, H10 discuss the mediating effect of job-related stress on job performance, whereas H8, H11, and H12 focus on this mediating effect on job satisfaction. In other words, the top part of this model – H1, H3, H4, H5, H6, H7 – is related to job performance, and the bottom part consisting of H2, H8, H9, H10, H11, H12 is linked to job satisfaction.

Figure 1. Conceptual model showing relations between variables and proposed hypotheses, in which a dotted line indicates a mediating relation.



In conclusion, this thesis will test whether the personality dimensions of the MPQ are related to levels of job performance and job satisfaction of the cabin crew. Furthermore, it will look at the mediating role of effective intercultural communication and job-related stress. Put differently, does a cabin crew member who has a multicultural personality, perform his or her job better and likes his or her job on board more? Also, can this relation be explained by having effective intercultural communication or by having low levels of job-related stress? The next chapter will discuss how to formulate an answer to these questions by looking at the methodological steps of this research. It will explain how the aforementioned concepts will be measured, how the data in this research will be collected, and discuss other methodological aspects.

3. Methodology

This chapter will discuss the methodological choices that were made in this thesis. First a detailed explanation on the used research design will be given. Then, the procedures and sampling method will be discussed, followed by a separate section that explains the qualitative method used in this research to construct a new scale. The measurements section will describe how the variables in this study were measured and lastly, two tables will be given showing the descriptive statistics of the measures and the correlations.

3.1 Research design

This thesis focussed on personality and the mediating role of effective intercultural communication on cabin crew's job performance and satisfaction. It was a quantitative, cross-sectional research that answered the following research question: Focussing on international airline cabin crew, what is the mediating role of effective intercultural communication with passengers on the relation between a multicultural personality and job performance/satisfaction? The quantitative approach fitted this research question well as it provided an opportunity to look for an effect of an independent variable on a dependent variable (Neuman, 2014), being in this case the personality dimensions of the MPQ and cabin crew's job performance and job satisfaction. Furthermore, through a quantitative research design, the mediating effect of intercultural communication could be examined. The potential role of job-related stress has been looked into as well, in order to reveal whether the effects of personality on job performance and job satisfaction can also be explained by stress.

However, to get a more complete view of the definition of effective intercultural communication on board between the cabin crew and passengers, qualitative data has been collected in addition to the quantitative data. Through a qualitative analysis the interactions of cabin crew and passengers have been understood in greater detail (Creswel, 2009). This thesis has therefore used a mixed methods design as the qualitative results were used as a stepping stone for the quantitative data collection. Section 3.4 will further discuss how a new scale for intercultural communication of cabin crew has been constructed through the use of a qualitative method. Nonetheless, as the weight is mainly on a quantitative method, this deductive research made use of hypotheses to test the general existing theories, tailored to the specific population of this research.

3.2 Procedures

The quantitative data of this study was gathered through an online survey (see Appendix A). Data was collected from 16th of April 2018 until 10th of May 2018. This survey was created in Qualtrics; an online tool to create and customize surveys. Respondents were able to take the survey on a laptop, smartphone or tablet with an internet connection. The survey consisted of 21 questions and would take approximately 10 to 15 minutes to complete. After clicking on the anonymous link, the respondent got to see the introduction page. Here the researcher and the purpose of the research got introduced. Furthermore, the respondent got informed regarding the confidentiality and anonymity, their voluntary participation, and contact information for further remarks or questions. After giving consent to participate in this research, the survey started.

First, 40 statements were given regarding personality traits. These statements were derived from the Multicultural Personality Questionnaire Short Form by van der Zee, van Oudenhoven, Ponterotto & Fietzer (2013). Every screen showed between eight to ten statements, starting with the statements related to *Cultural Empathy*, followed by *Flexibility*, *Social Initiative*, *Emotional Stability* and lastly *Open-mindedness*. The second section of the survey was about respondent's job performance. Through answering seven statements, their level of job performance could be measured. Third, respondents had to answer six statements regarding job satisfaction. The fourth part of this survey measured levels of job-related stress. Here, respondents got reminded to answer according to truth and that their answers would stay anonymous at all times. The next screen showed seven statements regarding intercultural communication on board. Through showing statements related to possible interactions between the cabin crew and passengers, the respondents could indicate to what extent they agreed or disagreed. On the sixth screen, another eight counter statements about these interactions were shown and respondents got informed about the fact that these statements may look similar to the previous screen, but that it was nonetheless highly important to answer all the statements. Lastly, several demographics of the respondents were asked which were divided on two screens. The final screen asked respondents some facts about their demographics and the job as cabin crew. These demographics were not mandatory to fill out. At the very end of the survey, respondents could give up their email address in case they were interested in the results of this research and if they wished to be in the run for a small price. It was made clear that their email would solely be used for these purposes and would be deleted afterwards.

3.3 Sampling method

The population of this study consisted of men and women currently working in the airline industry as cabin crew on board of an airplane or who have worked as cabin crew in the past. A non-random sample of this population was taken from Dutch cabin attendants from the Dutch airline KLM, making this group the unit of analysis in this research. The fact that this was a non-random sample means that the sample is not entirely representative for the whole population.

The respondents for the survey have been picked through purposive sampling, as this population is very specific and difficult to reach (Neuman, 2014). Most respondents for the online survey have been invited through a Facebook message that was posted in five private Facebook groups for KLM cabin crew with each more than 1000 members. This post included a short introduction to the researcher, the research itself and the link to the online survey. A follow-up post was posted after approximately 1-2 weeks since the first post. Also, snowball sampling has taken place, as the cabin attendants were asked to share the link with their colleagues through channels like email, Facebook, and WhatsApp. Through convenience sampling, close relatives and friends of the researcher have been invited to participate in the online survey. This was done through email, Facebook, WhatsApp, and face-to-face.

Since KLM is a Dutch airline, their cabin crew is required to speak the Dutch language (with the exception of the Asian crew who works on flights to China, Japan, and South-Korea). In total, 227 cabin attendants who used to or currently work for KLM have participated in this research. Out of this sample, 89.4 percent of the respondents were born in The Netherlands. Regarding cultural background, 15.9% of the respondents had a father born outside of The Netherlands and 15,8% a mother. The age range of the sample population lied between 21 and 67 years old, meaning that they are born between 1951 and 1998. The minimum age to be employed as cabin crew at KLM is 21 and people retire around 65 years old, but due to the physical intensiveness of the job a lot of people retire a couple of years earlier. Since ex-employees and retirees may also participate, the maximum age in this research has been expanded to 67. The mean of the age scale was 42.76 ($SD = 10.509$), which means that the average birth year was 1972. Consequently, the mean age of the respondents is 46 years old. Of the 227 respondents in total, 185 were female (81.5%) and 42 (18.5%) were male. Regarding educational level of cabin attendants at KLM, a total 221 respondents filled in their highest educational level they have attained. The largest group (48.9%) had a bachelor's degree; either a university bachelor or university of applied sciences (the Dutch

hbo) bachelor. Out of the total 227 respondents, most are currently working as cabin attendants (95.2%) and on average they have been working as cabin crew for 21.03 years ($SD = 11.034$) with a minimum of 1 year and a maximum of 41 years. Regarding years of employment as cabin crew at KLM, the average was 19.54 years ($SD = 11.414$). The largest group (39.2%) was ranked as a Cabin Attendant 1. This means that they carry one stripe on their uniform and serve the passengers in the economy class (see section 3.5 on control variables). A more detailed overview of the sample characteristics can be found in Appendix B.

An entirely random sample in which a mathematical method chooses the sample “so that each sampling element of the population has an equal probability of being selected in the sample” (Neuman, 2014, p. 255) would be preferred. However, due to the very specific target population in this research, the above-mentioned methods are most appropriate.

3.4 Construction of intercultural communication scale

As was mentioned before, this thesis made use of a mixed methods, meaning that in addition to the steps taken in 3.2 and 3.3 which were related to a quantitative method, a qualitative method was included. This qualitative part of this research was conducted through in-depth semi-structured interviews. These interviews have been used to better understand the role of positive and negative encounters between cabin crew and passengers on board of an airplane. By that, a new scale has been created that has been used in the aforementioned online survey. This scale measured the effectiveness of intercultural communication between cabin crew and passengers on board and was created out of need for a scale to measure this particular interaction. With this new scale, the qualitative study could be conducted to test the proposed hypotheses.

Five interviews were conducted in a quiet room where no one could disturb and lasted for approximately 40-45 minutes. The interviewees were informed beforehand what the topic of the interview would be. Before starting the interview, they were verbally asked whether they agreed with recording the conversation. After an introduction to the topic of this research and what was expected from them, the informal conversation would start. They were asked to give examples of positive and negative encounters with passengers during a flight. In other words, the interviewee gave concrete experiences of good or bad communication with culturally diverse passengers. For most people, negative events stick to mind more easily. Therefore, the interviewees were asked to start with a positive example. When the interviewee got stuck, the interviewer would ask probe questions like: “What do you think contributed to

this positive/negative outcome?”, “Why do you think the communication was (not) effective between you and the passenger?”, “Which circumstances caused this positive/negative experience?”, “Why do you think that this is an example of effective/ineffective communication?”, “What exactly did you do that helped/worsened the conversation between you and the passenger?”. During the interviews, the interviewer made use of the critical incident technique. This technique “consists of a flexible set of procedures for collecting and analysing reports of incidents” (Anderson & Wilson, 1997, p. 89). By this, examples of actual behaviour can be collected.

To find respondents for the in-depth interviews the non-probability technique convenience sampling was used (Neuman, 2014). All interviewees were picked because of their proximity to the researcher. The semi-structured interviews were conducted with five cabin attendants. Of this group, four were currently employed at KLM and one worked there between 1992 and 1998. Four interviewees were female, one male. They were contacted through email or WhatsApp. Since all interviewees had the Dutch nationality, the interviews were held in Dutch.

With the results of the interviews, a new scale has been created to measure the effectiveness of intercultural communication between cabin crew and passengers on board of an airplane. A 15-item scale was created focussing on the specific intercultural interactions of cabin crew with passengers. The items were phrased in a manner that would represent the cabin crew’s point of view. The scale consists of 7 items relating to a negative outcome of intercultural communication and 8 items concerning a positive outcome of intercultural communication between the cabin crew and their intercultural passengers. For each negative item, there was a positive equivalent (with one negative item having two positive counterparts). A factor analysis was run to see if, based on this negative-positive division, two separate scales could be created. Nonetheless, results of this factor analysis showed more than two factors. In fact, there were four factors with an Eigenvalue greater than 1.0, which explained 51.95% of the total variance (see Appendix C). Consequently, it was decided to not change the scale based on different components. The 15-item scale included items like “If a passenger is disrespectful towards me, I get very irritated”, “I understand that every passenger has his/her own cultural manners and adapt to that”, and “I set my prejudgements aside and give every passenger the same service”. On a 7-point Likert scale, respondents had to indicate to what extent they agreed with the statements, in which 1 meant Totally disagree, and 7 meant Totally agree. A high score on this scale indicated effective intercultural

communication of the cabin crew with their passengers. The novel scale proved to be reliable (Cronbach's alpha = .77). The mean was 5.07 with a standard deviation of 0.64.

3.5 Measures

In addition to the measurement of intercultural communication on board of an airplane that was implemented in the quantitative part of this research, four other concepts plus control variables were measured.

Multicultural Personality. This variable was measured using multiple items from the Multicultural Personality Questionnaire, also known as the MPQ. This is a preferred measurement for measuring one's personality traits in a multicultural setting and used in many researches related to intercultural settings (see Chapter 2). It consisted of 40 items divided in five different personality dimensions: *Cultural Empathy* (CE), *Flexibility* (FX), *Social Initiative* (SI), *Emotional Stability* (ES), *Open-mindedness* (OM). On a 7-point Likert scale, respondents had to indicate how much the statements were applicable to them, ranging from "1: Totally not applicable to me" to "7: Totally applicable to me". Respondents could place the following sentence before every statement: "I consider myself as someone who...".

CE was measured by 8 items consisting of items like "Pays attention to the emotion of others", "Notices when someone is in trouble", and "Sets others at ease" (van der Zee & van Oudenhoven, Ponterotto & Fietzer, 2013). A high score meant a high level of *Cultural Empathy*. The Cronbach's Alpha was .81 and the mean of the scale was 6.07 with a standard deviation of .53. This shows that the results of this dimension are highly skewed to the left. Nonetheless, this makes sense when considering the context of cabin crew personnel. The majority of the cabin crew members will perceive themselves as empathic people. A crucial component of the job as cabin crew is to for instance pay attention to the emotion of others or to set passengers at ease.

FX was measured by 8 items. Examples are "Works according to strict rules", "Looks for regularity in life", and "Wants predictability" (van der Zee & van Oudenhoven, Ponterotto & Fietzer, 2013). Since all items were reversed, a high score meant a high level of *Flexibility*. Cronbach's Alpha was .86 and the mean of the scale was 3.72 with a standard deviation of 1.01.

SI was measured by 8 items consisting of for example "Takes the lead", "Finds it difficult to make contacts" (reversed), and "Is often the driving force behind things" (van der Zee & van Oudenhoven, Ponterotto & Fietzer, 2013). A high score meant a high level of *Social Initiative*. Cronbach's Alpha was .75 and the mean of the scale was 5.42 with a

standard deviation of 0.78.

ES was measured by 8 items like “Gets upset easily” (reversed), “Keeps calm when things don’t go well”, and “Is not easily hurt” (van der Zee & van Oudenhoven, Ponterotto & Fietzer, 2013). A high score meant a high level of *Emotional Stability*. Cronbach’s Alpha was .82 and the mean of the scale was 4.98 with a standard deviation of 0.95.

OM was measured by 8 items consisting of items such as “Tries out various approaches”, “Is looking for new ways to attain his or her goal”, and “Has feeling for what’s appropriate in culture” (van der Zee & van Oudenhoven, Ponterotto & Fietzer, 2013). A high score meant a high level of *Open-mindedness*. Cronbach’s Alpha was .78 and the mean of the scale was 5.33 with a standard deviation of 0.70.

A final scale was created, called Multicultural Personality, by combining the five dimensions and computing them into one variable. A high overall score meant that the respondent shows traits that are represented in a multicultural personality. With this new variable, general analyses regarding the multicultural personality of the cabin crew could be made. However, the aforementioned separate dimensions were also used to conduct analyses in order to find relations based on individual traits. The mean of the Multicultural Personality scale was 5.11 with a standard deviation of 0.50.

Job Performance. To find a relation between personality and job performance, the level of job performance was measured by using the Individual Work Performance Questionnaire (IWPQ) developed by Koopmans, Bernaards, Hildebrandt, van Buuren, van der Beek and de Vet (2014). This instrument measured job performance through a task performance, contextual performance, and counterproductive work behaviour scale. This scale was able to “measure workers at all levels of ability, discriminate between workers at a much wider range on each scale, and detect changes in IWP [Individual Work Performance]” (p. 69), which is useful for this study as this target population’s job industry is very specific. There exist several scales to measure IWP. One of these is the original Individual Work Performance Questionnaire, originally consisting of 14 items. An improved version, the IWPQ 0.3, consisted of a 27-item scale and was made to include more “items that should be located at the higher range of the task and contextual performance scales (i.e., difficult items), and items that should be located at the lower range of the counterproductive work behaviour scale (i.e., easy items)” (Koopmans et al., 2014, p.162). In this study, only 7 items from the task performance scale were used to measure individual job performance. Based on an article by Campbell, McHenry and Wise (1990), Koopmans et al. (2014) defined task performance as “the proficiency with which individuals perform the core substantive or technical tasks

central to his or her job” (p. 161). Task performance is of most interest in this research, as it will provide a possible relationship between personality traits and cabin crew’s performance on board. Furthermore, the final survey should not take more than 10-15 minutes for respondents to complete, meaning that the survey could not have more than 100 items. Therefore, the decision was made to only include the 7 items of the task performance scale of the IWPQ 0.3.

This scale included items like “I managed to plan my work so that it was done on time”, “I kept in mind the results that I had to achieve my work”, and “I was able to perform my work well with minimal time and effort” (Koopmans et al., 2014). On a 7-point Likert scale, respondents had to indicate how often these statements occurred during flights in the last three months, where 1 meant Never and 7 meant Always. For respondents who are currently not working as cabin crew anymore, they were instructed to refer to flights they could still remember. A high score meant high levels of job performance. The scale was reliable (Cronbach’s Alpha = .81) and had a mean of 6.02 and a standard deviation of 0.62, indicating a strong tendency towards high (self-perceived) job performance of the cabin crew.

Job Satisfaction. This variable was measured using the job satisfaction scale developed by de Witte (2000). Hofhuis, van der Rijt and Vlug (2016) used a modified version on this scale to measure job satisfaction in their article “Diversity Climate Enhances Work Outcomes Through Trust and Openness in Workgroup Communication”. Six items were included with statements like “I feel satisfied with my current job”, “My job gives me the opportunity to show what I am worth”, and “My job gives me the feeling that I have done something valuable” (de Witte, 2000). On a 7-point Likert scale, respondents had to indicate to what extent they agreed with the items, in which 1 meant Totally disagree, and 7 meant Totally agree. A high score on this scale meant a high level of job satisfaction. Hofhuis, van der Rijt and Vlug (2016) concluded that this six-item scale was reliable. A reliability test in this research showed a high reliability as well (Cronbach’s Alpha = .88). The mean was 5.51 with a standard deviation of 1.04, indicating a tendency towards high levels of job satisfaction amongst the respondents.

Job-related Stress. In order to find a mediating effect of job-related stress, the Job Stress scale developed by Parker and DeCotiis (1983) was used. The 13-item scale consisted of two components of which the first is dominated by items concerning “feelings of being under substantial time pressure” (p. 169) and the second by items associated with “job-related feelings of anxiety” (p. 169). Three items were deleted by the researcher beforehand, because of the irrelevance of the items to the job as a cabin attendant. These items were “I feel guilty

when I take time off from job”, “I sometimes dread the telephone ringing at home because the call might be job-related”, and “I feel like I never have a day off” (p. 169). The resultant 10-item scale included statements like “My job gets to me more than it should”, “Working here leaves little time for other activities”, and “I have too much work and too little time to do in” (Parker & DeCotiis, 1983, p. 169). On a 7-point Likert scale, respondents had to indicate how often the statements described how they feel, in which 1 meant Never, and 7 meant Always. Before analysing the data, the items of this scale were recoded, meaning that a high score meant low job-related stress. Respondents were reminded to answer according to truth and that their answers would stay anonymous at all time. The scale was reliable (Cronbach’s Alpha = .86) and had a mean of 5.25 and a standard deviation of 1.04.

Control variables. While seeking to find a relation between the aforementioned measures, it is important to hold all other predictors constant (Freedman, Pisani & Purves, 2007). A total of 10 control variables were included in the survey. The first six were standard demographics, including gender, year of birth, educational level, nationality, and nationality of father and mother. The year of birth measure was recoded into numbers ranging from 1 = 1930 and 69 = 1998. This meant that a high number indicated a young person.

The other four control variables were related to the job as cabin crew. The first examined whether respondents are currently employed as cabin crew. Here, 1 meant currently employed, 2 meant currently not employed as cabin crew, Second, respondents had to indicate for how many years they worked as cabin crew, and third, for how many years they specifically worked as cabin crew for KLM Royal Dutch Airlines. Lastly, respondents had to indicate their position on board. KLM has five different positions for cabin crew on board, indicated by the stripes on their uniform. These included – from a high to low rank – Senior Purser, Purser, Assistant Purser, CA2 (working in Business Class), and CA1 (working in Economy Class). Respondents who are currently not employed had to fill out their last position. Here, 1 indicated a high rank (Senior Purser), and 5 meant low rank (CA1).

3.6 Descriptive statistics

The table below provides an overview of the descriptive statistics of the measures as discussed in section 3.5 (see Table 2). Furthermore, to gain insights into how the variables are correlated to each other, a correlation matrix is given (see Table 3).

Table 2. Descriptive Statistics of measures ($N = 227$).

Measure	M	SD	Minimum	Maximum	Cronbach's alpha
Multicultural Personality	5.11	0.50	3.45	6.38	.87
Job Performance	6.02	0.62	3.57	7.00	.81
Job Satisfaction	5.51	1.04	1.33	7.00	.88
Job-related Stress	5.25	1.04	2.40	7.00	.86
Intercultural Communication	5.07	0.64	3.60	6.87	.77

Table 3. Pearson correlations between measures ($N = 227$).

Measure	1	2	3	4	5
1. Multicultural Personality	1	.28**	.23**	.15*	.37**
2. Job Performance	.28**	1	.17*	.15*	.23**
3. Job Satisfaction	.23**	.17*	1	.27**	.18**
4. Job-related Stress	.15*	.15*	.27**	1	.16*
5. Intercultural Communication	.37**	.23**	.18**	.16*	1

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

Regarding the tested control variables, it was found that five out of ten were significantly correlated to certain outcome measures (see Table 4). These significantly correlated variables were therefore included in the corresponding regression analyses as will be shown in Chapter 4.

Table 4. Significant Pearson correlations between outcome variables (rows) and control variables (columns) ($N = 227$).

	Age	Currently employed as cabin crew	Years working as cabin crew	Years working as cabin crew for KLM	Position on board
Job Performance	-.32**	n.s.	.30**	.27**	.30**
Job Satisfaction	.14*	n.s.	n.s.	.17*	-.26**
Job-related Stress	n.s.	-.14*	n.s.	n.s.	n.s.
Intercultural Communication	-.16*	n.s.	n.s.	n.s.	n.s.

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

4. Results

This chapter will give a detailed overview of the results after testing the 12 hypotheses as proposed in the Theoretical Framework (Chapter 2). All hypotheses have been tested by making use of IBM SPSS version 24. By conducting several regression analyses, possible relations could be found between the measures as discussed in the Methodology (Chapter 3). It is important to note that, in addition to the hypotheses that will be tested, some additional regression analyses have been done in order to unravel the influence of the five different personality dimensions of the MPQ on the outcome variables. In other words, not only the role of the MPQ in general will be tested as was proposed in the hypotheses, but also the separate dimensions including *Cultural Empathy*, *Flexibility*, *Social Initiative*, *Emotional Stability* and *Open-mindedness* will be examined and discussed in section 4.5. This is interesting, as it will provide a more detailed overview on how specific personality traits of the cabin crew are of importance for job-related outcomes.

4.1 Control variables

In order to find a relation between the control variables and outcome variables several regression analyses were conducted. Only one control variable showed a significant relation: the position of the crew on board – referring to the five different ranks that exist – was significantly related to the levels of job satisfaction ($b^* = -.13, p = .018$). A negative relation was found, indicating that the higher the position on board, the higher the job satisfaction (because in the survey a low score indicted a higher position on board). Hence, a cabin crew member who works as a Senior Purser and can therefore be seen as the manager on board of the airplane is more satisfied with his or her job than a crew member who works in the economy class.

4.2 Relation between multicultural personality and job performance/satisfaction

4.2.1 Multicultural personality – Job performance

To test whether there is a positive relation between a cabin attendant's multicultural personality and his or her job performance on board of an airplane (H1), a linear regression analysis has been conducted. In this case, the multicultural personality was the independent variable and job performance was the dependent variable. A single regression analysis was an appropriate test for finding a relation between two variables. Furthermore, the measurement level of the two variables used in this hypothesis was continuous, meaning that this fits the requirements for a regression analysis (Pallant, 2013). The criterium in the linear regression

was job performance. Predictors were multicultural personality and four control variables which were significantly correlated to job performance including age, years working as cabin crew, years working as cabin crew for KLM, and position on board (see Table 4, Chapter 3). The resultant model was found to be significant, $F(5, 220) = 8.69, p < .001, R^2 = .17$. The multiple regression showed that there is only a significant relationship between a multicultural personality of the crew and job performance ($b^* = .34, p < .001$). Neither age ($b^* = -.01, p = .097$), years working as cabin crew ($b^* = .01, p = .645$), years working as cabin crew for KLM ($b^* = .00, p = .848$), and position on board ($b^* = .02, p = .478$) were found to be significant predictors of job performance. However, since multicultural personality and job performance were significantly positively ($b^* = .34$) related, H1 was confirmed.

4.2.2 Multicultural personality – Job satisfaction

To test whether there is a positive relation between a cabin attendant's multicultural personality and his or her job satisfaction (H2), another linear regression analysis has been conducted. Similar to H1, multicultural personality was the independent variable, however, in this hypothesis the dependent variable was changed to job satisfaction. These variables' measurement level was continuous, meaning that a regression analysis is an appropriate fit (Pallant, 2013). Job satisfaction was entered as the criterium in the multiple regression analysis. The main predictor was multicultural personality, accompanied by the correlated control variables years working as cabin crew, years working as cabin crew for KLM, and position on board (see Table 4, Chapter 3). This model was found to be significant as well, $F(4, 221) = 6.57, p < .001, R^2 = .11$. In this analysis, multicultural personality ($b^* = .41, p = .003$) and position on board ($b^* = -.13, p = .018$) were found to be significant predictors of job satisfaction. The other two control variables which showed significant correlations to job satisfaction, proved to be not significant after the regression analysis. The slope coefficient for multicultural personality was positive ($b^* = .41$) and negative for position on board ($b^* = -.13$). Based on these results, H2 was confirmed.

4.3 Role of effective intercultural communication

This thesis aimed at finding the mediating effect of intercultural communication on the relation between a multicultural personality and job performance/job satisfaction. In order to do so for the outcome job performance, hypotheses 1, 3 and 5 were tested. For job performance, hypotheses 2, 3, and 7 were used.

4.3.1 Multicultural personality – Effective intercultural communication

In order to test whether there is a positive relation between a multicultural personality of the cabin crew and effective intercultural communication between cabin crew and passengers (H3), a third multiple linear regression analysis was conducted. The independent variable was multicultural personality and the dependent variable was effective intercultural communication. Both variables were continuous. The only control variables which showed significant correlation to effective intercultural communication was age (see Table 4, Chapter 3). This single control variable was included in the regression analysis. The model was significant, $F(2, 224) = 19.76, p < .001, R^2 = .15$. Only multicultural personality was found to be a significant predictor ($b^* = .46, p < .001$), as age proved to be a non-significant predictor of effective intercultural communication ($b^* = -.01, p = .110$). The unstandardized coefficient for multicultural personality was .46, indicating a positive relation between a multicultural personality and effective intercultural communication. Consequently, H3 was accepted.

4.3.2 Job performance

First, the mediating role of effective intercultural communication on the relation between X and Y has been tested, in which X is multicultural personality and Y is job performance.

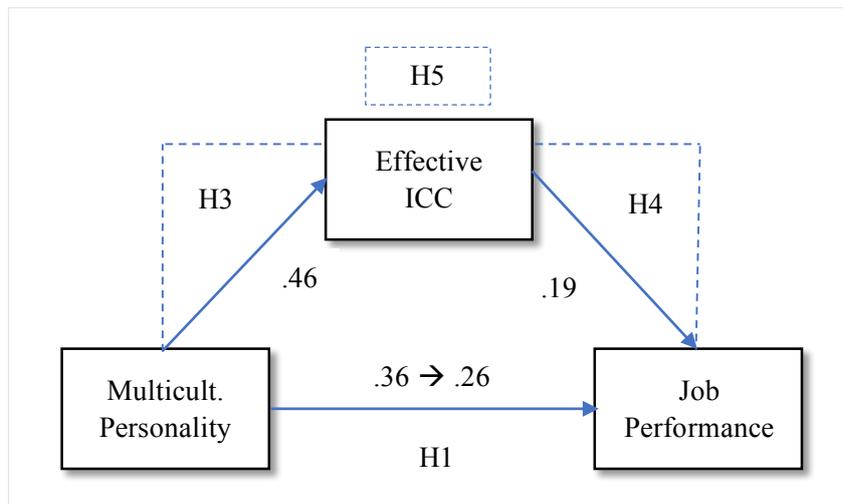
4.3.2.1 Effective intercultural communication – Job performance

A linear regression analysis has been conducted to test whether there is a positive relation between effective intercultural communication and job performance (H4). Here, the independent variable was effective intercultural communication and the dependent variable was job performance. Since the measurement level of both variables was continuous, a linear regression analysis is an appropriate test to find a relation between the two variables (Pallant, 2013). The significantly correlated control variables to job performance were added to the regression analysis (see Table 4, Chapter 3). Job performance was entered as the criterium, effective intercultural communication as predictor as well as the significant control variables. After running the multiple regression analysis, the model was found to be significant, $F(5, 222) = 7.28, p < .001, R^2 = .14$. However, only effective intercultural communication was found to be a significant predictor of job performance ($b^* = .19, p = .002$), as none of the control variables was significantly related. The slope coefficient of effective intercultural communication was .19, meaning that there was a positive relation between this predictor and the dependent variable job performance. Based on this outcome, H4 was accepted.

4.3.2.2 Mediating effect of effective intercultural communication

By combining H1, H3, and H4, H5 has been formulated: effective intercultural communication mediates the relationship between a multicultural personality and job performance of the crew. Mediation can be found by testing three models as proposed by Baron and Kenny (1986). In other words, by conducting three different linear regression analyses and focussing on the difference between the unstandardized coefficients, it can be tested whether the relation between the independent and dependent variable was caused by a mediator. The regression analyses could be run due to the continuous measurement level of the measures (Pallant, 2013). The first model in the mediation process has been tested in H1. Model 2 was tested in H3 and model 3 in H4. To find if there is a difference in the unstandardized coefficients of H1 and the b^* when controlled for the effect of effective intercultural communication, a multiple linear regression analysis will be conducted in which the dependent variable job performance was the criterium, and the independent variable multicultural personality and mediating variable effective intercultural personality the predictors. The model was found to be significant, $F(6, 219) = 7.92, p < .001, R^2 = .18$. Multicultural personality was a significant predictor of job performance ($b^* = .26, p = .002$) when controlled for the effect of effective intercultural communication ($b^* = .14, p = .030$). The other control variables were found to be insignificant. Since there is a difference between the unstandardized coefficient of the relation between a multicultural personality and job performance (H1, $b^* = .34$) and the relation between these two when controlled for the mediating effect of effective intercultural communication (H5, $b^* = .26$), there was partial mediation (see Figure 1). By calculating a Sobel's Z value, an indication can be given with regard to how much the influence of multicultural personality on job performance is removed by effective intercultural communication. A significant partial mediation was found ($c = .34, p < .001, c' = .26, p = .002; Sobel's Z = 3.10, p = .002$). Therefore, H5 was confirmed.

Figure 1. Mediating effect of effective intercultural communication on the relation between multicultural personality and job performance by showing b* values.



4.3.3 Job satisfaction

Next, the mediating role of effective intercultural communication on the relation between X and Y has been tested, in which X is multicultural personality and Y is job satisfaction.

4.3.3.1 Effective intercultural communication – Job satisfaction

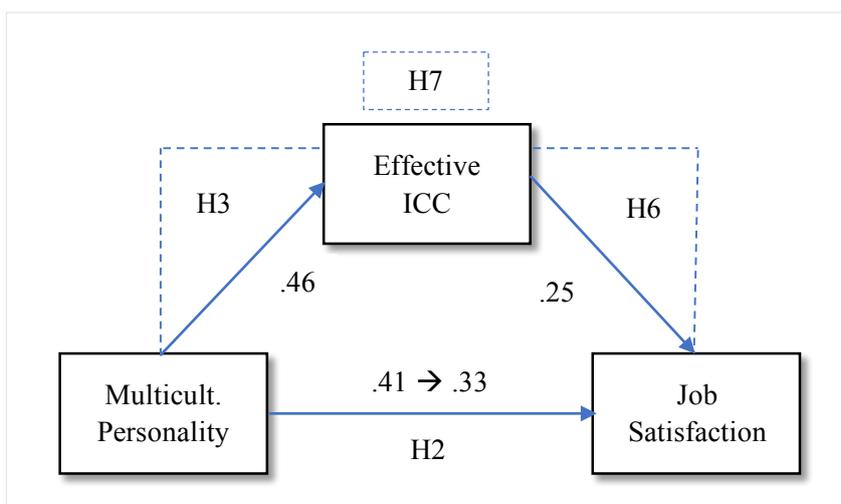
Switching to the dependent variable of job satisfaction, a regression analysis was run to find a positive relation between effective intercultural communication and job satisfaction (H6), in which effective intercultural communication was the independent variable. Due to the continuous measurement level of the variables, a regression analysis has been conducted (Pallant, 2013). The aforementioned control variables that were significantly correlated to job satisfaction were added to the analysis (see Table 4, Chapter 3). The model was significant, $F(4, 221) = 5.68, p < .001, R^2 = .09$. The predictor effective intercultural communication proved to be significant ($b^* = .25, p = .020$), as well as the control variable position on board ($b^* = -.16, p = .005$). The other two control variables were non-significant. The slope coefficient of effective intercultural communication was .25, which showed a positive relation between this variable and job satisfaction. Hence, H6 was also confirmed.

4.3.3.2 Mediating effect of effective intercultural communication

The combination of H2, H3 and H6, resulted in H7: effective intercultural communication mediates the relationship between personality and job satisfaction. Similar to

H5, the mediating effect of effective intercultural communication was found by conducting four regression analyses by which three models were tested (Baron & Kenny, 1986). In this hypothesis, multicultural personality is the independent variable, job satisfaction is the dependent variable and effective intercultural communication is the mediator. All three variables were continuous, making them appropriate to test with a regression analysis (Pallant, 2013). In order to find the mediating effect of effective intercultural communication, job satisfaction was entered as the criterium, and multicultural personality and effective intercultural communication as predictors. The model appeared to be significant, $F(5, 220) = 5.68, p < .001, R^2 = .11$. Multicultural personality was a significant predictor of job satisfaction ($b^* = .33, p = .023$) when controlled for the effect of effective intercultural communication. In addition, the control variable position on board showed to be significant ($b^* = -.13, p = .018$). The other variables were non-significant. Because of the fact that there is a difference between the unstandardized coefficient of the relation between a multicultural personality and job satisfaction (H2, $b^* = .41$) and the relation between these two variables when controlled for the mediating effect of effective intercultural communication (H7, $b^* = .33$), there was partial mediation (see Figure 2). This mediation was found to be significant ($c = .41, p = .003, c' = .33, p = .023$; Sobel's $Z = 2.45, p = .014$). For that reason, H7 was accepted as the 7th hypothesis in a row.

Figure 2. Mediating effect of effective intercultural communication on the relation between multicultural personality and job satisfaction by showing b* values.



4.4 Role of job-related stress

In addition to finding the mediating role of effective intercultural communication, this thesis aimed at finding the mediating effect of job-related stress on the relation between a multicultural personality and job performance/job satisfaction. Hypotheses 1, 8, and 9 were used to find the mediating effect of job-related stress on job performance whereas hypotheses 2, 8, and 11 contributed to the mediating effect of job satisfaction.

4.4.1 Multicultural personality – Job-related stress

A simple linear regression was carried out to test whether there is a negative relation between a multicultural personality of the cabin crew and their levels of job-related stress (H8). In this case, multicultural personality is the independent variable and job-related stress the dependent variable, which are both continuous measurements. The only control variable that was significantly correlated to job-related stress was currently employed as cabin crew (see Table 4, Chapter 3) and was therefore added to the regression analysis. Job-related stress was entered as the criterium. Predictors were multicultural personality and the aforementioned control variable. The resultant model was significant, $F(2, 224) = 4.54, p = .012, R^2 = .04$. Multicultural personality proved to be a significant predictor of job-related stress ($b^* = .30, p = .030$). The fact that the scale for job-related stress was reversed (a high score meant low levels of job-related stress) explains the positive number for the slope coefficient for multicultural personality. Since $b^* = .30$ for multicultural personality, there is a positive relation between having a multicultural personality and low levels of job-related stress. Thus, H8 was accepted.

4.4.2 Job performance

First, the mediating role of job-related stress on the relation between X and Y has been tested, in which X is multicultural personality and Y is job performance.

4.4.2.1 Job-related stress – Job performance

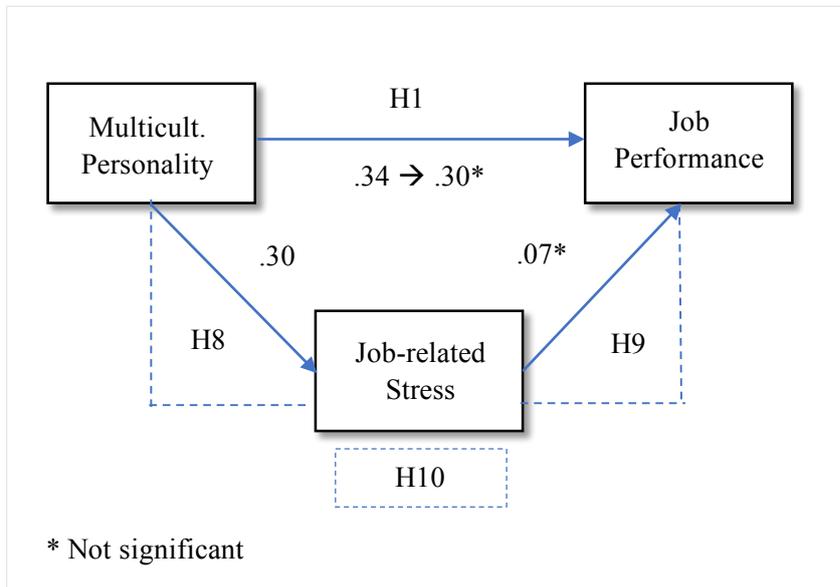
In order to reveal whether there is a negative relation between levels of job-related stress and job performance (H9), a linear regression analysis has been conducted. The variables in this analysis both had a continuous measurement level, which made a regression analysis a suitable test to find a relation between the two variables (Pallant, 2013). The independent variable was job-related stress and the dependent variable was job performance. The control variables that significantly correlated to the dependent variable were added to the regression analysis (see Table 4, Chapter 3). Job performance was entered as criterium and

job-related stress as the predictor. The model showed significance, $F(5, 220) = 5.94, p < .001, R^2 = .12$. However, job-related stress was found to be a marginally significant predictor of job performance ($b^* = .07, p = .059$). The four control variables were not significant either, but age was rather close to significance ($p = .092$). The slope coefficient of job-related stress was .07, meaning that if the score for job-related stress went up (which meant lower levels of job-related stress), the job performance went up as well. Consequently, there is negative relation between having stress caused by the job and job performance. Nonetheless, since there was found a marginally significance for the relation between job-related stress and job performance, H9 was rejected.

4.4.2.2 Mediating effect of job-related stress

By merging H1, H8 and H9, H10 could be formulated: Job-related stress mediates the relationship between a multicultural personality and job performance. Similar to H5 and H7, the mediating effect of effective intercultural communication was found by testing three models (Baron & Kenny, 1986). In this hypothesis, multicultural personality is the independent variable, job performance is the dependent variable and job-related stress is the mediator. All three variables were continuous, making them appropriate to test with a regression analysis (Pallant, 2013). In order to find the mediating effect of job-related stress, a multiple linear regression analysis was run in which job performance was entered as the criterium, and multicultural personality and job-related stress as the predictors. The outcome of the model was significant, $F(6, 219) = 7.59, p < .001, R^2 = .17$. Multicultural personality was a significant predictor of job performance ($b^* = .30, p < .001$) when controlled for the effect of effective intercultural communication. Neither job-related stress as the four control variables were significant. Since there is a difference between the unstandardized coefficient of the relation between a multicultural personality and job performance (H1, $b^* = .34$) and the relation between these two variables when controlled for the mediating effect of effective intercultural communication (H10, $b^* = .30$), there was partial mediation (see Figure 3). Nevertheless, after testing Sobel's Z , this partial mediation was found to be insignificant ($c = .34, p < .001, c' = .30, p < .001; Sobel's Z = 1.61, p = .107$). Therefore, H10 was rejected.

Figure 3. Mediating effect of job-related stress on the relation between multicultural personality and job performance by showing b^* values.



4.4.3 Job satisfaction

Second, the mediating role of job-related stress on the relation between X and Y has been tested, in which X is multicultural personality and Y is job satisfaction.

4.4.3.1 Job-related stress – Job satisfaction

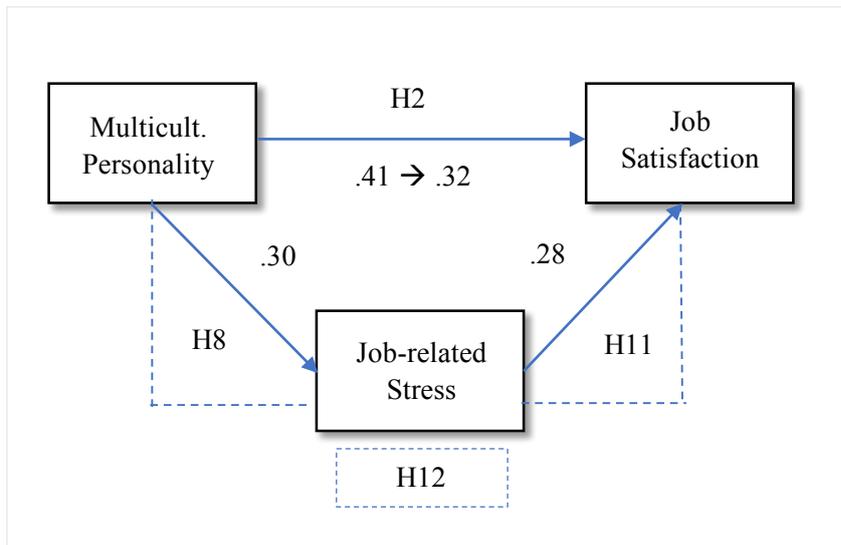
To test whether there is a positive relation between levels of job-related stress and job satisfaction of the cabin crew (H11), another linear regression analysis has been conducted. Similar to H9, job-related stress was the independent variable, however, in this hypothesis the dependent variable was changed to job satisfaction instead of job performance. The measurement level of these variables was continuous, meaning that a regression analysis is an appropriate fit (Pallant, 2013). Job satisfaction was entered as the criterion in the multiple regression analysis. The main predictor was job-related stress, accompanied by the significantly correlated control variables (see Table 4, Chapter 3). This model was again found to be significant, $F(4, 221) = 9.61, p < .001, R^2 = .15$. In this analysis, job-related stress ($b^* = .28, p < .001$) and position on board ($b^* = -.17, p = .001$) were found to be significant predictors of job satisfaction. The other two control variables which showed significant correlations to job satisfaction, proved to be not significant after the regression analysis. The slope coefficient for job-related stress was positive ($b^* = .28$) and negative for position on

board ($b^* = -.17$). Regarding these results, there is a negative relation between job-related stress and job satisfaction. Concludingly, H11 was confirmed.

4.4.3.2 Mediating effect of job-related stress

Finally, by testing H12, a possible mediating effect of job-related stress on the relationship between personality and job satisfaction could be found. The combination of H2, H8, and H11 will help to find this mediation. As was mentioned before, by testing three models by conducting linear regression analyses and focussing on the difference in unstandardized coefficients, it can be tested whether the relation between the independent and dependent variable was caused by a mediator. In this hypothesis, the independent variable is multicultural personality, the dependent variable is job satisfaction, and the mediator is job-related stress. Model 1 in the mediation process has been tested in H2. Model 2 was tested in H8 and model 3 in H11. To perform the final step, a multiple linear regression analysis will be conducted in which job satisfaction was entered as criterium, and multicultural personality and job-related stress as predictors. The model was found to be significant, $F(5, 220) = 9.02$, $p < .001$, $R^2 = .17$. Multicultural personality was a significant predictor of job satisfaction ($b^* = .32$, $p = .017$) when controlled for the effect of job-related stress. In addition, job-related stress ($b^* = .26$, $p < .001$) and the control variable position on board ($b^* = -.14$, $p = .007$) were significant. The other two control variables were found to be non-significant. Since there is a difference between the unstandardized coefficient of the relation between a multicultural personality and job satisfaction (H2, $b^* = .41$) and the relation between these two when controlled for the mediating effect of job-related stress (H12, $b^* = .32$), there was partial mediation (see Figure 4). By calculating a Sobel's Z value, a significant partial mediation was found ($c = .41$, $p = .003$, $c' = .32$, $p = .017$; Sobel's $Z = 2.03$, $p = .043$). As a result, the final hypothesis H12 was confirmed.

Figure 4. Mediating effect of job-related stress on the relation between multicultural personality and job satisfaction by showing b^* values.



4.5 The individual dimensions of the MPQ

The personality traits of the cabin crew have been measured using the MPQ. The hypotheses that have been tested above all examined the MPQ as a whole. However, as was discussed at the beginning of this chapter, the five different personality dimensions that together form the MPQ scale are also of interest. Therefore, several regression analyses have been performed in order to find the relation between the five dimensions and job performance, job satisfaction, effective intercultural communication, and job-related stress. For every outcome measure, five different regression analyses have been performed with the five personality dimensions.

Focussing on the relation between a multicultural personality and job performance, it was found that *Cultural Empathy* ($b^* = .36, p < .001$), *Social Initiative* ($b^* = .20, p < .001$), *Emotional Stability* ($b^* = .12, p = .007$), and *Open-mindedness* ($b^* = .27, p < .001$) were significantly related to job performance. Only *Flexibility* turned out to be an insignificant predictor of job performance ($b^* = -.03, p = .448$).

The dimensions that significantly related to job satisfaction included *Cultural Empathy* ($b^* = .43, p = .001$), *Social Initiative* ($b^* = .27, p = .003$), *Emotional Stability* ($b^* = .34, p < .001$), and *Open-mindedness* ($b^* = .20, p = .038$). *Flexibility* was again found to be insignificant ($b^* = -.09, p = .187$).

In finding a relation between the separate dimensions and effective intercultural

communication, it can be concluded that *Cultural Empathy* ($b^* = .48, p < .001$), *Social Initiative* ($b^* = .11, p = .040$), *Emotional Stability* ($b^* = .18, p < .001$), and *Open-mindedness* ($b^* = .35, p < .001$) were found to be significant predictors of having effective intercultural communication. *Flexibility* was found to be insignificant ($b^* = .07, p = .122$).

Finally, other regression analyses showed that, concentrating on the relation between the separate dimensions and job-related stress, the only significant dimension of the MPQ included *Emotional Stability* ($b^* = .39, p < .001$). *Cultural Empathy* ($b^* = -.04, p = .781$), *Flexibility* ($b^* = .03, p = .634$), *Social Initiative* ($b^* = .08, p = .364$), and *Open-mindedness* ($b^* = -.06, p = .526$) were found to be insignificant predictors of job-related stress.

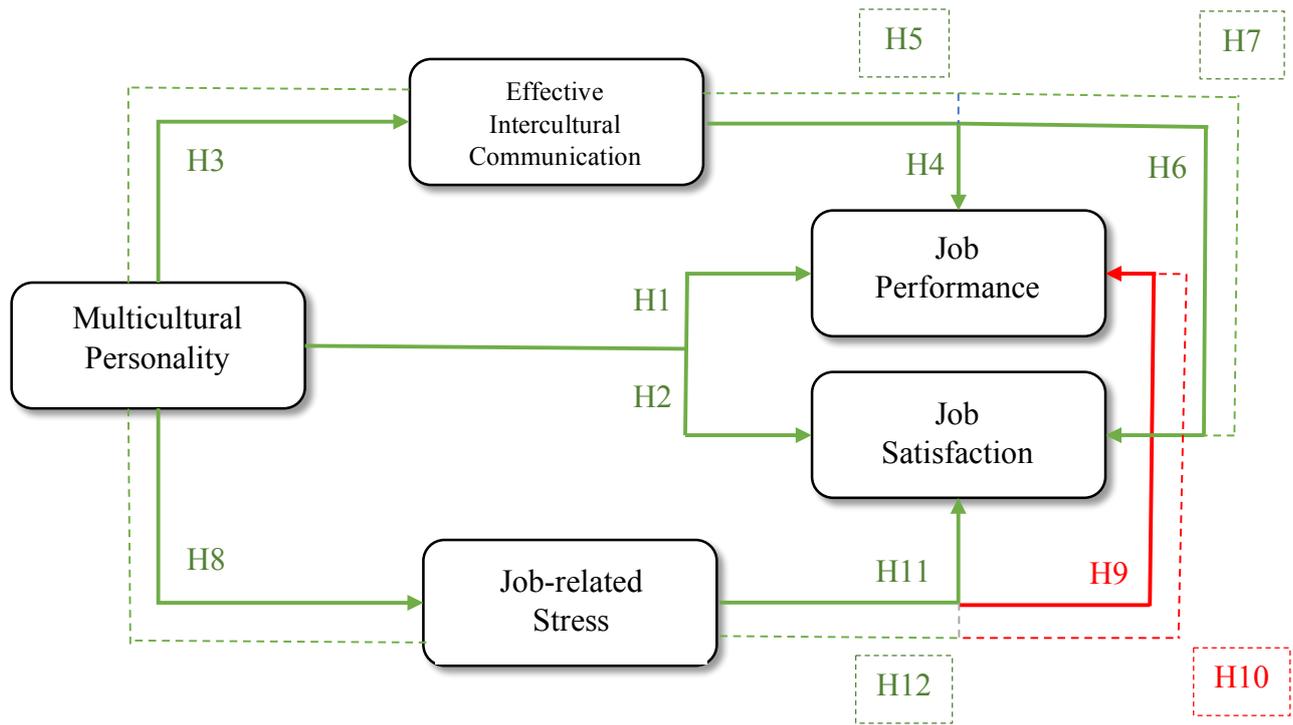
4.6 Summary

To sum up the results, 10 out of 12 hypotheses were confirmed. Using a regression analysis, a relation was found between the cabin crew's multicultural personality and their job performance and job satisfaction, meaning that H1 and H2 were confirmed. Next, regression analyses were used to test hypothesis 3-12. H3 and H8 showed that there is not only a relation between the crew's personality and their job performance/job satisfaction, but that there is also a linkage between having a multicultural personality and effective intercultural communication, and job-related stress.

Focussing on job performance H4 and H5 were successfully accepted, indicating a positive relation between effective intercultural communication and job performance, and a mediating effect of effective intercultural communication on the relation that was found in H1. However, H9 and H10 were rejected, meaning that there is no mediating effect of job-related stress on H1.

Related to job satisfaction of the crew, H6, H7, H11, and H12 were approved. This means that there is a significant relation between effective intercultural communication and job satisfaction (H6), but also between job-related stress and job satisfaction (H11). Consequently, it can be said that both effective intercultural communication as well as job-related stress mediate the relation that was found in H2.

Figure 5. Conceptual model showing the confirmed (green) and rejected (red) hypotheses.



5. Conclusion and Discussion

The purpose of this thesis was to unravel the effects of having effective intercultural communication between cabin crew and passengers on board of an airplane. In other words, this thesis aimed to answer the following research question: Focussing on international airline cabin crew, what is the (mediating) role of effective intercultural communication with passengers on the relation between a multicultural personality and job performance/satisfaction? Furthermore, the following two sub-questions were proposed: (1) to what extent does a multicultural personality of the cabin crew relate to their job performance and job satisfaction?, and (2) to what extent can the relation between a multicultural personality of the cabin crew and their job performance/satisfaction be explained by, in addition to effective intercultural communication, the mediating effect of job-related stress? The answers to these questions are of interest for the aviation industry, as no earlier research investigated the proposed relations with regard to this specific industry that deals with intercultural situations on a daily basis. In this way, the interactions between the crew and their passengers can be optimised, resulting in more satisfied customers. This is in line with the mission and vision of KLM Royal Dutch Airlines – the studied airline in this thesis – as their customer service vision is based on individual and personal attention (“KLM Company Profile – KLM Corporate”, 2017).

In order to answer the research questions, previous research on the topic was studied. Based on prior findings, 12 hypotheses were formulated that predict several relations between the key concepts of this research. The data was collected by means of an online survey that was distributed in closed KLM crew Facebook groups. Through the use of IBM SPSS the data was analysed and the hypotheses could be tested.

Based on the findings of this research among 227 cabin crew members of KLM, it can be concluded that effective intercultural communication between the cabin crew and passengers is of high importance. It mediates the relation between a multicultural personality and job performance of the crew as well as their job satisfaction. Furthermore, it can be concluded that having an intercultural personality positively influences job performance and job satisfaction. Lastly, this research showed that stress as a result of their job does not affect job performance of the crew, however, it does have a negative influence on job satisfaction.

5.1 Summary of findings

In accordance with this study's expectations, it can be concluded that there exists a positive relation between having a multicultural personality and cabin crew's job performance. Put differently, the higher a cabin crew member's score on the MPQ, the higher their multicultural personality, and thus the higher their job performance on board.

In relation to this finding, it can also be concluded that there is a positive relation between the multicultural personality of the cabin crew and their job satisfaction. Since a positive relation was found, it can be said that the higher the MPQ score, the higher the multicultural personality of the cabin crew, and the better they enjoy their job on board. There is a slightly stronger relation between a multicultural personality and job satisfaction than job performance.

Third, it was predicted and found that there is a positive linkage between a multicultural personality of the cabin crew and effective intercultural communication. This means that, a high score on the MPQ results in a more effective form of communication of the cabin crew with their passengers. Although the age of the crew member is significantly correlated to the effectiveness of their intercultural communication with passengers, it cannot be said that an older crew member performs more effective intercultural communication as there was no significant relation found. In a separate analysis, it was found that *Cultural Empathy*, *Social Initiative*, *Emotional Stability*, and *Open-mindedness* are personality traits of cabin crew members that significantly contribute to their job performance, job satisfaction, and intercultural communication, in which having a high sense of *Cultural Empathy* is the biggest predictor of these three outcomes. Taking into account the intercultural nature on board of an airplane and of the job as a cabin attendant, it is not surprising that this personality trait is the most important.

Fourth, the following conclusion can be drawn: there is a positive relation between effective intercultural communication and job performance. Hence, someone who knows how to effectively communicate in an intercultural setting performs his or her job better. This makes sense in the airline industry scene, as intercultural communication is a crucial part of the job as a cabin attendant; the passengers that are served on international flights are highly culturally diverse. If a cabin crew member knows how to effectively deal with these intercultural situations, he or she is better at the job.

In relation to this, it can be concluded that effective intercultural communication partially mediates the relationship between a multicultural personality and job performance of

the cabin crew. This means that the relation between having a multicultural personality – i.e. a high score on the MPQ – and performing one's job well is partially caused by having effective intercultural communication. In other words, there is an indirect relation between a multicultural personality and job performance, as this relation partially runs through effective intercultural communication.

Turning to the effects on job satisfaction rather than job performance, a comparable conclusion can be drawn, meaning that there is a positive relation between effective intercultural communication and job satisfaction. This means that a cabin crew member who effectively communicates with his or her passengers, is also more satisfied with the job.

As a result, it can be concluded that effective intercultural communication of the cabin crew also mediates the relationship between a scoring high on the MPQ and levels of job satisfaction. However, it is important to note that this is a partial mediation, meaning that the relation between a multicultural personality and job satisfaction is partially caused by having effective intercultural communication, but can also be caused by other factors. For example, it was found that position on board also plays a significant part in this relation.

In addition, the role of job-related stress should not be forgotten. Results have shown that there is a negative relation between the multicultural personality of the cabin crew and levels of job-related stress. This means that a high MPQ score will lead to lesser stress caused by the job as a cabin attendant. Here, *Emotional Stability* is the only trait that is related to job stress. This means that cabin crew members who are emotional stable and are not easily upset by certain behaviour of the passengers as a result of cultural differences experience less job-related stress.

Contradicting the expectations and earlier scientific research done by e.g. Alam (2015) that found that stress reduces productivity and performance, this study found no relation between levels of job-related stress and job performance of the crew. It was expected that having little job-related stress would result in higher job performance. Nonetheless, analysis showed an insignificant relation between the two. Nevertheless, as the result nearly approached significance, the chances would be high of finding a significant relation would the observed sample be bigger than in this study.

Consequently, there is no mediating effect of job-related stress on the relation between a multicultural personality and job performance. This means that stress caused by being a cabin crew member does not influence the existent relation between a high MPQ score and performing the job well. The opposite is true for the mediating effect of effective intercultural communication.

With regards to cabin crew's satisfaction, it can be concluded that there is a negative relation between levels of job-related stress and job satisfaction. This indicated that a cabin crew member who experiences little job-related stress, is more satisfied with his or her job.

Accordingly, job-related stress partially mediates the relationship between a multicultural personality and job satisfaction. In other words, the effect of the MPQ on job satisfaction can partially be explained by the levels of job-related stress as experienced by the cabin crew.

5.2 Theoretical implications

The findings of this study add to the existing literature through several aspects. First, the prominent role of the multicultural personality traits of the MPQ in job satisfaction was already approved by van Oudenhoven, Mol, and van der Zee (2003) by showing that *Flexibility* is a predictor of job satisfaction amongst expatriates. This research has proved the prominent relation between the MPQ traits and job satisfaction as well, but also added a new evidence for the relation with another job-related outcome; individual job performance. By showing that there is a significant relation between the scores of the MPQ and job performance of cabin crew, the validity of the MPQ has been confirmed once again.

Furthermore, through this study the evidence is growing for the importance of personality traits in intercultural settings. By linking the MPQ and its individual dimensions to outcomes of intercultural communication, levels of job-related stress, individual job performance, and job satisfaction new knowledge is found for the importance of multicultural personality traits. When looking at job performance, job satisfaction, and effective intercultural communication, four dimensions of the MPQ have been found to be beneficial traits for employees working in highly intercultural settings, like cabin crew members. The importance of being able to show empathy towards people from different cultural background is supported in this study as well as in a study amongst hospitality employees done by Sizoo, Iskat, Plank & Serrie (2004) based on job-related outcomes, and in a study amongst health care providers conducted by Ulrey and Amason (2001) related to intercultural communication. However, this study found opposite results in comparison to the aforementioned result of van Oudenhoven, Mol, and van der Zee (2003), because all dimensions of the MPQ except *Flexibility* were found to be related to cabin attendants' job satisfaction. This could perhaps be explained by the difference in studied population, as van Oudenhoven, Mol and van der Zee conducted their research amongst expatriates who have to deal with more long-term acculturation than only short-term intercultural communication

during a flight as is the case with cabin crew members. Comparing the results of van Oudenhoven and van der Zee (2013) based on the MPQ and possible stress factors, the importance of being emotional stable in order to experience less stress caused by the intercultural job is confirmed.

Furthermore, this study provided additional evidence for the relevance of the MPQ by testing it amongst a never tested target population, being in this case a cabin crew member. Focussing on this population, new insights emerged regarding cabin crew's role of personality, the way they deal with intercultural settings, and, based on this study, what traits should be trained for in intercultural trainings. In accordance with van der Zee & van Oudenhoven (2013), who argue for the importance of intercultural training programs, this study added to the evidence of the importance of such trainings.

Also, the construction of a new scale to measure intercultural communication effectiveness among cabin crew members with their passengers on board is an added value to the aviation literature. Other scholars are welcomed to use and improve this scale for their researches related to this topic, as the body of academic literature related to intercultural communication in the airline industry in general and the cabin crew specifically could still be enlarged.

5.3 Limitations and future research

Similar to every other scientific research, the present research knows some limitations. Based on these limitations, suggestions can be made for future research. First of all, there are some issues related to the research method and sample of this study. An online survey was used to collect the data. Despite the low costs, there are some limitations with regard to online data collection through surveys. For example, response rates are generally low (Neuman, 2014). This survey was distributed in five closed Facebook groups for KLM cabin crew, with the biggest group consisting of 4000 members. Regardless of this high number of members, only 227 KLM cabin crew members filled in the survey within 3.5 weeks. As a result, the sample size is big enough to meet the criteria, however, a larger sample could increase the chances of finding significance. As an illustration, in this research a significance of $p = .059$ was found for the relation between job-related stress and job performance. With a wider sample size, perhaps significance would be found. Future research could prolong the data collection period to increase the sample size. Another limitation to the survey was its language. As most respondents were Dutch and the survey was in English, there could have been misunderstandings or misinterpretations of the questions asked. Future research could

solve this by professionally translating the survey to the ideal language. Furthermore, the sampling method as was discussed in the Methodology (Chapter 3), can be seen as a limitation, because it is a non-random method (Neuman, 2014). Some respondents have been reached because of their closeness to the researcher. Most respondents have been reached through the online social network Facebook. A bias could be present as the sample partially represents the researcher's social environment and excludes the population who is not on Facebook or not member of the KLM cabin crew Facebook groups. In an ideal research, all current cabin crew employees of KLM would have been reached through their corporate email address. Also, conducting this research amongst several other airlines and amongst other nationalities would be an interesting suggestion for future research.

Another limitation to this research are the non-normally distributed items of the survey. For example, a majority of the respondents claimed to pay a lot of attention to the emotions of others, meaning that the histogram for this item was highly left skewed. Nonetheless, it was chosen not to delete these items, because KLM recruits for people who have an eye for the emotions of others. In other words, KLM most probably recruits for people with a certain personality. Therefore, it would make sense that most respondents fill in this answer. Interviewing the HR and recruitment department of an airline could bring more insights. However, questions related to personality are also very prone to social desirability. As a cabin crew member, you are expected to be a good listener or to enjoy other people's stories.

The developed intercultural communication scale for cabin crew members proved to be reliable (Cronbach's alpha = .77) and of great use in this research. In future research, this scale could be tested for its cross-cultural validity amongst a different sample in a different country and airline. Also, the Cronbach's alpha could be increased by rephrasing and re-introducing different items.

Future research could also further dive into the demographics of the target population. For example, focussing on respondent's cultural background might be interesting. A cabin crew member who grew up in a multicultural family, could be more advanced in dealing with intercultural situations. The results of this study raised some other questions that would be worthwhile to investigate in future research. For example, is there a difference in full-time and part-time employed cabin crew members? Based on this study, it can be said that job-related stress is not related to job performance. However, would this also be the case if only full-time cabin crew members were investigated? Someone who works part-time and flies only twice a month could possibly experience less job-related stress than someone who works

full-time.

A follow-up study could look at other mediators on the relation between the MPQ and job-related outcomes, such as diversity beliefs or team performance instead of individual performance. Also, the mediating effect of intercultural communication and job-related stress on the individual personality traits of the MPQ would be a relevant addition to this research. Taking a look at the effectiveness of intercultural communication from the passenger's perspective would be of added value as well. Additionally, it could be investigated why such contradicting results were found in comparison to a similar study conducted by van Oudenhoven, Mol, and van der Zee (2003) and van Oudenhoven and van der Zee (2013) with regard to the importance of the trait *Flexibility* in relation to job satisfaction or job-related stress. As *Flexibility* was in none of the analysis found to be significance, there could have been some error. Lastly, a qualitative approach in a follow-up study could be a fascinating extension, as it could provide insights in the reasons behind the relations that were found. In addition, open-ended questions for respondents of the survey would be interesting, as they could give their own input on for example how to improve intercultural interactions on board.

5.4 Practical implications

Despite the aforementioned limitations, this research has some implications for practitioners, as it shows the importance of having effective intercultural communication. This effective form of communication partially influences cabin crew's job performance and job satisfaction. In other words, employee's performance and satisfaction with their job can be improved or maintained when their intercultural communication skills are at its best. This proves the importance of educating employees working in an intercultural environment – such as hospitality or airline industry – regarding intercultural situations. Providing information and training based on behaviours and customs in different cultures, e.g. through a role play with actors, can help to prepare cabin crew members for their passengers. When they know what to expect, they can effectively adapt to the intercultural situation. Eventually, this could improve customer satisfaction as well, as the communication between them and the employee goes smoothly and efficiently.

Furthermore, this research demonstrates the relevance of recruiting for certain personality traits when working in the intercultural workplace. In its recruitment process, KLM pays a lot of attention to the personality of the interviewee. Aspects like interpersonal sensitivity, flexibility, and effective communication are taken into account when recruiting for KLM cabin attendants. Nevertheless, a closer look at the multicultural competences of the

potential crew is advised, especially looking for people with high *Cultural Empathy* as this trait showed a high relation to having effective intercultural communication, but also high job performance and satisfaction. How do cabin attendants react to different manners and customs of culturally distant passengers? Knowing how to effectively deal with these situations improves effective intercultural communication and consequently job performance and job satisfaction.

In conclusion, this research is of added value for the academic world as well as for international airline industries and other industries that deal with culturally diverse encounters with their customers. By providing empirical evidence, the importance of personality and effective intercultural communication is confirmed. It can be said that cabin crew's personality is related to the way they perform the job and the likeliness that they are satisfied with the job. This linkage is partially caused by the fact that the KLM cabin crew members know how to effectively interculturally communicate with the passengers, but, considering job satisfaction, the amount of job-related stress that is experienced by the crew is also of influence. With this knowledge, KLM Royal Dutch Airlines should be able to continue their positive reputation regarding their open, friendly, and (culturally) understanding cabin crew.

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Appendix A: Survey intercultural communication cabin crew

Note: items with * are recoded in the dataset.

Q1

Dear ex-KLM colleague,

Thank you very much for participating in this research and helping me to graduate. This research is being conducted by Sanne Kranendonk, master student Media and Business at Erasmus University Rotterdam and former cabin attendant at KLM (summer 2016). The purpose of this study is to explore intercultural communication between the cabin crew and passengers. It consists of several questions regarding you and your work on board. Participation will be limited to the completion of an online questionnaire that should require between 10-15 minutes to complete.

Confidentiality: The data collected in this survey is strictly confidential and the findings of this research will be used solely for study purposes. Individual scores cannot be shared. Hence, your anonymity is guaranteed at any time.

Voluntary Participation: Please be aware that your participation in this survey is completely voluntary. You may refuse to participate or withdraw from this study at any time.

Contact Information: If you have any questions during or after your participation, please feel free to contact me: Sanne Kranendonk (454634sk@student.eur.nl).

Thanks again and hope to see you on board!

I understand the above and agree to participate in this research. (1)

Q2 (Cultural Empathy)

The following statements are related to your personality. To what extent do the statements apply to you?

Please know that there are no right or wrong answers!

I consider myself as someone who:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Pays attention to the emotions of others. (1)	<input type="radio"/>						
Is a good listener. (2)	<input type="radio"/>						
Senses when others get irritated. (3)	<input type="radio"/>						
Gets to know others profoundly. (4)	<input type="radio"/>						
Enjoys other people's stories. (5)	<input type="radio"/>						
Notices when someone is in trouble. (6)	<input type="radio"/>						
Sympathizes with others. (7)	<input type="radio"/>						
Sets others at ease. (8)	<input type="radio"/>						

Q3 (Flexibility)

I consider myself as someone who:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
*Works according to strict rules. (1)	<input type="radio"/>						
*Works according to plan. (2)	<input type="radio"/>						
*Works according to strict scheme. (3)	<input type="radio"/>						
*Looks for regularity in life. (4)	<input type="radio"/>						
*Likes routine. (5)	<input type="radio"/>						
*Wants predictability. (6)	<input type="radio"/>						
*Functions best in a familiar setting. (7)	<input type="radio"/>						
*Has fixed habits. (8)	<input type="radio"/>						

Q4 (Social Initiative)

I consider myself as someone who:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Takes the lead. (1)	<input type="radio"/>						
*Leaves initiative to others to make contacts. (2)	<input type="radio"/>						
*Finds it difficult to make contacts. (3)	<input type="radio"/>						
Takes initiative. (4)	<input type="radio"/>						
Is inclined to speak out. (5)	<input type="radio"/>						
Is often the driving force behind things. (6)	<input type="radio"/>						
Makes contacts easily. (7)	<input type="radio"/>						
*Is reserved. (8)	<input type="radio"/>						

Q5 (Emotional Stability)

I consider myself as someone who:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
*Worries. (1)	<input type="radio"/>						
*Gets upset easily. (2)	<input type="radio"/>						
*Is nervous. (3)	<input type="radio"/>						
*Is apt to feel lonely. (4)	<input type="radio"/>						
Keeps calm when things don't go well. (5)	<input type="radio"/>						
*Is insecure. (6)	<input type="radio"/>						
*Is under pressure. (7)	<input type="radio"/>						
Is not easily hurt. (8)	<input type="radio"/>						

Q6 (Open-mindedness)

I consider myself as someone who:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Tries out various approaches. (1)	<input type="radio"/>						
Is looking for new ways to attain his or her goal. (2)	<input type="radio"/>						
Starts a new life easily. (3)	<input type="radio"/>						
Likes to imagine solutions to problems. (4)	<input type="radio"/>						
Is a trendsetter in societal developments. (5)	<input type="radio"/>						
Has feeling for what's appropriate in culture. (6)	<input type="radio"/>						
Seeks people from different backgrounds. (7)	<input type="radio"/>						
Has broad range of interests. (8)	<input type="radio"/>						

Q7

The following seven statements are related to your work on board. Please indicate how often the statements occurred during flights in the past 3 months.

If you are currently not working as cabin crew anymore, please think of flights you still remember in order to answer these statements.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
I managed to plan my work so that it was done on time. (1)	<input type="radio"/>						
My planning was optimal. (2)	<input type="radio"/>						
I kept in mind the results that I had to achieve in my work. (3)	<input type="radio"/>						
I was able to separate main issues from side issues at work. (4)	<input type="radio"/>						
I knew how to set the right priorities. (5)	<input type="radio"/>						
I was able to perform my work well with minimal time and effort. (6)	<input type="radio"/>						
Collaboration with others was very productive. (7)	<input type="radio"/>						

Q8

The following six statements are about your love for the job as cabin crew. Please indicate how much you agree or disagree with the statements.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
I feel committed to my job. (1)	<input type="radio"/>						
I am satisfied with my current job. (2)	<input type="radio"/>						
Through my job I gain respect and status. (3)	<input type="radio"/>						
My job makes me feel useful. (4)	<input type="radio"/>						
My job gives me the opportunity to show what I am worth. (5)	<input type="radio"/>						
My job gives me the feeling that I have done something valuable. (6)	<input type="radio"/>						

Q9

The following ten statements are related to stress you may feel. How often do each of the statements describe how you feel?

Please remember to answer according to truth. Your answers will stay anonymous at all times.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
*I have felt restless or nervous as a result of my job. (1)	<input type="radio"/>						
*Working here makes it hard to spend enough time with my family and friends. (2)	<input type="radio"/>						
*My job gets to me more than it should. (3)	<input type="radio"/>						
*I spend so much time at work, I can't see the forest for the trees. (4)	<input type="radio"/>						
*There are lots of times when my job drives me right up the wall. (5)	<input type="radio"/>						
*Working here leaves little time for other activities. (6)	<input type="radio"/>						
*Sometimes when I think about my job I get a tight feeling in my chest. (7)	<input type="radio"/>						
*I frequently get the feeling I am married to the company. (8)	<input type="radio"/>						

*I have too much work on board and too little time to do it in. (9)

*Too many people at my level in the company get burned out by job demands. (10)

Q10

The following statements are about your interactions with passengers of different cultures on board. Please indicate to what extent you agree or disagree.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
*If a passenger is disrespectful towards me, I get very irritated. (1)	<input type="radio"/>						
If a passenger does not speak the same language(s) as I do, I easily use hand-gestures or other non-verbal communication. (2)	<input type="radio"/>						
*I have a better and closer connection with passengers when I am familiar with their culture (e.g. when you speak the language, lived in the country, have relatives or friends with the same culture, etc.). (3)	<input type="radio"/>						
If a passenger reacts differently to a situation than I do, I stay calm. (4)	<input type="radio"/>						
*Communication is much easier with passengers who have the same nationality as I have. (5)	<input type="radio"/>						
*My prejudgements about some cultures negatively influence the service I provide to passengers of these cultures (conscious or unconscious). (6)	<input type="radio"/>						

I understand that every passenger has his/her own cultural manners and adapt to that.
(7)

Q11

The following final statements of this survey may seem similar to the previous page. Nonetheless, please indicate to what extent you agree or disagree.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
When a passenger perceives me as a lesser person and is being disrespectful, I stay calm and do what they asked from me. (1)	<input type="radio"/>						
I communicate just as easily with passengers of my nationality as with passengers of other nationalities. (2)	<input type="radio"/>						
If a passenger reacts differently to a situation than I do, I adapt to him/her. (3)	<input type="radio"/>						
*If a passenger has a different view on how to behave on board (<i>e.g. when a passenger leaves his/her dirty tray on the floor, has different table manners, etc.</i>), I think he/she is unmannered and I get annoyed. (4)	<input type="radio"/>						
I can connect with every passenger regardless of their cultural background. (5)	<input type="radio"/>						

*If a passenger does not speak the same language(s) as I do, I find it very difficult to communicate.
(6)

I set my prejudgements aside and give every passenger the same service.
(7)

*If a passenger reacts differently to a situation than I would do, I feel annoyed and may react emotionally.
(8)

Q12 Can you please specify your gender?

- Male (1)
- Female (2)
- Other (3)

Q13 What is your year of birth?

▼ 1930 (1) ... 1998 (69)

Q14 What is the highest educational level that you have attained?

▼ High school degree (vmbo, mavo, havo, vwo) (1) ... Other (6)

Q15 In which country were you born?

▼ Netherlands (122) ... Other (198)

Q16 What is the country of birth of your father?

If you do not know, please click "unknown".

▼ Netherlands (122) ... Other (198)

Q17 What is the country of birth of your mother?

If you do not know, please click "unknown".

▼ Netherlands (122) ... Other (198)

Q18 Are you currently working as cabin crew?

Yes (1)

No (2)

Don't know (3)

Q19 For how many years are you working/have you worked as cabin crew?

▼ 0 (1) ... 60 (61)

Q20 For how many years are you working/have you worked as cabin crew for KLM Royal Dutch Airlines?

▼ 0 (1) ... 60 (61)

Q21

Please indicate your current position on board.

If you are currently not working as cabin crew anymore, please fill out your last position.

- Senior Purser (1)
- Purser (2)
- Assistant Purser (3)
- CA2 (*Twee-bander*) (4)
- CA1 (*Eén-bander*) (5)
- Other (6)

Q22

Here you may fill in your email address if you want to be in the run to win the limited-edition KLM Historic House Game!

Your email address will solely be used to pick a winner and will be deleted afterwards.

Q23 Are you interested in the overall results of this research once it's finished? Please click the box below if you wish to receive a small summary of my thesis conclusions on the email address provided above.

- Yes, send me a summary of the findings of this research on my email address. (1)

Appendix B: Descriptions of respondents

Table 1. Descriptive Statistics of respondents ($N = 227$).

Variable	Value	Count	Percent
Gender	Male	42	18.5%
	Female	185	81.5%
	Other	0	0%
Education	High school degree	40	18.1%
	Vocational degree	36	16.3%
	Bachelor's degree	108	48.9%
	Master's degree	22	10.0%
	MBA degree/PhD degree	6	2.7%
	Other	9	4.1%
Nationality respondent	Belgium	3	1.3%
	Brazil	1	.4%
	Colombia	1	.4%
	Ecuador	1	.4%
	Finland	1	.4%
	France	1	.4%
	Germany	4	1.8%
	Hungary	1	.4%
	Indonesia	1	.4%
	Italy	1	.4%
	Netherlands	203	89.4%
	Poland	1	.4%
	Portugal	1	.4%
	South Korea	1	.4%
	Suriname	3	1.3%
	Switzerland	1	.4%
	United Kingdom of Great Britain and Northern Ireland	1	.4%

	United States of America	1	.4%
Nationality father	Netherlands	191	84.1%
	Other	36	15.9%
Nationality mother	Netherlands	186	84.2%
	Other	35	15.8%
Currently employed as cabin crew	Yes	216	95.2%
	No	11	4.8%
Occupation on board	Senior Purser	35	15.4%
	Purser	51	22.5%
	Assistant Purser	1	.4%
	CA2 (twee-bander)	47	20.7%
	CA1 (één-bander)	89	39.2%
	Other	4	1.8%

	Range	<i>M</i>	<i>SD</i>
Age in years	22 - 67	42.76 (46)	10.51
Years working as cabin crew	1 - 42	21.03	11.03
Years working as cabin crew KLM	1 - 42	19.54	11.41

Appendix C: Factor Analysis scale intercultural communication

Table 1. Intercultural communication effectiveness on board: item loadings on a four factor principal component solution.

Items	Reaction on culture/nationality of passenger	Negative reaction to intercultural situation	Positive reaction to intercultural situation (based on showing understanding)	Positive reaction to intercultural situation (related to communication)
If a passenger is disrespectful towards me, I get very irritated.	-	.571	-	-
If a passenger does not speak the same language(s) as I do, I easily use hand-gestures or other non-verbal communication.	-	-	-	.832
I have a better and closer connection with passengers when I am familiar with their culture (<i>e.g. when you speak the language, lived in the country, have relatives or friends with the same culture, etc.</i>).	.531	.313	-	-
If a passenger reacts differently to a situation than I do, I stay calm.	-	-	-	.580
Communication is much easier with passengers who have the same nationality as I have.	.696	-	-	-
My prejudgements about some cultures negatively	.455	.496	-	-

influence the service I provide to passengers of these cultures (conscious or unconscious).				
I understand that every passenger has his/her own cultural manners and adapt to that.	-	-	.653	-
When a passenger perceives me as a lesser person and is being disrespectful, I stay calm and do what they asked from me.	-	-	.698	-
I communicate just as easily with passengers of my nationality as with passengers of other nationalities.	.721	-	-	-
If a passenger reacts differently to a situation than I do, I adapt to him/her.	-	-	.709	-
If a passenger has a different view on how to behave on board (<i>e.g. when a passenger leaves his/her dirty tray on the floor, has different table manners, etc.</i>), I think he/she is unmannered and I get annoyed.	-	.766	-	-
I can connect with every passenger regardless of their cultural background.	.613	-	.318	-

If a passenger does not speak the same language(s) as I do, I find it very difficult to communicate.	.460	-	-	.358
I set my prejudgements aside and give every passenger the same service.	.468	.302	-	.324
If a passenger reacts differently to a situation than I would do, I feel annoyed and may react emotionally.	-	.713	-	-
R²	3.77	1.52	1.45	1.05