ATTACHMENT AND EMOTIONAL INTELLIGENCE
A Study in the Indonesian Context
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DEDICATION

To my dearest parents, my true hero and angel,
Sudarsono Atmolaksito and Tatty Rasjidi,
Without whom none of my success in life would be possible
ATTACHMENT AND EMOTIONAL INTELLIGENCE:

A study in the Indonesian Context

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A study in the Indonesian Context

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Chapter 1
General Introduction
Early childhood experiences can have a strong influence on adult characteristics. Biological growth, personality development, social interaction, and cultural perception are all processes affected by the conditions of early life, and all create the wide range of individual variation over a life span. For example, children's experiences of stressful upbringings such as malnutrition and physical or emotional abuse have lasting effects on adult physiological consequence, psychological complexity, and social behavior. Psychologists mainly concern with how early experience influences individual development in later life, while anthropologists concern with the population differences that represent outcomes of the diverse social and ecological environments that people face while growing up. In the context of Indonesian society, for example, Indonesian adults’ characteristic and behavior stereotype cannot be detached from the influence of their experience in learning and internalizing cultural tradition through their interaction with mother figure and family member since early life. One of the core psychological concepts of infants' early interaction with others is attachment. Attachment was first articulated by John Bowlby in the 1950s, and it was subsequently elaborated by numerous
psychologists, especially Mary Ainsworth (Cassidy & Shaver, 2016). Bowlby (Cassidy & Shaver, 2016; Mikulincer & Shaver, 2007) defined attachment as the infant's drive to form a unique, primary bond with one caretaker. He saw that early attachment is fundamental as it provides infants with a sense of a "secure base". It ultimately contributes to internalized expectations about the availability of the self and other-named working models of attachment, which develop across developmental stages. Working models are shaped by repeated experiences within the context of early secure or insecure attachment relationships with an attachment figure (Mikulincer & Shaver, 2007).

Affect-orientated research supports direct links between attachment orientations and emotional consequences (e.g. Goodall, Trejnowska, & Darling, 2012; Gresham & Gullone, 2012; Marganska, Gallagher, & Miranda, 2013; Zijlmans, Embregts, Gerits, Bosman, & Derksen, 2011). Individuals with secure attachment model adopt emotional regulation strategies that minimize stress and put emphasis on positive emotions. In contrast, those with insecure attachment models use emotion regulation strategies that emphasize negative emotions and tend to experience situations in a more stressful manner (anxious attachment), or tend to repress emotional experiences (avoidant attachment) (Mikulincer & Shaver, 2007). The connection between cognitive and emotional processes is also central to adult attachment theory. Adult attachment orientations integrate both affective and cognitive strategies that provoke emotional reactions in individuals and relationships. Individuals with secure, anxious/ambivalent, and avoidant styles of attachment employ different strategies of emotion regulation and information processing (Cassidy & Shaver, 2016; Mikulincer & Shaver, 2007). Over the last decade, a body of work on attachment orientations has also provided an explanation about individual differences in emotional intelligence (EI) abilities (e.g. Caldwell & Shaver, 2015; Cherry, Fletcher, & O'Sullivan, 2014; Dewitte & De Houwer, 2011; Ginot, 2012; Marks, Horrock, & Schutte, 2016). The EI concept originally proposed by Salovey and Mayer in 1990 has
provided a strong basis on which to examine individual differences in how people reason with, and about, feelings. A recently elaborated approach shifts the emphasis from an ability conceptualization of EI to a trait (BarOn & Parker, 2000; Schulze & Robert, 2005).

The general goal of this thesis is to explore the biocultural context of attachment and EI in Indonesian society by using the adapted measurements that were developed previously in Western society. By the term biocultural, we refer an explicit biological characteristic of the participants—specifically age and sex difference—that was assumed to affect behavior patterns, while attending to the cultural environment as also the important determinant of, and constraint on, behavior. Accordingly, in this thesis we focused on attachment, EI, and also demographic parameters. From a theoretical point of view, this thesis integrated theories of personality, clinical, developmental, and cross-cultural psychology. By using the same theories and assessments technique and tools that are usually used in explaining weakness and abnormality, or treating illness, this thesis explicitly addressed the studies to the application of the theories and measurements in explaining strength and competence of Indonesians. From a methodological standpoint, this thesis applied research method in clinical, developmental, and cross-cultural psychology with the data collection strategy from social anthropology. Accordingly, ethnic-identity criteria, which are social anthropology in nature, have been explicitly defined and adopted here in this study as a relevant demographic factor in explaining the social and emotional skills of Indonesians. Additionally, this thesis also created an interaction model of attachment, EI, and demographic factors by executing the structural equation modelling strategy.

This eclectic approach that primarily consists of psychological, anthropological, and sociological aspects have been considered essential here for four reasons. First is the concern of reliability and validity of the theory and research in a non-Western context. By providing the adapted psychological assessment this
thesis aimed to evaluate the scientific achievement and application of the theories and psychological instrument in Indonesian settings. As psychological literatures are mostly developed in the Western, we thought that research findings in a non-Western society are still needed to enrich the existing literature. This present thesis that focused on the Eastern society of Indonesia may make a valuable addition to the growing literature on psychology. Second is the fact that there is a relatively limited topic of psychological research, if not none, on the indigenous Indonesian society in the meaning of academic publications. In view of that, this thesis proposed the Indonesian ethnicity as the focus of interest, which may give a valuable contribution to this concern. The third reason is related to the issue of the general versus group-specific characteristic of the behavior pattern of people in a community. Sociological and anthropological theories and research made it clear that social and cultural values are various among different groups of society. For that reason, the Indonesian cultural values—in terms of the member of an Eastern society as well as of a multiethnic society—have been used in this study to examine the Indonesians’ behavior pattern. The forth is about the individual versus group perspective of analysis. This thesis adopted the perspective of an individual, which is largely clinical and developmental in nature, and also the perspective of a group, which is social anthropology in nature. In this way, we expected to have a general portrayal about Indonesians with an appreciation of its social and cultural nuances. In view of that, this present thesis aimed to look at the EI competence level consequences of attachment style in an Indonesian setting. The empirical data underlying this thesis comprised both the adaptation of the attachment and EI measurements, and the application of the adapted measurements to the Indonesian participants from three different ethnic groups. To be more specific, this thesis examined attachment style and EI competence of the Indonesians by incorporating the role of demographic factors including ethnicity, gender, age, and living—with–family experience. The central themes of this thesis will now be discussed in greater detail.
Attachment and Emotional Intelligence: The conceptual framework

For over three decades, the attachment theory has offered as a basic framework for explaining how the dynamic of closeness and emotional bonds with others affect the psychosocial growth and development of an individual across the life span. The attachment literatures initially underlined the adverse implication of insecure attachment on human functioning (Cassidy & Shaver, 2016; Mikulincer & Shaver, 2007). These authors have adopted a “negative” focus on how insecure adult attachment contribute to the risk factors for emotional distress, maladaptive behavior, and health problem, or by limiting a consideration of a stress-buffering effect of secure attachment on individuals. However, we found that the current studies of attachment are progressively more adopting the contributions of secure attachment to support and maintain people's health and adaptive behavior within and across the multiple life domains, such as problem solving, achievement, and social relationship (Cassidy & Shaver, 2016; Hazan & Shaver, 1987; Kim, 2005; Mikulincer & Shaver, 2007; Mikulincer et al., 2001; Simpson, 1990). Indeed, the considerable literatures on adult attachment have emerged in recent years to investigate the nature, correlates, and consequences of attachment development in the quality of individual's intimate relationships. Additionally, some also proposed that secure adult attachment may provide more than just its protective mechanism, it may also encourage individuals' growth and development; indeed, as Bowlby originally envisioned (Cassidy & Shaver, 2016; Lopez & Brennan, 2000; Mikulincer & Shaver, 2005).

The development of the attachment and personality theory, established by Bowlby and Ainsworth (Cassidy & Shaver, 2016), is a basic knowledge in explaining the close relationship among attachment, emotion, and personality. The child expectations of caregiver's availability and responsiveness (internal working model) form the core of attachment-related features of the child's personality (Kobak, Cassidy, Lyons-Ruths, & Ziv, 2006). Following
Bowlby and Ainsworth's basic theory of attachment, Mikulincer and Shaver (2007) developed the theory into the adolescent and adult age periods. They posited that attachment behavioral system is an inborn regulation system with some important implications for personality development and social behavior. In order to explain the continuity of the attachment process, they developed a model of attachment system that showed how the attachment system is activated in adolescents and adults by threats and stressors, and then how its primary strategy works to achieve a sense of felt security that leads to the personal growth, fully functioning of personality, and self-actualization. According to Feeney, Noller, and Roberts (1999), the working models of attachment—the model of self and the model of other—are explained as a function to predict the behavior of others and to plan one's own behavior to achieve relational goals. These models refer to positive or negative schemas about one's capacity and expectations of others in relational settings and usually develop within the individual in relation to each other, usually in a complementary fashion. Different to Hazan and Shaver's (1987) idea about romantic attachment style, Feeney, Noller, and Hanrahan (1994) went back to Bowlby’s and Ainsworth’s basic theory of attachment in explaining a close relationship and creating the measurement instrument in a less "romantic" way.

In this thesis, EI will also considered as one of an individual’s ability that demonstrates individual's skill and competence. Recognized as a non-cognitive intelligence, Salovey and Mayer’s ability model explains EI as an individual's ability to identify, use, understand, and manage emotions while BarOn’s mixed model explains EI as a kind of intelligence that consists of the interrelation of emotional and social competences (BarOn, 1997; BarOn, 2004; BarOn & Parker, 2000; Schulze & Robert, 2005; Wood, Parker, & Keefer, 2009). The term suggests the idea that there might be other ways of being intelligent than those emphasized by standard IQ tests. Identified as a non-cognitive intelligence, EI appears to support cognitive intelligence (IQ) in the development of an individual's emotion and cognitive capacities. With their psychometric
independence, both IQ and EI are now known to complement each other in describing an individual’s competence (BarOn & Parker, 2000; BarOn, 2004; Derksen, Kramer, & Katzko, 2002; Stough, Saklofske, & Parker, 2009).

An individual might be able to develop these abilities across their ages, and that an EI could be an important predictor of success in personal relationship, family functioning, workplace, and life. Neubauer and Freudenthaler (as cited in Schulze & Robert, 2005) and Wood, Parker, and Keefer (2009) explained that the models of EI can be classified into two distinct groups, i.e. the ability model and the mixed model. Unlike the former, that views EI as a set of abilities, the mixed model of EI, like the BarOn’s theory, develops the meaning of EI by explicitly incorporating a wide range of personality characteristics. Furthermore, the BarOn model of EI was constructed by the concept of emotional-social intelligence (ESI) as a cross-section of interrelated emotional and social competencies, skills, and facilitators that determine how effectively individuals understand and express themselves, understand others and relate with them, and then cope with daily demands (BarOn, 2004; BarOn, 2006; BarOn & Parker, 2000; Schulze & Robert, 2005). Schultz, Izard, and Abe (as cited in Schulze & Robert, 2005) posited that the adaptive functioning of emotion could be reflected by the level of EI that is shaped since early childhood by a person’s social relationship and emotion experiences. From the theoretical point of view, both attachment and EI theories seem to pay attention to an individual’s self capacity and social relationship. This basic idea promotes our interest in applying those theories through several studies reported in this thesis.

**The context of the studies: Why and who in Indonesia?**

As community becomes more varied across the world, this thesis noticed that it becomes essential to include cultural context in a discussion about any aspect of human life. People now need to interact and communicate with each other more frequently through
the global trade, relationship, and advances of technology. In the field of psychology, we realized that the importance of a cultural context should be involved in a discussion about people’s lives. We discerned that in exploring individual’s strength through psychological research, it becomes necessary to apply theories, to identify variables, to carry out scientific measurements, and to interpret the results by carefully considering variety of the cultural values. More work must be done in order to enhance a better understanding of the way that a cultural context plays an influential role in assessing and explaining an individual’s strength from diverse groups. Furthermore, Gardiner and Kosmitzki (2005) posited that social and cultural forces will contribute to the psychological development of men and women in the different societies. Since early childhood, prevailing gender stereotypes already influence the socialization of gendered behavior. These interactions become increasingly important during adolescence and adulthood. Berry, Poortinga, Segall, and Dasen (2002) also posited that collecting indications of a particular culture/ethnic group, such as values, cultural beliefs (stereotypes), and expectations (ideology), swing into an action and lead to a male-female differences in the socialization, role differentiations and assignment, and eventually to differences in a number of psychological characteristics (abilities, aggression, intelligence, etc).

According to Metzger, Erdman, and Mun Ng (2010) and Wang and Song (2010), the cross-cultural study of attachment in a non-Western developing country is still needed for adding a multicultural layer and an alternative framework to the attachment theory since previous studies mostly referred to Western countries. With regard to possible cultural effects on attachment styles, some prior studies supported the cultural universality of the working model of attachment and also the culture-specific of attachment theory (IJzendoorn & Sagi, 1999; Rothbaum, Weisz, Pott, Miyake, &Morelli, 2000; Wang & Mallinckrodt, 2006; You & Malley-Morrison, 2000). BarOn (2006) posited that there were some differences in EI competencies between male and female. The previous studies on
Dutch male and female nurses, for example, found that there were different EI profiles in men and women (Dusseldorp, Meijel, & Derksen, 2009; Gerits, Derksen, & Verbruggen, 2004; Gerits, Derksen, Verbruggen, & Katzko, 2005). There are some other previous findings that support the notion of gender differences in the EI level and those have a similarity in the general conclusion in which gender is the determinant factor of EI level differences (BarOn, 2004; BarOn, 2006; Schulze & Robert, 2005). Following some previous studies (e.g. Cooper, Shaver, & Collins, 1998; Hazan & Shaver, 1987; Kafetsios, 2004; Kim, 2005; Mikulincer, Orbach, & lavnieli, 1998; Mikulincer et al., 2001), one of our studies specifically examined further the interrelationship between attachment style and EI competence in the Indonesian society.

Indonesia is the largest archipelago and the fourth most populous nation in the world after China, India, and the United States. It is predicted that the total population of Indonesia will rise rapidly in the next 25 years, from 205.1 million in 2000 to 273.1 million in years 2025. There are more than 300 ethnic groups in Indonesia and speaking about 700 different local languages that are united by Bahasa Indonesia. The main ethnic groups are the Wajaks, Irianese, Ambonese, Acehnese, Batak, Minangkabau, Sundanese, Javanese, Madurese, Balinese, Timorese, Dayaks, Minahasa, Toraja, Makassarese, and Buginese (Badan Pusat Statistik, 2009; “Indonesia – Ethnic groups”, 2012). Each Indonesian ethnic group has its local language, habits, social rules, and behavioral stereotypes characteristic of that specific group and rooted in its unique traditional values. More important, these diversity ethnic values contribute significantly to the differences in thinking, emotion, and behavior patterns of Indonesian people, who tend to feel more secure if they convey their ethnic-identity when expressing their self-identity. With a tendency to be a collectivism, an Indonesian usually exist as a group with other people from the same ethnic group and do not like to be detached from their ethnic group (Alisyahbana, 1989; Koentjaraningrat, 2002).
GENERAL INTRODUCTION

Regarding the family systems, there are patrilineal and matrilineal descent coexist in the Indonesian community. Patrilineal descent, such as among the Javanese and Bataks, is a system in which family descent is traced through the blood links of males. Typically names and property follow the male line of descent, like the name of the clan in Batak society. In contrast, matrilineal descent, as found among the Minangkabau, is traced through mothers rather than through fathers. The woman in a matrilineal society represents the clan and her children carry on the name of her clan (“Patrilineal Descent”, 2009).

Three major ethnic groups, namely Javanese, Bataks, and Minangkabau, were chosen to illustrate the apparently unique characteristic of a particular ethnic group among the Indonesian society. According to Endraswara (2003), the social rules, norms, and beliefs of the Javanese, aimed at maintaining harmony and pleasing or serving others, always follows the behavior standard of the highest social class—the priyai, who are perceived as an ideal model. The Javanese are very concerned about cooperation, helping, and never being selfish in their social life. Stereotypically, Javanese are known as people who are soft spoken and gentle, patient, polite, accepting (nrimo) and sincere. They do not like to speak loudly, behave harshly, or express ‘strong emotion’ such as anger (Endraswara, 2003; Jatman, 2000; Koentjaraningrat, 2002; Mulder, 1994). In contrast, Batak people are known as people with a strong fighting spirit, hard spoken style, courage to stand up for their family and relatives, and a very assertive nature bordering on aggression. The Bataks have a traditional tenet named Dalihan Na Tolu, which is internalized as the cognitive and value systems such as independence, openness, self-consciousness, and habitual group discussion (Harahap & Siahaan, 1987; Koentjaraningrat, 2002; Malau, 2000). The Minangkabau are the best known matrilineal society in Indonesia, recognized for their very strong inherited relationship and ordinary family system. Through an extended family system and the social interaction among the members of the family, the Minangkabau values—such as togetherness, closeness, possessiveness, and mutual
assistance—have been internalized across generations (Heider, 1991; Koentjaraningrat, 2002). Despite having a diversity of ethnic values, the Indonesians also have their shared and universal values. For example, as an Eastern and collectivistic society, the Indonesians share mutual dependency, social tolerance, and harmony as a general community system. Besides, Schwarz, Trommsdorff, and Chakkarath (as cited in Setiadi, Supratiknya, Lonner, & Poortinga, 2004) posited that the emotional aspects as well as filial responsibility played a significant role for the Indonesians. Furthermore, the memories of parenting experienced during adolescence have a strong influence on the relationships of Indonesian adults.

In this thesis, family was put as an important factor in examining people’s life and behavior. Berry et al. (2002) and Matsumoto (1994) posited that culture/ethnic value will be internalized passively within the self from a very early age through interaction with family members, especially parents, and will continue at a later age through the interactions of a wider social life. This thesis discerned an important agent for understanding the Indonesians seems to be a family system that consists of the parents and family members’ interaction and bonding as a collectivist society. As a collectivist Eastern people, Indonesians place family as a foremost external environment to gain a feeling of security feeling as a member of group. In addition, traditional values that were rooted in ethnic values also perceptible have a substantial influence upon how family members express their emotions and interact with each other. In the social context, Schultz, Izard, and Abe (as cited in Schulze & Robert, 2005) found that positive affective bonds among family members seem to lay a critical basis for them in expressing emotions and discussing things.

Derived from previous studies on the contrast between the Western and Eastern cultures, there is a possibility that person and selfhood are a cultural construction and may be expected to vary cross-culturally. Kagitcibasi (as cited in Berry et al., 2002) for example, found that a relational self is mostly developed in the
Eastern societies and characterized with the “family model of emotional and material interdependence”. Such societies typically have a traditional agricultural subsistence economy with a collectivist life style. In this kind of society, the members of a family have to rely on each other in case of sickness and to have old age security. Additionally, Markus and Kitayama (as cited in Berry et al., 2002) found that relatedness, connectedness, and interdependence are sought mostly in the Eastern cultures. They are rooted in a concept of the self as a creature who is inherently linked to others, instead of as a discrete entity.

**Culture and Measurement Issues**

As researchers begin to examine adult attachment and EI in different cultures, it will be important to expand the theoretical frameworks and to identify cross-cultural differences and social issue—that matter most in a particular society or cultural context, where a research will be conducted. Conducting a cross-cultural research will be both theoretically and practically challenging for several reasons. First, one of the most important challenges in cross-cultural research is to find the reason for particular differences. We think it is worth considering that some of the differences may be due to genetic factors. For example, preliminary studies have provided evidence for genetic influence on attachment patterns, even within a particular culture (e.g. Donnellan, Burt, Levendosky, & Klump, 2008; Gillath, Shaver, Baek, & Chun, 2008). But most of cross-cultural variance is likely to be due to the kinds of differences between cultures and countries identified by Hofstede (2001) and Schwartz (2009) – differences in individualism versus collectivism. Second, because attachment and EI theories views behavior patterns as outcomes as actual social experiences within family, marital relationships, community, and workplaces, it will be worthwhile to consider whether particular behavior patterns are especially adaptive in certain cultures or subcultures. In the multi-ethnic society of Indonesian, for example, behavior patterns of Indonesians may be guided by traditional values that are used as a rule of conduct for the
member of a particular ethnic group. Third, when cross-cultural research requires the translation and adaptation of measures used in different culture, as it usually does, it will be important to consider the ITC guidelines for the test adaptation and to deal with problems related lack of conceptual, content, and semantic equivalence (International Test Commission, 2010).

The application of theory and measurement of attachment and EI that has previously been developed in the Western countries raises questions about the reliability and validity of the theory and measurement in the less well-studied Indonesian culture. In view of that, in this thesis we made the cultural adaptation in terms of language and then took the psychometric test on the Attachment Style Quetionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994) and the BarOn Emotional Quotient Inventory (EQ-i; BarOn, 2006). The cross-cultural adaptation from English to Bahasa Indonesia versions required the process of translation, back-translation, expert revision, and testing of the preliminary version to assure that the meanings of the original items were adequately captured in Bahasa Indonesia. We then evaluated the psychometric properties by using the multiple source of evidence to establish the two measurements for Indonesian people. This study referred to the International Test Commission’s guideline for translating and adapting tests (International Test Commission, 2010). In considering the potential influence of demographic factors such as gender, age, ethnicity, and family background, the studies in this thesis included demographic background of the participants in the investigation.

Objectives and outlines of the thesis

Although the knowledge regarding EI is increasing in Indonesia, yet much is still unknown about the scientific aspect of EI more than its popular attraction. EI as a topic of scientific research in Indonesia—in terms of academic publication—appears limited, to some degree, compared with many other countries. Attachment, a considerable asset within an individual, is also widely investigated in
other countries, but yet less evident in Indonesia. In view of that, this thesis that aimed to examine the connection between attachment and EI in Indonesia—by incorporating demographic factors—possibly becomes an original topic of study in Indonesia. The studies described in this thesis were designed with the overriding aims to explore the development of attachment and EI in the Indonesians by providing the theoretical base and previous empirical findings, and also to develop the attachment and EI measurements that will be applicable for Indonesian speaking people, as are reflected in the following objectives of the studies:

1. to develop the Indonesian versions of the attachment style questionnaire (ASQ) and the BarOn emotional quotient inventory (EQ-i) by making the adaptation from the original versions and testing the psychometric properties.

2. to generate the attachment styles and EI competence profiles of the Indonesians by employing a cross-cultural approach, both within Indonesian ethnic groups and between countries.

3. to develop an interaction model of attachment and EI in the Indonesian context by including some demographic factors in the model. We intend to execute the structural equation model strategy in creating the interaction model.

The main topic of Chapter 2 is about attachment in Indonesians. This chapter started with the report about the adaptation process of the ASQ. Regarding the ethnic group variability in Indonesian society, we conduct the cross-ethnic analysis explicitly by comparing the three ethnic groups (Javanese, Batak, and Minangkabau). The attachment style profile of Indonesian was created by using the Indonesian normative sample as a reference point in calculating the standard T-score and interpreting the result. The cross-group comparison analyses were performed to establish putative group differences of the attachment style across age, gender, and ethnic groups. The development of the Indonesian version of the EQ-i becomes the topic of discussion in Chapter 3. In this chapter, we report the
adaptation process and psychometric evaluation on the EQ-i. The Indonesian profile of EI competence was created by using the Dutch normative sample as a reference point in calculating the standard T-score in the light of the fact that the Netherlands is one of major Western countries where the EQ-i has been developed earlier. To complete the examination, the group comparison analyses were performed across gender and age groups.

In Chapter 4 and Chapter 5, the cross-cultural approach was implemented to describe the EI competence of the Indonesians. Chapter 4 focuses on the potential difference of EI competence between two countries: Indonesia and Netherlands, whereas Chapter 5 focuses on the difference among the three ethnic groups of Indonesian: Javanese, Batak, and Minangkabau. In these two chapters, we include gender difference in the analyses.

Chapter 6, the most important chapter in this thesis, reports the interrelationship between attachment and EI—the main constructs to be investigated in this thesis. In this chapter, we build an interrelational model by performing the structural equation model (SEM) analysis based on the data collected in Chapter 2–5. Demographic factors, which consists of age and living-with-family experience are included as a predictor factor in the interaction model, whereas gender and ethnic groups are included as control variables in the model and are expected to provide some different interaction models among the gender and ethnic groups. In the final chapter of this thesis, Chapter 7, the conclusions and discussion of the results of the present thesis are described, including recommendations for future research and practice.
References


Chapter 2
Attachment in context: The role of demographic factors among Indonesians from three ethnic groups

Published as:

1) Additional analyses were made, therefore this version is slightly modified.
CHAPTER 2

Abstract

This study examined attachment in Indonesia, one of the fourth most populous countries in the world. We applied the Indonesian version of the Attachment Style Questionnaire (ASQ) on the 1313 Indonesians from the three ethnically diverse samples (404 Bataks, 430 Minangkabau, and 479 Javanese). We assessed demographic factors which consist of the roles of the living-with-family experience ($M=19.58$ yrs), age ($M=24.34$ yrs old), gender ($\text{Man}=43.4\%$), and ethnicity in the attachment dimensions development. Pearson’s Correlation analyses revealed negative correlations between the living-with-family experience as well as age and the two attachment dimensions, Need for approval and confirmation by others and Preoccupation with relationships. Group comparison analyses found significant differences for the five scales of ASQ among gender and ethnic groups. We also found a significant main effect of age and ethnicity on some of the ASQ scales.

Keywords: Attachment, demographic factors, Indonesians context, ethnic groups
Introduction

According to Bowlby and Ainsworth’s basic theories of attachment in infant and childhood, attachment has been studied primarily in the context of mother–child (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1988; Cassidy & Shaver, 2016). Following the development of the attachment theory and research, Mikulincer and Shaver (2007) extend the attachment theory to adolescent and adult age periods. The attachment development theory consists of basic knowledge about a close relationship among attachment, emotion, and personality. A child’s expectation of its caregiver’s availability and responsiveness shapes the core of attachment-related features of a child’s personality that will be relatively permanent in adulthood (Kobak, Cassidy, Lyons-Ruths, & Ziv, 2006). During the last decade, the attachment theory has become known as one of the most influential conceptual frameworks in a social development research (Cassidy & Shaver, 2016). Its application to the study of the adult relationships has attracted strong interest in several areas of personality and social psychology (Simpson & Rholes, 1998). Current studies of attachment are increasingly more adopting a positive
psychological perspective rather than a negative perspective (Hazan & Shaver, 1987; Kim, 2005; Mikulincer & Shaver, 2007; Mikulincer et al., 2001; Simpson, 1990). The positive perspective focus on how secure attachment support and maintain individual’s health, adaptive behavior, growth, and development (Lopez & Brennan, 2000; Mikulincer & Shaver, 2005). In this point of view, we found that the theory of attachment belongs to positive psychology through a discussion of the role of adult-relationships quality in building individual’s personal and social life, strength, and potentials (Sheldon & King, 2001).

Repeated experiences are internalized as an attachment “style”, a complex system of representations, expectancy, and beliefs about the self and others (Cassidy & Shaver, 2016). Important conceptual issues have emerged concerning the number of attachment styles required to explain adult attachment behavior. Hazan and Shaver (1987), for example, developed a model of adult attachment based on three categorically assessed styles: secure, avoidant, and anxious/ambivalent, whereas Bartholomew (1990; Bartholomew & Horowitz, 1991) proposed a fourfold typology of adult attachment: secure, preoccupied (i.e., anxious/ambivalent), dismissing, and fearful. The two attachment-style models predominate over the attachment theories although examinations underlying the attachment dimensions are becoming more common (Brennan, Clark, & Shaver, 1998; Collins, 1996; Mikulincer et al., 2001). Dimensional analyses are statistically more robust because their continuous scores indicate more clearly the difference in attachment processes of individuals (Collins, 1996; Fraley & Waller, 1998; Mikulincer et al., 2001). In any case, the typological (categorical) approach to the adult attachment assessment appears to imply that attachment styles are mutually exclusive. However, several empirical studies do not support this point (Levy & Davis, 1988). The scores of avoidant and anxious/ambivalent attachment styles, for instance, were not negatively correlated and even virtually uncorrelated. Accordingly, we consider using the dimensional model for assessing individual differences in attachment development in the Indonesian
sample. Further, we also assume that scores on the continuous level of this dimension analysis can be statistically converted into the categories level of analysis if desired later by using cut-off scores.

Different from Hazan and Shaver's (1987) idea about romantic attachment style, Feeney, Noller, and Hanrahan (1994) went back to Bowlby and Ainsworth's basic theory of attachment in explaining close relationship. They conceptualized a working model of adult attachment and also created the measurement instrument in a less "romantic" way. Through the Attachment Style Questionnaire (ASQ), they proposed a self-report questionnaire that consisted of the five-factor-based of attachment, i.e. Confidence (in self and others), Discomfort with closeness, Need for approval and confirmation by others, Preoccupation with relationships, and Viewing relationships as secondary (Feeney et al., 1994). With the aim in assessing attachment among Indonesians, we consider the possibility of applying the ASQ; the less "romantic" attachment idea to explore attachment of Indonesian adults with and without a romantic experience as the sample of the general population.

In regard to possible cultural effects on attachment, some prior studies indicated that attachment dimensions vary across culture and ethnic groups, whereas other studies found that attachment is culturally universal (Hazan & Shaver, 1994). Variability in the patterns, norms, and values associated with childrearing may exist across diverse groups. In the continuity of internal working model standpoint, it is worded that adults' attachment dimensions/styles represent their very early attachment dimensions/styles. Thus, the internalization process of ethnic value in an early attachment relationship will be apparent from adult attachment dimensions. Furthermore, a gender role that is formed by ethnic values also influences the way in which male and female express themselves and interact with others appropriately (Feeney et al., 1994; Feeney & Noller, 1996; Mikulincer & Shaver, 2007). For example, claims of cultural universality were made when the results of observational attachment studies were replicated in samples of mother–infant
dyads from Uganda and the United States (Ainsworth et al., 1978). Another study on the three attachment categories across cultures found that the majority of children have a secure attachment style (van IJzendoorn & Sagi, 1999). Some contemporary attachment researchers notice that the core components of attachment theory are culturally universal, while acknowledging that specific attachment behaviors may be expressed differently across cultural contexts (Grossmann, Grossmann, & Kepler, 2005; Posada & Jacobs, 2001). You and Malley-Morrison (2000) found that Korean adults scored higher on preoccupied attachment than Americans and Europeans. Wang and Mallinckrodt (2006) found that Taiwanese behavioral norms tend to form a more anxiety or avoidance attachment style than do the Western norms in the United States, which show a more secure attachment style.

Rothbaum, Weisz, Pott, Miyake, and Morelli (2000) noticed that most attachment constructs are deeply rooted in the Western culture. They also found that empirical studies of attachment are mostly conducted in the United States and Europe with white middle-class subjects. They argued that there are fundamental differences in the underlying philosophies and assumptions of attachment theory between the Western and non-Western cultures that prohibit the generalization of attachment theory. The controversy over the universality of attachment theory has continued, and an appropriate application to the non-Western cultures has become the focus of a growing controversy. This study notices that more cross-cultural research is needed to encourage the debate. According to Metzger, Erdman, and Mun Ng (2010), the cross-cultural study of attachment in non-Western developing countries is still needed because the prior studies mostly referred to the Western. In addition, Wang and Song (2010) suggested the cultural study of attachment from the indigenous perspective in other Eastern countries with the aim of adding a multicultural layer and an alternative framework to the attachment theory. Attachment studies in a non-Western country like Indonesia are expected to offer a further explanation about the universality versus the culture-specific of nature attachment theory as applied to adults.
We think that culture and family-system differences among groups of societies should be considered as potential factors in examining attachment development. Rothbaum, Rosen, Ujjie, and Uchida (2002) posited that attachment and family-system theories have important similarities in which they are concerned with intimate human relationships and try to classify people according to their attachment style (such as secure, ambivalent, avoidant) and a family-system category (such as adaptive, enmeshed, disengaged). Family that is generally regarded as the smallest community system in developing an in-group feeling no doubt appears in Indonesia as an Eastern society with a collectivistic tendency. Schwarz, Trommsdorff, and Chakkarath (as cited in Setiadi, Supratiknya, Lonner, & Poortinga, 2004) found that emotional factors as well as filial obligations played a significant role in Indonesian culture, as in Korean and German cultures. The memories of parenting experienced during adolescence are strongly connected to the current quality of relationship for all three countries. Accordingly, we consider the living-with-family experience to be an important factor in the development of attachment dimension in Indonesians.

Indonesia, the largest archipelago and the fourth most populous nation in the world after China, India, and the United States, consists of 300 ethnic groups with about 700 different local languages; the national language, Bahasa Indonesia, unites them all (Badan Pusat Statistik, 2009). Each ethnic group has its own unique and traditional values, which have resulted in languages, habits, social rules, and also behavioral stereotypes characteristic of that specific group, that contribute significantly to differences in thinking, emotion, and behavioral pattern of the Indonesians (Koentjaraningrat, 2002). This study aims to explore the attachment development of Indonesians through a general Indonesian population sample and also through a specific ethnic group. We focus on the Javanese, Bataks, and Minangkabau, three major ethnic groups in terms of their total population and specific traditional family system. Their unique behavior stereotypes usually make them being in contrast with each others. Each Indonesian ethnic group has at least one local language,
habits, social rules, and also behavioral stereotypes characteristic of that specific group rooted in its unique and traditional values. More important, this diversity of ethnic values contributes significantly to the differences in the thinking, emotion, and behavior pattern of the Indonesian people. Indonesian people tend to feel more secure if they convey their ethnic identity in expressing their self-identity. With a collectivist tendency, Indonesian people tend to exist as a group with other people from the same ethnic group and do not like to be detached from their ethnic groups (Alisyahbana, 1989; Koentjaraningrat 2002).

The current study

The main goal of this study is to examine attachment in Indonesia by applying the Indonesian version of the Attachment Style Questionnaire (ASQ) on adult Indonesians. Descriptive analyses are carried out to describe the profile of the attachment dimensions of Indonesians. Correlation analyses are performed to assess the relationship between attachment dimensions and both age and the living-with-family experience. Cross-group comparison analyses are performed to portray attachment development across Indonesian gender and ethnic groups.

Based on the assumption about the continuity of the working model of adult attachment (Mikulincer & Shaver, 2007), we hypothesize that all age groups will present a similar profile of the five dimensions of the ASQ. Besides, on the assumption of a collectivistic tendency in Indonesian society, we hypothesize that Indonesians will demonstrate a greater confidence-attachment dimension. According to the interpersonal closeness within the collectivistic society of Indonesia, we hypothesize that the living-with-family experience and age are expected to have positive correlations with the secure-attachment dimension. Following the debate on the universality of the attachment dimensions, we hypothesize that all groups of ethnic and sex groups will show a similar pattern of the five dimensions of the ASQ. Further, this study also aims to study the
effect of age, gender, and ethnicity on the ASQ dimensions of
Indonesians. We expect to find the effects of age, gender, ethnicity,
and also the interaction of age, gender, and ethnicity on the ASQ
dimensions of the Indonesian sample. More specifically, we
hypothesize that age, gender, and ethnicity respectively would be the
main effect on the ASQ dimensions score for the Indonesians.

**Method**

**Translation Procedure**

Equivalence with the original version of the ASQ in terms of the
meaning of the items was the main purpose of the translation
process. Adaptation of the ASQ consisted of the process of
translation, back-translation, expert revision, and testing of the
preliminary version. This process aimed to ensure that the meanings
of the original items were adequately captured in Bahasa Indonesia.
The original English version of the ASQ was translated into Bahasa
Indonesia by three psychologists including the first author. A draft of
the Indonesian version, which was created by the first author, was
then back-translated into English by the other three Bahasa
Indonesia–English bilingual Indonesians. Through discussion and
corrections of words, meanings, and content of each item in
cooperation with other authors of this study, the first author
compared the original English and the back-translated versions, and
then created a preliminary Indonesian version.

To translate the items in a culturally satisfactory manner and to
enhance accurate cultural meanings of the items for Indonesian
people, we reworded several items of the original version within the
Indonesian context. The problems encountered during the
back-translation step were related to items 2, 5, 7, 8, 18, 28, 32, and
37. After careful rewording, we carried out a second round of
back-translation of these eight items and items 2 and 7 had to be
corrected. A third round of back-translation had to be done and item
2 remained unsatisfactory. In the fourth round, we obtained three
Bahasa Indonesia versions of item 2 of the original version, “I am
easier to get know than most people”: “Saya lebih mudah diketahui siapa diri saya daripada kebanyakan orang” (“I am easier to know who I am than most people”), “Saya lebih mudah membuka diri saya daripada orang lain” (“I open myself more easily than other people”), and “Saya lebih mudah membuka diri untuk diketahui siapa diri saya daripada kebanyakan orang–orang” (“I am more easily open themselves to know who I am than most people”). We decided to use the first version as the item 2 in the preliminary version of the Indonesian version of the ASQ.

**Participants**

The sample was composed of 1313 Indonesians from the cities of Yogyakarta, Surakarta, Medan, and Padang. A total of 570 (43.4%) participants were Men and 743 (56.6%) were Women, the mean age of participants was 24.34 years (SD=5.97), and the living–with–family experience varied in years (M=19.58 yrs, SD=3.5)–all participants were having the experience since their first day of life. To ensure adequate verbal skills, necessary for self–evaluation questionnaires, this study took care that two participants (.2%) had completed junior high school, 1122 (85.5%) had completed senior high school, 38 (2.9%) had completed a Diploma course, 150 (11.4%) had an Undergraduate degree, and one (.1%) had a Master’s degree.

In terms of ethnic background (Javanese, Batak, or Minangkabau), participants had to meet the defined ethnic identity criteria, explicitly in respect of: the ethnic background similarity to their father and mother, their ability to understand the local/traditional language, and the living–with–family experience for more than a half of their life. The participants in this study were Javanese (479, 36.5%), Batak (404, 30.8%), and Minangkabau (430, 32.7%). All participants gave their written informed consent to participation in the study after receiving a detailed description of what was required.
Measures

Demographics

Information was collected regarding gender, age, ethnicity (based on ethnic identity criteria), the living-with-family experience (from age and how long), education level, work experience, and marital status. Table 1 shows how we measured the demographic data in which some of these factors become the main variables in this study.

Table 1. Assessment of the demographic factors of the Indonesian participants (N=1313).

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1. Man</td>
</tr>
<tr>
<td></td>
<td>2. Woman</td>
</tr>
<tr>
<td>Age</td>
<td>a. Group</td>
</tr>
<tr>
<td></td>
<td>1. 18-29 yrs</td>
</tr>
<tr>
<td></td>
<td>2. 30-39 yrs</td>
</tr>
<tr>
<td></td>
<td>3. 40-49 yrs</td>
</tr>
<tr>
<td></td>
<td>4. 50 &amp; above yrs</td>
</tr>
<tr>
<td>b. Individuals</td>
<td>In years</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>a. Javanese</td>
</tr>
<tr>
<td></td>
<td>2. Batak</td>
</tr>
<tr>
<td></td>
<td>3. Minangkabau</td>
</tr>
<tr>
<td>Living-with-family experience</td>
<td>a. What age</td>
</tr>
<tr>
<td></td>
<td>b. How long</td>
</tr>
<tr>
<td>Education level</td>
<td>1. Primary</td>
</tr>
<tr>
<td></td>
<td>2. Junior high</td>
</tr>
<tr>
<td></td>
<td>3. Senior high</td>
</tr>
<tr>
<td></td>
<td>4. Diploma</td>
</tr>
<tr>
<td>Work experience</td>
<td>1. Yes</td>
</tr>
<tr>
<td></td>
<td>2. No</td>
</tr>
<tr>
<td>Marital status</td>
<td>1. Unmarried</td>
</tr>
<tr>
<td></td>
<td>2. Married</td>
</tr>
<tr>
<td></td>
<td>3. Widow</td>
</tr>
</tbody>
</table>

Table 2. Descriptive statistics of the ASQ scales in Indonesian normative sample (N=1313).

<table>
<thead>
<tr>
<th>ASQ Scales</th>
<th>Number of Items</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence</td>
<td>8</td>
<td>34.36</td>
<td>4.45</td>
<td>-0.37</td>
<td>0.35</td>
</tr>
<tr>
<td>Discomfort</td>
<td>10</td>
<td>37.10</td>
<td>5.49</td>
<td>0.11</td>
<td>0.64</td>
</tr>
<tr>
<td>N for A</td>
<td>7</td>
<td>25.59</td>
<td>4.38</td>
<td>-0.02</td>
<td>0.23</td>
</tr>
<tr>
<td>Preoccupation</td>
<td>8</td>
<td>29.91</td>
<td>5.76</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td>R as S</td>
<td>7</td>
<td>21.44</td>
<td>4.67</td>
<td>0.15</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Note: Confidence = Confidence to self and other, Discomfort = Discomfort with closeness, N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ; Feeney et al., 1994).
CHAPTER 2

Attachment Style Questionnaire (ASQ; Feeney et al., 1994)

Participants completed the Attachment Style Questionnaire (ASQ; Feeney et al., 1994), a self-report questionnaire. The ASQ is designed to measure five dimensions of adult attachment: Confidence in self and others (Confidence, eight items), Discomfort with closeness (Discomfort, 10 items), Need for approval and confirmation by others (N for A, seven items), Preoccupation with relationships (Preoccupation, eight items), and Relationships as secondary (R as S, seven items). Its 40 items were assigned to measure the five dimensions of attachment through a 6-point scale of items, from 1 (totally disagree) to 6 (totally agree).

The ASQ indicators have to be measured as a dimension in which the conclusion about attachment models in individuals describes the quality of indicators instead of labeling an individual as a particular type. “Confidence” reflects a secure attachment orientation. “Discomfort” and “Preoccupation” are the themes central to Hazan and Shaver’s (1987) conceptualization of avoidant attachment and anxious/ambivalent attachment types. “R as S” is consistent with Bartholomew’s (1990) concept of dismissing attachment, whereas “N for A” reflects an individual’s need for acceptance and confirmation from others that characterize fearful and preoccupied attachment styles.

Reliability and validity data have been provided for the original English (Feeney et al., 1994), German (Hexel, 2004), and Italian (Fossati et al., 2003) versions. In this study, the ASQ was first adapted for Bahasa Indonesia according to the scientific standards available in the five domains. The ABBA counterbalance design was employed to measure the test-retest reliability by asking the participants to fill out the English and Indonesian versions after an interval of two weeks. The Pearson’s product-moment coefficient correlation was applied to test agreement between the baseline and the retest scores of the ASQ dimensions. Based on their English proficiency as students of English, there were collected to two
groups: 40 participants in the AB group and 40 participants in the BA
group were included in this step. The result showed a satisfactory
coefficient (r) between the two time intervals. For the AB group
(n=40), Pearson's coefficients (r) were .53; .74; .45; .81; .85 (p< .001)
for Confidence, Discomfort, N for A, Preoccupation, and R as S;
respectively. For the BA group (n=40), Pearson's coefficients (r) were
.82; .73; .67; .71; .88 (p< .001) for Confidence, Discomfort, N for A,
Preoccupation, and R as S; respectively. The results indicated that the
preliminary Indonesian version of the ASQ had been translated
accurately and was ready to be tested in terms of its psychometric
properties following recommended procedure. The skewness and the
kurtosis values (see Table 2) indicate approximately normal
distributions. The internal consistency coefficients were acceptable,
considering the relatively small number of items comprising each
scale: .64 (Confidence), .63 (Discomfort), .51 (N for A), .71
(Preoccupation), and .59 (R as S). Validity items ranged from .42 to
.72. We think that these results may be affected by the difficulty of
the Indonesian participants in understanding the meaning of
sentences that are culturally appropriate (see the translation
procedure section).

The confirmatory factor analysis (CFA) of the Bahasa Indonesia
version of the ASQ showed a barely adequate fit with $\chi^2$/df = 6.0,
RMSEA= .06, and CFI= .61. Factor loadings of the five-factor model
were .25-.62 for Confidence, .00-.64 for Discomfort, .04-.63 for N
for A, .06-.60 for Preoccupation, and .25-.63 for R as S. The
three-factor solution where the 40 items of the ASQ loaded as
Security, Avoidance, and Anxiety factors (Hazan and Shaver, 1987)
was also tested. The three-factor model of attachment style is
clearly present in the Indonesian version of the ASQ: .24-.62 for
Security, .05-.59 for Avoidance, and .04-.60 for Anxiety. Five items
make a minor contribution to Discomfort (item 4 and 21), N for A
(item 11 and 12), and Preoccupation (item 28) with their very small
factor loadings (≤ .10). Correlations between Confidence and the
other four dimensions were negatively significant except with R as S.
There was no correlation between Confidence and R as S. Significant
positive correlations among Discomfort, N for A, Preoccupation, and R as S were also found with Pearson’s coefficients (r) ranging from .20 to .60 (p< .001). We think that the broad range of factors loading would also affect the profile picture of the ASQ of the Indonesians. The low or high level of a domain may also be due to lack of loading of certain items in a certain domain.

**Procedure**

This study sought formal approval from the dean or head of division to recruit students and staff as participants. To gather participants directly from the community, it is necessary to adopt an individual and personal approach after seeking informal permission from community leaders. The research team of this study gave a general explanation about this study, and then gave a package of questionnaires to those who agreed to participate. In order to achieve efficiency, individual data in this study was gathered either in a small group (5–10 people) or in a larger group (25 people maximum); they were given a standardized explanation and instructions from the research team.

A psychologist was always present to answer questions about unfamiliar concepts such as assertiveness. Those who filled out all the questionnaires completely were later included as prospective participants. Regarding the aim to explore Indonesians as an ethnic group, we further selected the prospective participants based on the ethnic identity criteria. Only those who met all these criteria were included as participants.

**Data analysis**

Descriptive analysis was performed to show a general description of Indonesian normative data in terms of demographic data. The Pearson’s correlation analyses were performed to assess the relationship between the living-with-family experience, as well as age, and the five attachment dimensions of the ASQ. To complete the cross-group comparison analyses, a one-way analysis of variance
(ANOVA) and the t-test were conducted. Further, the three-way ANOVA was then tested to see the effect of gender, age, and ethnicity to the ASQ dimensions. This study used Cohen's effect size criteria commonly used across many fields (Cohen, 1988).

Results

Descriptive statistics

Table 2 presents the raw descriptive score, Figure 1, Figure 2, and Figure 3 show the ASQ profiles based upon the standard scores of ethnic, gender, and age groups. To maximize the comparability of the ASQ profiles across the groups, the five dimensions raw scores were converted to the standardized T-scores. We calculated the standard T-score by using the 100±15(z-score), using the Indonesian normative sample as a reference point to interpret the mean score of each group.

We expected Confidence to exceed the other four dimensions, but this was not the case for any ethnic group. For example, Confidence was the lowest dimension among the Minangkabau (see Figure 1). The ASQ profile for Men and Women showed that the two gender groups have a opposite pattern among the dimensions. For example, Men were dominated by Confidence and R as S while Women were dominated by Discomfort, N for A, and Preoccupation (see Figure 2). Confidence seems to be a dominant dimension for Indonesian Men as much as R as S. Across age groups, nevertheless, the 40-49 years group produced the highest Confidence score. In contrast, this age group produced the lowest Discomfort, N for A, and Preoccupation scores (see Figure 3).
Figure 1. T-Score profile of the ASQ dimensions of the three ethnic groups in Indonesia.
Note: Confidence = Confidence to self and other, Discomfort = Discomfort with closeness, N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ; Feeney et al., 1994).

Figure 2. T-Score profile of the ASQ dimensions by gender group of the Indonesian participants.
Note: Confidence = Confidence to self and other, Discomfort = Discomfort with closeness, N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ; Feeney et al., 1994).
Figure 3. T-Score profile of the ASQ dimensions by the three age groups of the Indonesian participants.

Note: Confidence = Confidence to self and other, Discomfort = Discomfort with closeness, N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ, Feeney et al., 1994).

**Correlation analyses**

Pearson’s correlation between age, the living-with-family experience, and the ASQ dimensions are presented in Table 3. Examination of demographic data relevant to age and the living-with-family experience revealed a positive correlation. Older individuals tended to have longer living-with-family experience.

With respect to attachment dimensions, age was negatively related to N for A and Preoccupation. Younger people tended to have the Anxiety attachment style. Likewise, the living-with-family experience related negatively to N for A and Preoccupation (Anxiety attachment style). However, it was also found that the longer individuals’ living-with-family experience, the more likely they were
to have a Security attachment style or Confidence attachment as revealed by the completed ASQ.

Table 3. Intercorrelation matrix of the Indonesian version of the ASQ (the correlation coefficient value).

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td></td>
<td>.30</td>
<td>.03</td>
<td>-.01</td>
<td>-.11</td>
<td>-.12</td>
<td>.05</td>
</tr>
<tr>
<td>2. Living-with-family experience</td>
<td></td>
<td>.10</td>
<td>-.02</td>
<td>-.08</td>
<td>-.07</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>3. Confidence</td>
<td></td>
<td>-.20</td>
<td>-.25</td>
<td>-.29</td>
<td>-.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Discomfort</td>
<td></td>
<td>.34</td>
<td>.35</td>
<td>.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. N for A</td>
<td></td>
<td></td>
<td>.56</td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Preoccupation</td>
<td></td>
<td></td>
<td></td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. R as S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *p<.05, **p<.01. Confidence = Confidence to self and other, Discomfort = Discomfort with closeness. N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ; Feeney et al., 1994).

**Gender, age, and ethnic differences**

Comparative analyses among gender, age, and ethnic groups are shown in Table 4, Table 5, and Table 6, respectively. The result showed that Indonesian women (M = 37.48, SD = 5.69) have a significantly higher score than men (M = 36.61, SD = 5.17) for Discomfort, effect size d= 0.16. Besides, different attachment dimensions appear as well among ethnic groups. Further analyses by using Tukey’s test indicated that the mean score for Discomfort for Javanese (M = 36.24, SD = 5.11) was significantly lower than for Batak (M = 37.31, SD = 6.43) and Minangkabau (M = 37.87, SD = 4.77), effect size η2= 0.02. The test also indicated that the mean score for Preoccupation for Minangkabau (M = 30.58, SD = 5.72) was significantly higher than for Batak (M = 29.60, SD = 6.35) and Javanese (M = 29.57, SD = 5.20), effect size η2= 0.01. Additionally, the test also indicated that the mean score for R as S for Javanese (M = 20.31, SD = 4.44) was significantly lower than for Batak (M = 22.12, SD = 4.85) and Minangkabau (M = 22.06, SD= 4.53), effect size η2= 0.03.
Table 4. Gender groups comparison among Indonesian participants (N=1313).

<table>
<thead>
<tr>
<th>ASQ</th>
<th>Mean (SD) by Gender Groups</th>
<th>p Values for the t-Test</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>34.48 (4.47)</td>
<td>34.27 (4.46)</td>
<td>.40</td>
</tr>
<tr>
<td>Discomfort</td>
<td>36.61 (5.17)</td>
<td>37.48 (5.69)</td>
<td>.00</td>
</tr>
<tr>
<td>N for A</td>
<td>25.50 (4.64)</td>
<td>25.66 (4.16)</td>
<td>.51</td>
</tr>
<tr>
<td>Preoccupation</td>
<td>29.60 (5.72)</td>
<td>30.15 (5.70)</td>
<td>.09</td>
</tr>
<tr>
<td>R as S</td>
<td>21.61 (4.70)</td>
<td>21.31 (4.66)</td>
<td>.26</td>
</tr>
</tbody>
</table>

Note: Confidence = Confidence to self and other, Discomfort = Discomfort with closeness, N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ; Feeney et al., 1994).

Table 5. Age groups comparison among Indonesian participants (N=1313).

<table>
<thead>
<tr>
<th>ASQ</th>
<th>Mean (SD) by Age Groups</th>
<th>p Values for the ANOVA test</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18-29</td>
<td>30-39</td>
<td>40-49</td>
</tr>
<tr>
<td>Confidence</td>
<td>34.30 (4.48)</td>
<td>34.36 (4.38)</td>
<td>36.00 (3.74)</td>
</tr>
<tr>
<td>Discomfort</td>
<td>37.12 (5.50)</td>
<td>37.13 (5.58)</td>
<td>36.35 (6.64)</td>
</tr>
<tr>
<td>N for A</td>
<td>25.76 (4.42)</td>
<td>25.25 (4.14)</td>
<td>23.55 (4.84)</td>
</tr>
<tr>
<td>Preoccupation</td>
<td>30.16 (5.72)</td>
<td>29.45 (5.72)</td>
<td>26.48 (6.26)</td>
</tr>
<tr>
<td>R as S</td>
<td>21.34 (4.65)</td>
<td>21.64 (4.70)</td>
<td>22.76 (5.26)</td>
</tr>
</tbody>
</table>

Note: Confidence = Confidence to self and other, Discomfort = Discomfort with closeness, N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ; Feeney et al., 1994).

Table 6. Ethnic groups comparison among Indonesian participants (N=1313).

<table>
<thead>
<tr>
<th>ASQ</th>
<th>Mean (SD) by Ethnic Groups</th>
<th>p Values for the ANOVA test</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Javanese</td>
<td>Batak</td>
<td>Minangkabau</td>
</tr>
<tr>
<td>Confidence</td>
<td>34.01 (4.35)</td>
<td>34.58 (5.00)</td>
<td>34.84 (4.28)</td>
</tr>
<tr>
<td>Discomfort</td>
<td>36.24 (5.11)</td>
<td>37.31 (6.40)</td>
<td>37.87 (4.77)</td>
</tr>
<tr>
<td>N for A</td>
<td>25.57 (4.60)</td>
<td>25.29 (4.62)</td>
<td>25.89 (4.31)</td>
</tr>
<tr>
<td>Preoccupation</td>
<td>29.57 (5.20)</td>
<td>29.60 (6.35)</td>
<td>30.58 (5.72)</td>
</tr>
<tr>
<td>R as S</td>
<td>20.31 (4.44)</td>
<td>22.12 (4.59)</td>
<td>22.06 (4.65)</td>
</tr>
</tbody>
</table>

Note: Confidence = Confidence to self and other, Discomfort = Discomfort with closeness, N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ; Feeney et al., 1994).
This study also tried to complete the analysis by treating the age, gender, and ethnicity of participants as independent variables. The three-way ANOVA analyses were conducted to see the main effect of age, gender, and ethnicity as well as the interaction effects of the three factors on attachment dimension as the dependent variable. Age appeared as a significant main effect for N for A \([F(2, 1296) = 6.21, p = 0.002]\) and Preoccupation \([F(2, 1296) = 6.90, p = 0.001]\). The main effect of gender and ethnicity were non-significant for all dimensions. The interaction effects among age, gender, and ethnicity was non-significant for all dimensions as well (see Table 7).

Post hoc test also indicated that the mean score for N for A for the eldest group \((M = 23.25, SD = 0.86)\) was significantly lower than for the youngest group \((M = 25.74, SD = 0.14)\), effect size \(\eta^2 = 0.01\). The test also indicated that the mean score for Preoccupation for the eldest group \((M = 26.63, SD = 1.12)\) was significantly lower than for the middle-age group \((M = 29.37, SD = 0.33)\) and the youngest group \((M = 30.16, SD = 0.19)\), effect size \(\eta^2 = 0.01\).
Table 7. Summary of three-way ANOVA of the main effects of gender, age, and ethnicity.

<table>
<thead>
<tr>
<th>ASQ</th>
<th>Gender</th>
<th></th>
<th></th>
<th>Age</th>
<th></th>
<th></th>
<th>Ethnicity</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( F(1,1296) )</td>
<td>( \eta^2 )</td>
<td>( F(2, 1296) )</td>
<td>( \eta^2 )</td>
<td>( F(2, 1296) )</td>
<td>( \eta^2 )</td>
<td>( F(2, 1296) )</td>
<td>( \eta^2 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( p )</td>
<td></td>
<td>( p )</td>
<td></td>
<td>( p )</td>
<td></td>
<td>( p )</td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>0.01</td>
<td>.92</td>
<td>0.00</td>
<td>1.70</td>
<td>.18</td>
<td>0.00</td>
<td>0.68</td>
<td>.51</td>
<td>0.00</td>
</tr>
<tr>
<td>Discomfort</td>
<td>2.14</td>
<td>.14</td>
<td>0.00</td>
<td>0.57</td>
<td>.57</td>
<td>0.00</td>
<td>2.46</td>
<td>.09</td>
<td>0.00</td>
</tr>
<tr>
<td>N for A</td>
<td>1.48</td>
<td>.23</td>
<td>0.00</td>
<td>6.21*</td>
<td>.00</td>
<td>0.01</td>
<td>0.73</td>
<td>.48</td>
<td>0.00</td>
</tr>
<tr>
<td>Preoccupation</td>
<td>1.43</td>
<td>.23</td>
<td>0.00</td>
<td>6.90*</td>
<td>.00</td>
<td>0.01</td>
<td>0.69</td>
<td>.50</td>
<td>0.00</td>
</tr>
<tr>
<td>R as S</td>
<td>1.35</td>
<td>.25</td>
<td>0.00</td>
<td>0.60</td>
<td>.55</td>
<td>0.00</td>
<td>1.45</td>
<td>.24</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.

Note: Confidence = Confidence to self and other, Discomfort = Discomfort with closeness, N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ; Feeney et al., 1994).

Table 8. Summary of three-way ANOVA of the interaction effects of gender, age, and ethnicity.

<table>
<thead>
<tr>
<th>ASQ</th>
<th>Gender x Age</th>
<th></th>
<th>Gender x Ethnicity</th>
<th></th>
<th>Age x Ethnicity</th>
<th></th>
<th>Gender x Age x Ethnicity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( F(2,1296) )</td>
<td>( \eta^2 )</td>
<td>( F(2,1296) )</td>
<td>( \eta^2 )</td>
<td>( F(4, 1296) )</td>
<td>( \eta^2 )</td>
<td>( F(3, 1296) )</td>
<td>( \eta^2 )</td>
</tr>
<tr>
<td></td>
<td>( p )</td>
<td></td>
<td>( p )</td>
<td></td>
<td>( p )</td>
<td></td>
<td>( p )</td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>0.21</td>
<td>.81</td>
<td>0.00</td>
<td>0.05</td>
<td>.95</td>
<td>0.00</td>
<td>1.01</td>
<td>.40</td>
</tr>
<tr>
<td>Discomfort</td>
<td>0.06</td>
<td>.94</td>
<td>0.00</td>
<td>1.23</td>
<td>.29</td>
<td>0.00</td>
<td>0.69</td>
<td>.60</td>
</tr>
<tr>
<td>N for A</td>
<td>1.70</td>
<td>.18</td>
<td>0.00</td>
<td>2.24</td>
<td>.11</td>
<td>0.00</td>
<td>2.31</td>
<td>.06</td>
</tr>
<tr>
<td>Preoccupation</td>
<td>2.38</td>
<td>.09</td>
<td>0.00</td>
<td>0.13</td>
<td>.88</td>
<td>0.00</td>
<td>1.74</td>
<td>.14</td>
</tr>
<tr>
<td>R as S</td>
<td>0.17</td>
<td>.84</td>
<td>0.00</td>
<td>1.16</td>
<td>.31</td>
<td>0.00</td>
<td>0.36</td>
<td>.83</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.

Note: Confidence = Confidence to self and other, Discomfort = Discomfort with closeness, N for A = Need for approval and confirmation by other, Preoccupation = Preoccupation with relationships, R as S = Relationship as secondary (ASQ; Feeney et al., 1994).
Discussion

The results of this study clearly portray the ASQ dimension model proposed by Feeney et al. (1994) in Indonesia, a non-Western society. We obtained an adequate reliability and validity of the Indonesian version of the ASQ to make it applicable in Indonesia. Up until now, the ASQ has not been translated and widely used to examine attachment development of Indonesians. Some items in this study (see the translation procedure section) should be carefully reworded according to the difficulty of Indonesian to interpret the meaning of the items as clear as the original version. We realize that the level of formal language proficiency in Bahasa Indonesia may pose a problem in this study. Indonesia, a multi-ethnic country, consists of many ethnic groups with many local languages that commonly influence informal communication, especially for those who live in rural settings. However, we were able to overcome the problem. Many words in Bahasa Indonesia have their synonyms that are more familiar and can be used appropriately to reword the statements. By providing a verbal explanation during the data gathering process, we can be sure that all participants are able to understand each item well and then fill out the entire questionnaire.

Results obtained with CFA have supported the five attachment dimensions model (Feeney et al., 1994) of the Indonesian version of the ASQ. The factor loadings of 40 items in the five dimensions model are considered adequate. However, there are some items that make a very small contribution on some scales. These items were not excluded in the Indonesian version of the ASQ considering the acceptable coefficient reliability of the dimensions. It is possible that minor linguistic differences between the Indonesian translation and the original version of the ASQ could partially explain the finding.

From a cultural point of view, the results of factor analyses may be considerable. In interpreting the findings, it is essential to acknowledge that the results may have been influenced by the cultural context. In this study, some items with a low loading should
be related to the Indonesian context. For example, items 4 and 21, which stress dependency, may to some extent not be significant for Indonesians. According to Setiadi et al. (2004), Indonesian people grow and develop in the Eastern cultural heritage that, for generations, has tended to be collectivistic and put the family as the foremost external environment to gain a sense of security as a member of a group. Strong bonds of affection among family members seem to lay a critical basis for the development of emotional expression and social ability of Indonesians. Thus, a strong interrelationship, an interdependent orientation, a mutual dependency, social tolerance, harmony, a more balanced exchange of support, and filial obligation are the general characteristics of the Indonesians (Berry, Poortinga, Segall, & Dasen, 2002).

We think that the characteristics of Indonesian society listed above can also explain the correlation analyses results that show the significance of age and the living-with-family experience in the development of the attachment dimensions. Increasing age, as well as the number of years in living together with family members, plays an important role in the development of confidence in self and in other of adult Indonesians (see Table 3). Interdependent orientation among family members leads most adult Indonesians to stay longer with family members as parents and siblings to ensure a feeling security, even when economically independent and socially mature.

Between-group comparison analyses show some statistical significance of differences in the attachment dimensions between age, gender, and ethnicity groups (see Table 4, Table 5, & Table 6). Further analyses show that the main effects are shown for age differences, though this was not so for all dimensions. However, the interaction between age, gender, and ethnicity were not found. The very small effect size show that the statistical significance result may reflect a big sample that was used in this study. However, as the interpretation of effect sizes is a subjective process and should be contextualized (Ellis, 2009; Field, 2005; Gravetter & Wallnau, 2009), we may say that the statistical significance in the context of this
study is still relevant information relating to the effect of age, gender and ethnic background on the development of attachment style in Indonesians. On the basis of continuity of the working model of adult attachment (Mikulincer & Shaver, 2007), we find here that all age groups may present different profiles of the five ASQ dimensions. Mikulincer and Shaver (2007) proposed the concept of continuity and discontinuity of adult attachment process through three key points. First, there was the stability of infant attachment patterns across childhood, adolescence, and adulthood, and the impact of early influential experiences with parental caregivers on later attachment patterns. This concept of continuity was supported by Hamilton's study of continuity and discontinuity of attachment from infancy until adolescence (Hamilton, 2000). Second, there were discontinuities in attachment patterns between infancy and adulthood, and the impact that attachment-relevant experiences during childhood and adolescence have on the development of adult attachment. Third, there was the stability of the working model of attachment in adulthood which can be reshaped by new kinds of social experiences. According to the result, age differences in attachment style among Indonesians may explain the concept of continuity and discontinuity of adult attachment.

Overall, the results of this study indicate that the ASQ provides detailed and reliable profiles of adult attachment development. The ASQ scales are internally consistent and replicate across samples. As a moderate length self-report, the ASQ is a useful research instrument for assessing adult attachment styles in Indonesia. In agreement with Fraley and Waller's (1998) findings, the results do not support categorical models of adult attachment. Rather, the results imply that ASQ scores represent a continuous variable from an individual. Individual differences in attachment development can be better described as a multivariate continuum than as discrete types.
Conclusions, limitations, and future directions

The issue of Eastern vs. Western cultural values opens the possibility of finding a shared feature of attachment profile in Eastern societies, including Indonesia. However, the existence of Western feature still possible for the Indonesians concerning Indonesia is a multi-ethnic country. Some Indonesians—that tend to be more collectivistic—may demonstrate an individualistic tendency that mostly can be found in Western society. As an illustration in another case, research on emotional intelligence (EI) in three ethnic groups of Indonesians showed a more individualistic profile of the EI competences in one of the groups (Dewi, Halim, & Derksen, 2017). Additionally, generalization about the attachment of Indonesians cannot be made only based on the study of Javanese, Batak, and Minangkabau which are more a representation of the west area of Indonesia. The future studies on the Indonesians from the other ethnic groups in the middle and east areas of Indonesia, such as Madurese, Balinese, Timorese, Dayaks, Minahasa, Torajas, Makassarese, and Buginese are expected to give a valuable contribution.

Collectivistic–individualistic tendency passed down between generations that later become the culture of a society. In this study, we see the possibility that the traditional collectivistic tendency may be less evident among younger Indonesians. A rapid advance in technology make the younger tends to be more individualistic by spending time independently using gadgets, such as laptop, tablet, and mobile phone. In the social context, the younger Indonesians prefer to build social relationships through many social media, in which it is mostly without any personal and intimate encounter. According to the age and education level of the participants (see the participants section), we noticed that the results of this research could not represent the attachment style of Indonesians across generations concerning the proportion of each group of the participants. We suggest continuing this study on other groups of Indonesian society in the terms of the variability of demographic background.
Similar to other dimensional-based measurements, the ASQ has some attractive features in terms of a more practical, vivid, and comprehensive description of individual attachment patterns. According to Fraley and Waller (1998), the dimensional approach does not imply the existence of mutually exclusive types of adult attachment. As a result, it makes it possible to describe adult attachment development in more detail. Moreover, it is important to note that dimensional assessments of adult attachment can be readily converted into typologies by using cut-off scores when needed. Finally, from a research perspective, the use of dimensional models of measurement usually increases statistical power (Fraley & Waller, 1998), and allows researchers to consider potential nonlinear relationships. Additionally, demographic characteristics of a society, in this case Indonesians, should be placed as a potential factor that may play an influential role in developing adult attachment.

Several limitations should be noted. The results of this study to some extent describe the attachment patterns of Indonesians from three major ethnic groups in Indonesia as the normative samples.

Considering the total Indonesian population, a larger number of participants and a more various ethnic groups of Indonesia are needed in future studies to make a more faithful representation. In relation to effect size, a more careful calculation of sample size by determining the effect size in the beginning of data collection stage is highly needed in future studies.

References


Chapter 3
The BarOn Emotional Quotient Inventory (EQ-i): Development and psychometric adaptation in Bahasa Indonesia

Published as:

1) Additional analyses were made, therefore this version is slightly modified.
CHAPTER 3

Abstract

The BarOn Emotional Quotient Inventory (EQ-i; BarOn, 2004) was created to assess emotional intelligence (EI). In our research project we produced the Indonesian version. The EQ-i was translated from English into Bahasa Indonesia and back-translated into English. Test–retest reliabilities and internal consistencies amongst 2801 Indonesians were calculated and found quite satisfactory. The exploratory factor analyses (N=500) and the confirmatory factor analysis (N= 750) were identified and largely consistent with the original version’s composite scales and sub scales. Our findings support the use of the Indonesian version of the EQ-i.

Keywords: Emotional intelligence, development, psychometric adaptation, Bahasa Indonesia.
Introduction

Literature on emotional intelligence (EI) has generally distinguished between two models of EI: the ability model and the mixed model (Schulze & Robert, 2005; Wood, Parker, & Keefer, 2009). The Salovey–Mayer's ability model (Mayer, Salovey, & Caruso, 2000) defines EI as ability to perceive, understand, manage, and use emotions for facilitating thoughts. This model views EI as a set of cognitive and emotional abilities that are best measured by an ability-based measurement. The mixed model describes EI more as an interrelated constellation of emotional and social abilities, skills, and facilitators that impact on intelligent behavior. This model represents broader personality traits under the umbrella of EI. Petrides and Furnham (Schulze & Robert, 2005) emphasize a conceptualization of trait and mixed models of EI. They suggest the formal concept of trait EI as a guiding framework for the integration and systematization of EI encompassed by existing mixed model. Accordingly, proponents of trait or mixed models allow for EI as a new umbrella term for various personality traits. Either trait or
mixed model employs a self-report or an observer rating to assess EI level (BarOn & Parker, 2000; BarOn, 2004b)

Different to Mayer and Salovey’s ability model, BarOn’s mixed model of EI interprets the meaning of EI by explicitly incorporating a wide range of personality characteristic (BarOn & Parker, 2000; BarOn, 2004b). More specifically, BarOn’s mixed model of EI was being constructed by the concept of emotional-social intelligence (ESI). The ESI can be explained as a cross-section of interrelated emotional and social competences that determine how effectively individuals understand and express their selves, understand others and relate with them, and then cope with daily demands. Some earlier theories influenced the development of EI models as a complementary to cognitive intelligence kind of intelligence. For example, Darwin’s (Schulze & Robert, 2005) early work on emotional expression and adaptation, Thorndike’s (BarOn & Parker, 2000) description of social intelligence, and Wechsler’s theory (Schulze & Robert, 2005) about non-cognitive and conative factors. All of them pointed to the importance of a non-cognitive kind of intelligence that supports individual’s cognitive intelligence. Accordingly, the present descriptions, definitions, and conceptualizations of the mixed model of EI have included the following key components: (a) the ability to recognize, understand, and express emotions and feelings; (b) the ability to understand how others feel and relate with them; (c) the ability to manage and control emotions; (d) the ability to manage change, adapt, and solve problems of a personal and interpersonal nature; and (e) the ability to generate positive affect and be self-motivated (BarOn & Parker, 2000; BarOn, 2004b). These definitions of components are still vague and need further development. When we look more closely at the concept of ESI we can distinguish two levels of ability in the concept, i.e. intrapersonal and interpersonal level. On the intrapersonal level, we can recognize one’s ability to be aware of one self, to understand one’s strengths and weaknesses, and to express one’s feelings and thoughts non-destructively. On the interpersonal level, we can distinguish one’s ability to be aware of others’ emotions, feelings and needs, and
the potential to establish and maintain cooperative, constructive, and mutually satisfying relationships. In view of that, being emotionally and socially intelligent means having the capacity to effectively manage personal, social, and environmental change by realistically and flexibly coping with the immediate situation, solving problems, and making decisions. This combination of traits, skills and attitudes corresponds to being successful and efficient.

The purpose of this study is to develop the Indonesian version of BarOn emotional quotient inventory (EQ-i), one of the most widely used measures of EI. The EQ-i is a self-report which estimates the level of EI through assessing emotionally and socially intelligent behavior. It is also the first self-report of EI that was published by a psychological test publisher, the first measure that has been peer-reviewed in the Buros Mental Measurement Yearbook, and a widely used measure of ESI to date (BarOn, 2004b). The BarOn EQ-i has been translated and adapted in Spanish (South American), French (Canadian), Dutch, Danish, Swedish, Norwegian, Finnish, and Hebrew. Research versions are available in Arabic, Chinese, Czech, German, Korean, and Russian. Afrikaans, Estonians, Latvian, Lithuanian, Iranian, Portuguese (Euro), and English (South African) versions are in development (BarOn, 2004b). A comprehensive explanation of how this measure was developed and its psychometric properties can be found in the Bar-On EQ-i Technical Manual (BarOn, 2004b) and in some other literature, such as in Glenn Geher’s book entitled Measuring Emotional Intelligence: Common Ground and Controversy (2004a).

Briefly, the EQ-i contains 133 items in the form of short statements. It employs a 5-point response scale ranging from "very seldom or not true of me" (1) to "very often true of me or true of me" (5). The list of its items can be found in the technical manual (BarOn, 2004b). The EQ-i is suitable for people who are 16 years of age and older. There is no time limit to complete the EQ-i, but generally people need 25 minutes to complete all items. The individual’s responses assess a total EQ score and five composite scales that
comprise 15 sub-scale scores, i.e. intrapersonal (comprising self-regard, emotional self-awareness, assertiveness, independence, and self-actualization); interpersonal (comprising empathy, social responsibility, and interpersonal relationship); stress management (comprising stress tolerance and impulse control); adaptability (comprising reality-testing, flexibility, and problem-solving); and general mood (comprising optimism and happiness) (BarOn, 2004b).

Data collection has been conducted in various settings around the world. In North America, for example, the EQ-i has been used to explore the differences of EI among various age, economic and social status, educational level, and also occupation groups. Psychometric study, which measured the validity and reliability of the EQ-i, has been done over the past two decades in many countries. For example, Dawda and Hart (2000) made the correlations of the EQ-i scores with the NEO FFI and the BDI. They found a quite good of overall item discrimination. Their research also found the item validity that was relatively similar between male and female subjects. The study of the North American normative sample was conducted to examine the effect of age, sex, and ethnicity on EQ-i scores (BarOn, 2004b). The results indicated a few significant differences between the age groups in which the older groups scored significantly higher than the younger on most of the EQ-i scales (BarOn & Parker, 2000). This result indicated that the ESI develops and changes over time in which people become more emotionally and socially intelligent when they get older.

With respect to sex difference, no differences have been revealed between males and females for overall ESI. However, with small effects, there were statistically significant sex differences for some scales measured by the EQ-i. Based on the North American normative sample (BarOn, 2004b) females appear to have stronger interpersonal skills than males. In contrast, males have a higher intrapersonal capacity, are better at managing emotions, and are more adaptive than females. More specifically, the BarOn’s model reveals that women are more aware of emotions, demonstrate more
empathy, relate better interpersonally, and are more socially responsible than men. On the other hand, men appear to have better self-regard, are more self-reliant, cope better with stress, are more flexible, solve problems better, and are more optimistic than women (BarOn, 2004a; 2004b).

Previous studies of the EQ-i also inspired us to develop the Indonesian version of the EQ-i through a psychometric study in Indonesian setting. Indonesia is the largest archipelago and the fourth most populous nation in the world with 300 ethnic groups inside (Badan Pusat Statistik, 2009a; Badan Pusat Statistik, 2009b; “Indonesia – Ethnic groups”, 2012). There are about 700 different local languages that were actively used as a daily language among the member of particular ethnic group. However, Indonesia has Bahasa Indonesia as a united language for all Indonesian which is mostly used in formal and official setting. Since their first grade, all Indonesian children should learn and use the Bahasa Indonesia at least along class sessions at school. The basic skill in Bahasa Indonesia will be developed further in higher educational levels and other formal setting along years that make educational and work experiences could be highly significant on the development of the Bahasa Indonesia skill.

**The Current Study**

This study develops the Indonesian version of the EQ-i by using the International Test Commission’s guideline for translating and adapting tests (International Test Commission, 2010). Prompted by the previous findings of the original and Dutch versions of the EQ-i, the aims of this study were to (a) evaluate the internal consistency and test–retest reliability of the EQ-i Indonesian version; (b) assess the factorial structure of the Indonesian version of the EQ-i; and (c) test whether the five-scales and the 15-sub-scales resulting from factor analysis could differentiate men participants from women as well as the younger from the older participants.
We hypothesize that the five-factor and the fifteen-factor structures of the EQ-i would fit to the Indonesian normative data. This study expects the high reliability of the five composite scales and the 15-sub scales of the Indonesian version of the EQ-i consistent with the original EQ-i.

Method

Translation Procedure

Equivalence to the original version in terms of the meaning of the items was the guiding principle in the translation process. The cross-cultural adaptation of the EQ-i required a process of translation, back-translation, expert revision, and testing of the preliminary version to assure that the meanings of the original items were adequately captured in Bahasa Indonesia. Accordingly, first, the English version of the EQ-i was translated into Bahasa Indonesia by three psychologists including the first author of the current study. One draft of Indonesian version was created by the first author based on the three translation results. Back-translation into English was performed by three other bilingual university graduates in Psychology. Then, the first author compared the original English and the back-translated versions, and created a preliminary Indonesian version after some discussions and corrections for words and meanings of each item in cooperation with other authors of this study.

To translate the items in a culturally appropriate manner during the translation process, several items in the original version were reworded within the Indonesian context to enhance the accurate cultural-meanings of the items for Indonesian people. For example, item 71 in the negative-impression scale, I feel cut off from my body. The Indonesian version proposes using quotes to the word “cut off” into “terpisah” to make it not be taken literally. For most Indonesian, especially those who do not get a higher-education experience, the word cut off reflect just the literal meaning in the sense that there are physically parts of the body separated due to cutting, connotes
something bad and horrible, which is predicted to be provoke the same answer to this item. The original and back-translated English versions did not differ appreciably as judged by the translators.

The problems encountered during the adaptation were related to items 22, 82, 111, and 126, but these were overcome by means of careful wording. Based on the experience gained during the data collection, the items in assertiveness sub-scale is often confusion and bring up questions from the participants. The terms and words “express my ideas” (mengekspresikan ide-ide) in item 22, “to say ‘no’” (berkata tidak) in item 82, “assertiveness” (berkata asertif) in item 111, and “stand up for my rights” (mempertahankan hak-hak saya) in item 126 are too abstract and not commonly used by some Indonesians, especially those who are still actively using local languages and those who have a low-education level.

This study also notices the influences of collectivistic tendency of Indonesian as the eastern society on the response to the assertiveness stimulus. In point of fact, expressing the thoughts and feelings that were different from others and highly possible to provoke the interpersonal conflict are sometimes being considered as aggressive, culturally undesirable, and weird behavior for Indonesian. However, a moderate factor loading of this sub-scale showed its considerable contribution in assessing the intrapersonal scale of Indonesian sample.

To make the questionnaire highly acceptable, easily understood, and capable of being administered to all Indonesians, it is necessary to reword some unfamiliar words with more familiar one. The main problem here is that there is no equivalent of “impulsive” and “assertive” in Indonesian vocabulary. If the word is replaced with its definition, then the item is going to be very long. Therefore, this study decided to keep using the word “impulsive” (impulsif) and “assertive” (asertif), accompanied by a verbal explanation about the meaning of these two words.
The ABBA counterbalance design was employed to measure the test–retest reliability by asking the participants to fill out the English and the Indonesian versions after an interval of 2–weeks. The Pearson's product–moment coefficient correlation was applied to test an agreement between the baseline and the retest scores of the EQ total and scales. Pearson's correlations were classified as fair (r < 0.30), moderate (0.30 < r ≤ 0.60), or good (r > 0.60). Based on the English language proficiency as a student of English study, they were 92 participants for the AB group and 88 participants for the BA group included in this step. The result showed a satisfactory coefficient (r) between the two time intervals for the EQ total and all scales. For the AB group (N=92), Pearson's coefficients (r) were .98; .98; .98; .98; .96; .97 (p< .001) for EQ total, intrapersonal, interpersonal, adaptability, stress management, and general mood; respectively. For the BA group (N=88), Pearson's coefficients (r) were .98; .98; .98; .97; .96; .96 (p< .001) for EQ total, intrapersonal, interpersonal, adaptability, stress management, and general mood; respectively. The results indicated that the preliminary version of the Indonesian version of the EQ–i has been translated accurately and ready to be tested in terms of its psychometric properties followed recommended procedure.

**Participants**

The total participants of this current study were 2801 Indonesian students and workers (Mean age = 27.94; SD = 9; 52.3% men). They were selected from several big cities of Indonesia, namely Jakarta, Bandung, Yogyakarta, Surakarta, Medan, and Padang. This study got approval from the board of business, school, university, and social services organizations to recruit the participants whereas the informal permission and approach were also done in the non-organization community. Those who agreed to participate received a package of questionnaires consist of personal data questionnaire and the preliminary EQ–i. This study was conducted individually and in groups (maximum 25 persons) by giving them a standardized explanation and instruction by the research team. Only
those who filled out the questionnaires completely will be included as participant.

For the factor analyses, we did not include the entire participant to avoid statistical bias. For EFA, we only chose 500 samples derived from the capital of Jakarta. Furthermore, for the CFA, we chose another 750 samples from areas that represent relatively large provinces, explicitly 250 samples from Middle Java (Yogyakarta and Surakarta), 250 samples from North Sumatra (Medan), and 250 samples from West Sumatra (Padang).

**Measures**

The Indonesian version of the BarOn Emotional Quotient–Inventory (EQ–i) consists of 133 items that are divided into 117 items for the five composites scales and 15 sub-scales, i.e. (1) intrapersonal scale, consists of self-regard, emotional self-awareness, assertiveness, independence, and self–actualization sub scales; (2) interpersonal scale, consists of empathy, social responsibility, and interpersonal relationship sub scales; (3) adaptability scale, consists of reality testing, flexibility, and problem solving sub scales; (4) stress management scale, consists of stress tolerance and impulse control sub scales; and (5) general mood scale, consists of happiness and optimism sub scales. There are also 15 items of the EQ–i that measure positive and negative impression scales. The last one item (item 133) is the item to assess a continuation of the instruction. In response to each item, respondents will be faced with 5-point response scale, ranging from 'not true of me' to 'true of me’. This study focuses on the total EQ, five-scales and 15 sub-scales regarding their applicability to future research.

**Statistical Analysis**

By using the Cronbach’s alpha, we calculated the reliability of the five-scales and 15-sub-scales of the EQ–i as internal consistency. To assess the relationship among scales and subscales of the EQ–i, we carried out the Pearson’s correlation analysis. We carried out a
principal component analysis by using the exploratory factor analysis (EFA). We used varimax rotation with extraction of those factors (eigenvalues >1.0) to assess the factor structure of the Indonesian version of the EQ-i. We performed CFA to assess the goodness of fit of the EI model originally proposed by BarOn (2006) and estimated the 15 sub-scales of the EQ-i as the factors of the five scales. We also performed the cross group comparisons using the t-test and the ANOVA to see the application of the Indonesian version of the EQ-i in Indonesia. All the following analyses were performed by using the IBM Statistical Package for the Social Sciences 19.0 (SPSS, Inc.) for Windows (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) and also the IBM SPSS AMOS 20 (Arbuckle, 2011).

The standard score by means of the T-score was calculated by using the $100 \pm 15$ (z-score) formula followed what was used in the original version (BarOn, 2004b). This study was using the Dutch norm as a reference point for the T-score in the light of the fact that the Netherlands is one of major Western countries where the EQ-i has been developed earlier. By using the T-score, this study aims to see the profile of the Indonesian EQ-i both in the scale and sub-scale levels.

**Results**

**Internal Consistency and Descriptive Statistics**

Internal consistency of the Indonesian version of EQ total, five scales, and 15 sub-scales of the EQ-i in Table 1 showed adequate values that were ranging from .40-.94. General mood scale and assertiveness sub scales provided the lowest values while EQ total was the highest. Validity items of the five scales were ranging from .70 to .88. Most of the 15 sub-scales also had adequate values ($\alpha > .5$) except assertiveness ($\alpha = .40$) as the most difficult scale for the Indonesian participants. Validity items of the 15 sub-scales were ranging from .30 to .79.
Descriptive statistics of the EQ levels in Indonesian participants are also presented in Table 1 separately for raw scores and T-scores. As shown in Table 1, the Indonesians obtained lower scores than the Dutch (mean T-scores < 100) on EQ total, scales, and subscales.

### Table 1. Internal consistency coefficients, means, and standard deviations of raw scores and T-scores.

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**EQ-1 Abbreviations:**
- SR = Self-Regard; ES = Emotional Self-Awareness;
- AS = Assertiveness; IN = Independence; SA = Self-Actualization; EM = Empathy;
- RE = Social Responsibility; IR = Interpersonal Relations; RT = Reality Testing;
- FL = Flexibility; PS = Problem Solving; ST = Stress Tolerance; IC = Impulse Control;
- OP = Optimism; HA = Happiness (BarOn, 2004)
Intercorrelations between EQ-i Scales and Sub-Scales

As shown in Table 2 and Table 3, several intercorrelations were observed among scales and sub-scales. The highest intercorrelations among scales were for intrapersonal with adaptability (.80) and general mood (.77). The highest intercorrelation among sub-scales was for social responsibility with empathy (.73) as well as for happiness with self-actualization (.71) and interpersonal relationship (.71). All other coefficients for scales ranged between .30 and .73, while for sub-scales ranged between .13 and .64.

Table 2. Intercorrelation matrix of the five scales of the Indonesian version of the EQ-i.

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Factor Structure

The Kaiser–Meyer–Olkin (KMO) and Bartlett tests found a highly correlated of the EQ-i variables to provide factor analysis (KMO = .92, Bartlett = .00). The EFA for a five-factor structure of the EQ-i scale-level analysis (including the 15 sub-scales) in 500 Indonesian samples found two factors with total eigenvalues of 7.06 (47.6% of variance) for factor 1 and 2.30 (15.31% of variance) for factor 2. Table 4 showed the sub-scales and factor loadings for the rotated factors. Varimax rotation explains 33.50% of variance (factor 1), 13.23% of variance (factor 2), and 11.93% of variance (factor 3) with total loadings of 5.23, 1.99, and 1.79, respectively. The fourth (4.16% of variance) and the fifth (2.68% of variance) factor were not significant regarding the low total loadings (<1.0).
Table 3. Intercorrelation matrix of the 15 sub-scales Indonesian version of the EQ-i.

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**. Correlation is significant at the 0.01 level (2-tailed).

**EQ-i Abbreviations:**
- SR = Self-Regard
- ES = Emotional Self-Awareness
- AS = Assertiveness
- IN = Independence
- SA = Self-Actualization
- EM = Empathy
- RE = Social Responsibility
- IR = Interpersonal Relationship
- RT = Reality Testing
- FL = Flexibility
- PS = Problem Solving
- ST = Stress Tolerance
- IC = Impulse Control
- HA = Happiness
- OP = Optimism

(BarOn, 2004)
Table 4. Scale level factor analysis of EFA for the rotated factors using the EQ-i sub-scales.

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**EQ-i Abbreviations:** SR = Self-Regard; ES = Emotional Self-Awareness; AS = Assertiveness; IN = Independence; SA = Self-Actualization; EM = Empathy; RE = Social Responsibility; IR = Interpersonal Relationship; RT = Reality Testing; FL = Flexibility; PS = Problem Solving; ST = Stress Tolerance; IC = Impulse Control; OP = Optimism; HA = Happiness (BarOn, 2004)

**Note.** Factor: 1 = Intrapersonal EQ; 2 = Interpersonal EQ, 3 = Adaptability EQ, 4 = Stress Management EQ, 5 = General Mood EQ.

The five-factor solution confirmatory factor analysis (N=750), where all the 15 factors were intercorrelated, was tested. Fit indexes with $\chi^2(80) = 1089.21$, $p < .001$; CFI = .82; TLI = .76; and RMSEA=.13 were less adequate to estimate the 15 sub-scales of the Indonesian version of the EQ-i as the factors of the five-factor model (see Table 5). We did not conduct the second order of CFA concerning the less significant of the first order CFA result. We however, did not exclude any items of the Indonesian version of the EQ-i considering the acceptable factor loadings.
Sex and Age differences

Comparative analyses between sex and age groups are shown in Table 6. With small effect size, Indonesian women have significantly higher scores than that man on EQ total as well as on adaptability, stress management, and general mood. At the sub-scale level, women are also higher than that for men on almost all sub-scales. The EQ total is not significantly different between age group. Also with very small size effect, age differences have an effect to the difference of all EQ scales, except adaptability.

Table 5. Confirmatory factor analysis of the Indonesian version of the EQ-i on Indonesian normative sample (N = 2801).

<table>
<thead>
<tr>
<th>Scales</th>
<th>15-factors</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrapersonal EQ</td>
<td>SR</td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td>ES</td>
<td>.69</td>
</tr>
<tr>
<td></td>
<td>AS</td>
<td>.62</td>
</tr>
<tr>
<td></td>
<td>IN</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>.81</td>
</tr>
<tr>
<td>Interpersonal EQ</td>
<td>EM</td>
<td>.63</td>
</tr>
<tr>
<td></td>
<td>RE</td>
<td>.72</td>
</tr>
<tr>
<td></td>
<td>IR</td>
<td>.86</td>
</tr>
<tr>
<td>Adaptability EQ</td>
<td>RT</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>FL</td>
<td>.71</td>
</tr>
<tr>
<td></td>
<td>PS</td>
<td>.51</td>
</tr>
<tr>
<td>Stress Management EQ</td>
<td>ST</td>
<td>.57</td>
</tr>
<tr>
<td></td>
<td>IC</td>
<td>.62</td>
</tr>
<tr>
<td>General Mood EQ</td>
<td>OP</td>
<td>.52</td>
</tr>
<tr>
<td></td>
<td>HA</td>
<td>.70</td>
</tr>
</tbody>
</table>

EQ-i Abbreviations: SR = Self-Regard; ES = Emotional Self-Awareness; AS = Assertiveness; IN = Independence; SA = Self-Actualization; EM = Empathy; RE = Social Responsibility; IR = Interpersonal Relationship; RT = Reality Testing; FL = Flexibility; PS = Problem Solving; ST = Stress Tolerance; IC = Impulse Control; OP = Optimism; HA = Happiness (BarOn, 2004)
Table 6. Sex and age groups comparisons for the Indonesian Normative Sample (N = 2801).

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Mean (SD)</th>
<th>p Values (ANOVA test)</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>406.76 (42)</td>
<td>.11</td>
<td>.00</td>
</tr>
<tr>
<td>(N = 1732)</td>
<td>30-39</td>
<td>407.94 (48)</td>
<td></td>
</tr>
<tr>
<td>(N = 754)</td>
<td>40-49</td>
<td>414.72 (52)</td>
<td></td>
</tr>
<tr>
<td>(N = 201)</td>
<td>50 or Above</td>
<td>404.96 (55)</td>
<td></td>
</tr>
<tr>
<td>(N = 114)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>134.98 (17)</td>
<td></td>
<td>.03</td>
<td>.00</td>
</tr>
<tr>
<td>95.05 (12)</td>
<td></td>
<td>.00</td>
<td>.10</td>
</tr>
<tr>
<td>85.47 (10)</td>
<td></td>
<td>.12</td>
<td>.00</td>
</tr>
<tr>
<td>57.55 (9)</td>
<td></td>
<td>.03</td>
<td>.00</td>
</tr>
<tr>
<td>62.30 (8)</td>
<td></td>
<td>.06</td>
<td>.00</td>
</tr>
<tr>
<td>32.75 (9)</td>
<td></td>
<td>.24</td>
<td>.00</td>
</tr>
<tr>
<td>26.97 (4)</td>
<td></td>
<td>.41</td>
<td>.00</td>
</tr>
<tr>
<td>22.02 (3)</td>
<td></td>
<td>.36</td>
<td>.00</td>
</tr>
<tr>
<td>21.74 (5)</td>
<td></td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>31.49 (4)</td>
<td></td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>28.70 (4)</td>
<td></td>
<td>.82</td>
<td>.00</td>
</tr>
<tr>
<td>36.48 (5)</td>
<td></td>
<td>.75</td>
<td>.00</td>
</tr>
<tr>
<td>40.49 (6)</td>
<td></td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>32.11 (5)</td>
<td></td>
<td>.04</td>
<td>.00</td>
</tr>
<tr>
<td>24.93 (4)</td>
<td></td>
<td>.35</td>
<td>.00</td>
</tr>
<tr>
<td>28.44 (4)</td>
<td></td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>29.56 (9)</td>
<td></td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>27.98 (6)</td>
<td></td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>30.14 (6)</td>
<td></td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>32.16 (4)</td>
<td></td>
<td>.00</td>
<td>.01</td>
</tr>
</tbody>
</table>

**EQ-i Abbreviations:** SR = Self-Regard; ES = Emotional Self-Awareness; AS = Assertiveness; IN = Independence; SA = Self-Actualization; EM = Empathy; RE = Social Responsibility; IR = Interpersonal Relationship; RT = Reality Testing; FL = Flexibility; PS = Problem Solving; ST = Stress Tolerance; IC = Impulse Control; OP = Optimism; HA = Happiness (BarOn, 2004).
Discussion

In this article we investigated the reliability and factor structure of the Indonesian version of the EQ-i on Indonesian normative sample. An adequate reliability of the Indonesian version of the EQ-i was obtained, so that the scale can be used in Indonesia.

Rewording some items was needed concerning some unfamiliar terminology for some Indonesians; especially for those who live in outskirts of town and more actively using their local language. These phenomena cannot be denied because Indonesia consists of many ethnic and social groups with various level of formal language proficiency. By rewording the items and giving a verbal explanation during the data gathering process, we are assured that all participants are able to understand each item well and then fill out the questionnaire completely. The result in Table 1 approves the consistency and applicability of the Indonesian version of the EQ-i in some difference cities of Indonesian that consists of different ethnicity (including different local language), level of education, age group, and sex. The standard score of EI competence portrayed the characteristic of Indonesian samples wherein some variables, such as ethnic diversity and socioeconomic characteristic, should be placed as an imperative factor for Indonesian society. Eastern society characteristic may contribute to the Indonesian's level of ESI. A future study that will compare Indonesia as an Eastern country to a Western country, like the Netherlands for example, will yield a positive contribution to explain more about EI competence in the two societies.

Regarding the theory, these results are in line with BarOn's conception of ESI. Indeed, we identified some similarities of the ESI and another theory—particularly the attachment theory—that make them can be interrelated by each other. First, they enlighten the intrapersonal aspect of individuals that leads them to be well-adapted with their emotional and social circumstances. Second, they also concern about the interpersonal functions of individuals
that leads them to build an adequate social relationship. Some previous studies found that there was a positive relationship between secure attachment orientation and EI competences (Cooper, Shaver, & Collins, 1998; Hazan & Shaver, 1987; Kafetsios, 2004; Kim, 2005; Mikulincer, Orbach, & Lavnieli, 1998; Mikulincer, et al., 2001; Simpson, 1990). Future research about the relationship between attachment style and EI level should be interesting.

Results obtained with EFA have supported a five-factor and 15-factor models of the Indonesian version of the EQ-i. The rotated factors of the EFA shows that the 15-factor models of the Indonesian version of the EQ-i are not completely in line with the original version (see Table 4). For example, reality testing and flexibility should be a sub-scale for factor 3 (adaptability) in the original version instead of factor 1 (intrapersonal). Optimism and happiness should be a sub-scale for factor 5 (general mood) instead of factor 3 and factor 1. These results are consistent in some extent with the CFA result (see Table 5). It demonstrates that the 15 factor loadings are the representation of the five scales of the EQ-i despite the deployment of its 15 sub-scales are not exactly the same as the original version. In addition, an overview on the Indonesian EI competences will further illustrate each competency scale as a single competence and cannot be assessed as a total competence (EQ total). We notice that further research to see more about how the Indonesian people assess their competence through EQ-i will be very useful to support these results. The Eastern society of Indonesia is a multi-ethnic society that could have a special characteristic in terms of self assessment regarding the ethnic values variability among Indonesians.

**Limitations and Implications**

Despite the accumulated evidence for the reliability of the EQ-i, a limitation of our study regarding analyzing of the demographic data, such as ethnic variability, age group, sex difference, and socioeconomic level has to be mentioned here. Even though the
15-subscles are observable and measurable and are therefore defined as indicators of EI competences, this study assessed these variables by using self-report. It is possible that people with different demographic characteristic will perform different self-evaluations of their behaviors in the meaning of emotion and social abilities. Indonesian people with different ethnic identity, for instance, would respond according to what is considered good and bad by their ethnic group. Therefore, even though they are defined as objective indicators, they could be biased by the variability of demographic factors. Accordingly, a further study and analysis that take into account the demography data as a main variable of the study would be important and interesting.

Conclusion

The contribution of this study is that for the first time the concept of EI has been investigated in Indonesia. Although there are major questions related to cultural perspective in using this western culture-based concept, we think that the connection of the Indonesians' concept of EI to the people's from the west may get closer. Indonesian society is confronted by the growth of globalized economy that forms, to some extent, the connection of the psychological profile with the modern economy. We think that the traditional EI concept well-developed in the western, which represents extraverted, narcissistic, and fitting-perfect characteristics of individuals in a neo-capitalist modern society, to the Indonesian society is now a possible outcome.

This study confirmed that the EQ-i is a reliable and an adequate instrument to assess EI competences in the Indonesian context and provided further support for the cross-cultural generalization of EI construct. The EQ-i is applicable both in research and practice. With regard to research, this self-report questionnaire can be used to further examine the EI construct and its relations to other constructs and criteria, e.g. in research on ethnic and culture differences in EI competence. With regard to practice, the EQ-i can be used to
measure the EI level in clinical assessment, human resource development, or training program. This study hopes that the introduction of this questionnaire stimulates not only further research on EI in Indonesia but also wider cooperation with other countries.

References


Chapter 4

The EQ-i Profile of the Indonesians Compared to the Dutch: A Cross-Cultural Approach

Published as:


1) Additional analyses were made, therefore this version is slightly modified.
Abstract

Indonesia, as a country which tends to be collectivistic, is characterized by a strong interrelationship and interdependency among the members of each social group. These characteristics make it more difficult for most Indonesians to be psychologically autonomous and to express their thought and emotion as extravert as the Dutch. This study attempts to portray the emotional intelligence (EI) competences of Indonesians as the fourth most populous country, compared to Dutch normative samples. By applying the EQ-i to 1274 Indonesians and 1455 Dutch participants, overall findings show, as predicted, that the level of EI of Indonesians is generally lower than that of the Dutch. The results revealed that there are significant differences for EQ total, five scales, and 15 sub-scales between the two groups. Based on the results, we see that the collectivistic tendency of the Indonesians as an Eastern society, to some extent, cannot optimally support the development of the EI competences, including interpersonal skill which is assumed to be higher in the Indonesian than in the Dutch. The low scores for the Indonesians might suggest that there is room for improvement, possibly through an intervention program.

Keywords: Across countries, cross-cultural, Dutch, emotional intelligence, Indonesian, profiles
Introduction

Psychological differences between Eastern and Western societies are remarkable in a number of ways. The concepts of collectivism and individualism are traditionally used to characterize important ways in which societies differ. Eastern societies, well known as being more collectivistic, are usually contrasted with societies in the West, which are more individualistic. Indonesian people grow and develop in an Eastern cultural collectivistic heritage. Strong interrelationship, interdependent orientation, mutual dependency, social tolerance, harmony, more balanced exchange of support, and filial obligation are the dominant characteristics of Indonesians (Setiadi, Supratiknya, Lonner, & Poortinga, 2004). For generations, Indonesians have valued the family as their foremost social environment, this being where they gain security as a member of a group. Strong bonds of affection among family members seem to lay a critical basis for the development of their emotional expression and social ability. Traditionally, Indonesians have described good emotions with reference to the interaction between parents and family members. In contrast to Indonesians, the Dutch internalize Western norms and values that generally emphasize personal independence and individualism.
Every psychological study on individual differences between Eastern and Western people should integrate these cultural differences. This diversity profoundly affects the development of human behavior and emotional competences such as self-appraisal, emotion regulation, self-regulation, achievement, motivation, competence, narcissism, and emotional closeness (Derksen, 2007; Fjneman et al., 1996; Li, Saklofske, Bowden, Yan & Fung, 2012; Van Dierendonck, Rodríguez–Carvajal, Moreno–Jiménez, Maria, & Dijkstra, 2009). The theories of emotional intelligence (EI) have generated discussions in theoretical and empirical literatures over the past 20 years. The historical roots of the EI conceptualization can be found in the 19th century. Scientists have been studying the construct of EI as well as publishing scientific findings along the 20th and 21st centuries. At the beginning of the 1990s, for example, Mayer and Salovey published a series of articles on EI as well as carried out study and published the first EI ability measure. EI also emerged in a dramatic fashion following the publication of Emotional Intelligence by Daniel Goleman in 1995. The publication became a worldwide best-seller which was widely copied over several years and boosted the popularity of EI in workplace, educational, and health settings. A number of improvements in the concept of EI and a wide application of EI took place, along with the development of new measures for EI as well as the peer-reviewed research articles on this topic (BarOn & Parker, 2000; Ciarrochi, Forgas, & Mayer, 2001; Stough et al., 2009).

Identified as a non-cognitive intelligence, EI appears to support cognitive intelligence (IQ) in the development of an individual's emotion and cognitive capacities. With their psychometric independence, both IQ and EI are now known to complement each other in describing individual competence (BarOn & Parker, 2000; Derksen, Kramer, & Katzko, 2002; BarOn, 2004a; Stough, Saklofske, & Parker, 2009). In theoretical models, and for purposes of measurement, EI is considered to be both ability and an expression of various personality characteristics. Salovey and Mayer's ability model explains EI as an intelligence or ability to identify, use, understand, and manage emotions. BarOn's mixed model includes
traits and competences, and tries to explain the level of intelligence that represents a wide range of personality styles. This intelligence consists of the interrelation of emotional and social competences that contribute to how effectively individuals understand and express themselves, understand others and relate with them, and then cope with stress and daily demands (BarOn, 1997; BarOn & Parker, 2000; BarOn, 2004a; Schulze & Robert, 2005; Stough et al., 2009; Wood, Parker, & Keefer, 2009).

Why is EI important?

We are inclined to agree with critiques of the term “emotional intelligence” which has not described in any definite way. Known as a non-academic intelligence, a non-cognitive intelligence, or practical intelligence, EI definitions encompass cognitive processes, such as social judgment, problem solving, and emotion perception as well as personality characteristics, such as extroversion, self-actualization, and motivation (BarOn & Parker, 2000; Ciarrochi, Forgas, & Mayer, 2001; Stough et al., 2009). We also found that EI belong to positive psychology that basically puts attention to the development of individual’s strength and potentials (Sheldon & King, 2001). However, we think that now we have some sense of what EI is, from the popular conception to the scientific inquiry. The historical development of EI construct this far and also its scientific and validated measures show EI as one of specific intelligences that contribute to the prediction of an individual’s success in life (BarOn, 1997; BarOn & Parker, 2000; BarOn, 2004a; Schulze & Robert, 2005; Stough et al., 2009; Wood, Parker, & Keefer, 2009).

EI may be important in everyday life as it represents a level of intrapersonal skill; the self-orientation of a person, and interpersonal skills; the other-orientation of a person (BarOn, 1997; BarOn & Parker, 2000). We think that the optimal and balance maturity of the two orientations is important for any individual as, by nature, a social creature. It seems reasonable to assume that individuals who are poor in dealing with stress and emotions will have weak relationship,
poor health condition, and less success in study and work. If individuals cannot understand what other people feel nor have great difficulty in doing so, they may have problems with building a meaningful and successful social interaction or to maintain a close relationship with friends. In contrast, individuals who cope with life stress adequately, manage their own life well, fully accept their own strengths and weaknesses, and establish good relations with others will have success in life (BarOn & Parker, 2000; Ciarrochi, Forgas, & Mayer, 2001; Stough et al., 2009). Different from IQ, EI has a more practical meaning as it is a fluid and a trainable kind of intelligence (BarOn & Parker, 2000; Stough et al., 2009).

Accordingly, this study intends to examine EI competence specifically in the underdeveloped Indonesian society. We expect that the result of this study may contribute to the application of EI in the future that may profit in a variety of ways. Our expectation is based on several observations along time. First, Indonesia is a developing country which still needs, at least to some extent, to be developed in terms of its individuals' potentials. A preliminary study on Indonesians' personality characteristics using the revised NEO personality inventory (NEO PI–R), for example, has previously described the Indonesians' personality factors (Halim, Derksen, & van der Staak, 2004). Developing the emotional capabilities of the people means on a societal level contributing to the advancement of social and cultural structures and patterns. It is logical because the development of a country depends in many ways on the quality of its people. We consider that EI is an individual’s behavior style that can be significantly developed through creating intervention programs using a portrait of EI profile as a reference (e.g. Dusseldorp, Meijel, & Derksen, 2009; Gerits, Derksen, & Verbruggen, 2004; Gerits, Derksen, Verbruggen, & Katzko, 2005; Zijlmans, Embregts, Gerits, Bosman, & Derksen, 2011). Second, there are currently many social phenomena in Indonesia, including a higher prevalence rate of physical and mental health problems of young to middle-aged adults (CDC–Atlanta, 2014; Depkes RI, 2006; WHO, 2013). Research in EI potentially contributes to these problems, not only through a
description of EI, but also through a more practical application and direct action. Third, many previous studies of EI in the West that have been conducted in various life settings, such as educational, workplace, and health intended to contribute to improvements. We image a wide application of EI in many life settings in Indonesia, both for preventive purposes that focus on developing the individuals’ potential and for curative purposes that focus on helping individuals to regain their health and quality of life. For example, assessment of EI in an industrial organization can be integrated with other assessments, such as IQ level and achievement tests, in developing Indonesian workers. In educational context, for example, EI can be used to create a social and emotional learning program for students in supporting their academic performance. Furthermore, EI can be used to create training programs to educate Indonesian adults, either as parents or teachers or both, in developing the social and emotional and emotional competences of their younger generation in family, educational, and also social community settings.

The explanation of EI in the context of culture requires the utmost care. Societal norms are specific to each cultural group and make a valuable contribution to the development of emotional expression and social behavior among group members (Alisyahbana, 1989; Berry, Poortinga, Segall, & Dasen, 2002; Koentjaraningrat, 2002; Matsumoto, 1984; Schulze & Robert, 2005; Wood et al., 2009). EI evaluation in Indonesians, for example, might be different from that of the Dutch. The Netherlands is one country that can represent Western society where many studies on EI have been done previously. Authors of previous studies have stressed the need to investigate how EI skills differ between different societies (Ekermans, Saklofske, Austin, & Stough, 2011; Parker et al., 2005). Applying EI self-report in a community can be also regarded as a more practical and promising method because the process of collecting data about behavioral styles and attitudes can be done more effectively and efficiently. As a prerequisite, the psychometric integrity of the self-report should, of course, be really well-established and reliable (Kitayama & Markus, 1994).
The Present Study

This study aims to see whether there are any significant differences in overall scores on the EQ-i between Indonesian and Dutch samples. The cross-group comparison works on the assumption that the Dutch were expected to gain a higher score than the Indonesians for total EQ. More specifically, we expected the Dutch to score significantly higher in intrapersonal, adaptability, stress management, and general mood competences than the Indonesians, who were expected to score higher in interpersonal competence (Derksen, 2007). The independent orientation of the Dutch and their individualistic and narcissistic tendency, developed during centuries of individualization, possibly have a considerable impact on their ability to know their own emotional, personal, social, and self-defense competences better than the Indonesians. In contrast, the Indonesians, who are more collectivistic, are probably more skillful in interpersonal relationships than the Dutch.

Another aim of this study was to examine gender differences in response to the EQ-i and how cultural differences affect the EI in men and women. To some extent, the social and cultural environment will contribute to prevailing gender stereotypes in a society which are controlling and promoting the acceptable gendered behavior from early age to adolescent and adult age (Gardiner & Kosmitzki, 2005). Previous studies on Dutch male and female nurses, for example, found that there were different EI profiles in men and women (Dusseldorp, Meijel, & Derksen, 2009; Gerits, Derksen, & Verbruggen, 2004; Gerits, Derksen, Verbruggen, & Katzko, 2005). Supported by previous finding on North Americans (BarOn, 2004b), we hypothesize that there is a significant main effect of gender to EI in Indonesian and Dutch normative samples. More specifically, we expect that women, both Indonesian and Dutch, would show a larger interpersonal competence than men. In contrast, men would be significantly higher in intrapersonal, adaptability, stress management, and general mood competences than women. These assumptions are supported by the previous study that found stronger
interpersonal skills, greater awareness of others' feelings, and more empathy in women than in men (BarOn & Parker, 2000). A gender role that places women as a key person for almost all domestic duties makes it possible for most women to become more sensitive and aware of others' needs and feelings. It is possible for most Indonesian women to internalize traditional values and accepted behavior especially in both traditional and modern counterpart.

**Method**

**Participants**

Indonesian (N = 1274; Mean age = 40.84; SD = 11.11; 47.3% Men) and Dutch (N = 1455; Mean age = 51.21; SD =13.25; 57.7% Men) adults participated in this study. The Indonesian samples were selected from several cities: Jakarta, Bandung, Yogyakarta, Surakarta, Medan, and Padang. The Dutch samples were selected from cities in the Netherlands in such a way that the whole sample is representative for the Dutch population. Table 1 show the distribution of the two countries' samples based on gender and age groups.

**Table 1. Summary of demographic data across Indonesian and Dutch samples.**

<table>
<thead>
<tr>
<th>Participants</th>
<th>Indonesian</th>
<th>Dutch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>602</td>
<td>839</td>
</tr>
<tr>
<td>Women</td>
<td>672</td>
<td>616</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>755</td>
<td>335</td>
</tr>
<tr>
<td>40-49</td>
<td>201</td>
<td>382</td>
</tr>
<tr>
<td>50 &amp; Above</td>
<td>318</td>
<td>738</td>
</tr>
<tr>
<td>Total Number</td>
<td>1274</td>
<td>1455</td>
</tr>
</tbody>
</table>
Measure

The EQ-i 133-items (BarOn, 2004b) provide 117 items of total measure of EI and scores on the five composites scales (15 sub-scales). First, intrapersonal scale, consists of self-regard, emotional self-awareness, assertiveness, independence, and self-actualization sub-scales. Second, interpersonal scales, consists of empathy, social responsibility, and interpersonal relationship sub-scales. Third, adaptability scale consists of reality testing, flexibility, and problem solving sub-scales. Fourth, stress management scale, consists of stress tolerance and impulse control sub-scales. Fifth, general mood scale, consists of happiness and optimism sub-scales. The other 15 items measure the positive impression (PI) and negative impression (NI) scores. The final item is a continuation of the instruction (item 133). Items are scored on a five point Likert scale. The EQ-i was adapted for Dutch and Indonesian according to the scientific standards available in this domain.

We focused on the analyses of the EQ total, scales, and sub-scales of the EQ-i. Indonesian and Dutch versions were applied to each group. Internal consistency reliability, calculated by Cronbach’s alpha coefficients for the total EQ and each scale and sub-scales across samples, yielded a lower score for the Indonesians than for the Dutch. Both groups, however, show good reliability, with alpha coefficients of total EQ of 0.96 and 0.94 for Indonesians and Dutch respectively. For Indonesians, the alpha coefficients of EQ scales and sub-scales ranged from 0.57–0.87 while for the Dutch the range was 0.71–0.92.

Data Analytic Strategy

Descriptive analysis was performed to show a general description of Indonesian and Dutch normative data. To maximize the comparability of EI profiles across the countries, the total, scales, and sub-scales EQ raw scores for each country were converted to standardize T-scores. Following an earlier study (BarOn, 2004b), we
calculated the standard T-score by using the $100 + 15(z\text{-score})$. We transformed the Indonesian raw score into the standard T-score by using the Dutch norm as a reference point. We did this because the Netherlands is one of the major Western countries where the EQ-i has already been developed. We expected to find more reliable results in the Eastern-Western comparisons by using the one standardized score. This procedure is intended to maximize the goal of this study of comparing the EQ-i between Indonesian and Dutch samples.

To complete the cross-group comparison analyses, one-way analysis of variance (ANOVA) and t-test and were also conducted. Further, the $2 \times 2$ factor ANOVA was then tested to see the main effect of gender and country differences, as well as possible significant interactions in EQ total, scales, and sub scales. This study applied Cohen’s effect size criteria commonly used across many fields. In general, $\leq 0.20$ is a small effect size, $0.50$ is a moderate effect size, and $\geq 0.80$ is a large effect size (Cohen, 1988).

**Result**

**Descriptive Analysis**

Table 2 and Table 3 show the mean scores and standard deviation of the EQ-i for the Indonesian and Dutch groups. The result yielded a higher score for the Dutch than for the Indonesians in the total EQ, scales, and sub-scales. The distribution of mean T-scores of the Indonesian compared to the Dutch norm, illustrated in Figure 1, showed the lower scores on total EQ, scales, and sub-scales for Indonesians. The result showed a potential effect of the individualistic in the Dutch group and collectivistic in the Indonesian group on the ability to understand their own emotions as well as others, and to build interpersonal relationships.
Comparison across Groups

The independent-sample t-test shows the differences in the mean scores of total EQ, scales, and sub-scales between Indonesian and Dutch samples (see Table 2 and Table 3).

![The Standard T-Score of EQ Total, Scales, and Sub Scales of the Indonesian by Using the Dutch Norm](image)

**Figure 1.** The distribution of mean T-scores and standard deviation of EQ total, scales, and sub scales of Indonesian normative sample compared to the Dutch Norm.

Note. EQ-i Abbreviations: ES = Emotional Self-Awareness; AS = Assertiveness; SR = Self-Regard; SA = Self-Actualization; IN = Independence; EM = Empathy; IR = Interpersonal Relationship; RE = Social Responsibility; PS = Problem Solving; RT = Reality Testing; FL = Flexibility; ST = Stress Tolerance; IC = Impulse Control; HA = Happiness; OP = Optimism (BarOn, 2004b).
Table 2. Summary of descriptive analysis and independent *t*-test the EQ total and scales across Indonesian and Dutch samples.

<table>
<thead>
<tr>
<th>EQ Total &amp; Scales</th>
<th>Indonesian (N = 1274)</th>
<th>Dutch (N = 1455)</th>
<th>t(2727)</th>
<th>p</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrapersonal</td>
<td>133.69 (18.33)</td>
<td>150.22 (17.94)</td>
<td>23.77</td>
<td>.00</td>
<td>0.91</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>86.68 (10.16)</td>
<td>93.72 (9.26)</td>
<td>18.95</td>
<td>.00</td>
<td>0.73</td>
</tr>
<tr>
<td>Adaptability</td>
<td>85.60 (11.49)</td>
<td>95.86 (9.50)</td>
<td>25.54</td>
<td>.00</td>
<td>0.98</td>
</tr>
<tr>
<td>Stress Management</td>
<td>57.33 (9.74)</td>
<td>65.36 (8.18)</td>
<td>23.41</td>
<td>.00</td>
<td>0.90</td>
</tr>
<tr>
<td>General Mood</td>
<td>61.78 (8.17)</td>
<td>67.39 (7.56)</td>
<td>18.62</td>
<td>.00</td>
<td>0.71</td>
</tr>
<tr>
<td>EQ Total</td>
<td>396.27 (49.22)</td>
<td>443.13 (39.27)</td>
<td>27.63</td>
<td>.00</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Table 3. Summary of descriptive analysis and Independent *t*-test the EQ sub-scales across Indonesian and Dutch samples.

<table>
<thead>
<tr>
<th>EQ Sub- Scales</th>
<th>Indonesian (N = 1274)</th>
<th>Dutch (N = 1455)</th>
<th>t(2727)</th>
<th>p</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES</td>
<td>26.87 (4.11)</td>
<td>27.91 (4.76)</td>
<td>6.11</td>
<td>.00</td>
<td>0.23</td>
</tr>
<tr>
<td>AS</td>
<td>22.12 (3.55)</td>
<td>24.91 (4.17)</td>
<td>18.71</td>
<td>.00</td>
<td>0.72</td>
</tr>
<tr>
<td>SR</td>
<td>32.67 (4.96)</td>
<td>35.35 (5.46)</td>
<td>13.34</td>
<td>.00</td>
<td>0.51</td>
</tr>
<tr>
<td>SA</td>
<td>30.91 (4.82)</td>
<td>35.75 (4.24)</td>
<td>27.91</td>
<td>.00</td>
<td>1.07</td>
</tr>
<tr>
<td>IN</td>
<td>21.12 (5.59)</td>
<td>26.30 (4.43)</td>
<td>26.96</td>
<td>.00</td>
<td>1.03</td>
</tr>
<tr>
<td>EM</td>
<td>28.81 (3.95)</td>
<td>31.40 (3.98)</td>
<td>16.99</td>
<td>.00</td>
<td>0.65</td>
</tr>
<tr>
<td>RE</td>
<td>36.52 (4.64)</td>
<td>40.12 (4.25)</td>
<td>21.16</td>
<td>.00</td>
<td>0.81</td>
</tr>
<tr>
<td>IR</td>
<td>39.78 (5.74)</td>
<td>41.89 (5.39)</td>
<td>9.93</td>
<td>.00</td>
<td>0.38</td>
</tr>
<tr>
<td>PS</td>
<td>28.81 (3.62)</td>
<td>29.68 (3.86)</td>
<td>6.07</td>
<td>.00</td>
<td>0.23</td>
</tr>
<tr>
<td>RT</td>
<td>31.82 (5.81)</td>
<td>38.56 (4.53)</td>
<td>33.95</td>
<td>.00</td>
<td>1.30</td>
</tr>
<tr>
<td>FL</td>
<td>24.97 (4.72)</td>
<td>27.62 (4.30)</td>
<td>15.39</td>
<td>.00</td>
<td>0.59</td>
</tr>
<tr>
<td>ST</td>
<td>30.13 (4.42)</td>
<td>32.26 (5.01)</td>
<td>11.69</td>
<td>.00</td>
<td>0.45</td>
</tr>
<tr>
<td>IC</td>
<td>27.21 (7.21)</td>
<td>33.11 (5.38)</td>
<td>24.41</td>
<td>.00</td>
<td>0.94</td>
</tr>
<tr>
<td>HA</td>
<td>31.21 (5.98)</td>
<td>36.88 (4.82)</td>
<td>27.42</td>
<td>.00</td>
<td>1.05</td>
</tr>
<tr>
<td>OP</td>
<td>30.57 (3.96)</td>
<td>30.51 (3.84)</td>
<td>0.41</td>
<td>.68</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Note. **EQ-i Abbreviations**: ES = Emotional Self-Awareness; AS = Assertiveness; SR = Self-Regard; SA = Self-Actualization; IN = Independence; EM = Empathy; IR = Interpersonal Relationship; RE = Social Responsibility; PS = Problem Solving; RT = Reality Testing; FL = Flexibility; ST = Stress Tolerance; IC = Impulse Control; HA = Happiness; OP = Optimism (BarOn, 2004b).
The score for the Dutch group, as well as illustrated in the profile of the T-score, was significantly higher than for the Indonesian. For example, the total EQ was higher in the Dutch (M = 443.13, SD = 39.27) than in the Indonesian (M = 396.27, SD = 49.22), a statistically significant difference, t(2727) = 27.63, p = .00, d = 1.06. The independent-sample t-test was also conducted to examine the differences of total EQ, scales, and sub scales between men and women in the group of each country. The results show that the Indonesian women (N= 671, M = 403.23, SD = 49.86) reach a significantly higher score for total EQ than Indonesian men (N= 602, M = 388.36, SD = 47.19), t(1271) = 5.45, p = .00, d = 0.31 as well as that for all five scales and most of sub scales. The Indonesian men and women obtain a relatively equal score for empathy, social responsibility, problem solving, and optimism. The Cohen's d effect size ranged from 0.14–0.32. Dutch women (N= 616, M = 96.35, SD = 8.84) reach significantly higher level of interpersonal competence than the Dutch men (N= 840, M = 91.82, SD = 9.11), t(1454) = 9.49, p = .00, d = 0.50 as well as that for emotional self-awareness, empathy, social responsibility, and interpersonal relationship. The Cohen's d effect size ranged from 0.13–0.51.

The 2x2 factor ANOVA was also conducted to see the effect of country and gender, and their interaction with EI competences as the dependent variable. Country was a significant main effect for the total EQ, all scales, and sub–scales, except optimism. In this case, Dutch group was higher than Indonesians. Gender also appeared as a significant main effect on total EQ, scales and sub–scales, except stress management, assertiveness, and independence. The interaction effect of country and gender appeared significant for total EQ, scales, and sub–scales, except emotional self–awareness and interpersonal relationship (see Table 4 and Table 5). For example, the main effect of country on total EQ yielded an F ratio of [F(1, 2725) = 772.75, p = .00, η² = 0.22] with the Dutch scoring higher than Indonesians, while the interaction effect yielded an F ratio of [F(1, 2725) = 24.24, p = .00, η² = 0.01]. The effect size for country and
gender main effects and the interaction effect are mostly small with \( \beta^2 \) between 0.00–0.02.

Further analyses by using Tukey’s test also indicated that the mean score for total EQ for Dutch men (\( M = 443.90, SD = 38.57 \)) was significantly higher than for Indonesian women (\( M = 403.23, SD = 49.86 \)), effect size \( d = 0.91 \) and Indonesian men (\( M = 388.36, SD = 47.19 \)), effect size \( d = 1.29 \) as well as for all scales and sub-scales. The test also found that the mean score for Dutch women was significantly higher than for Indonesian women and Indonesian men for total EQ as well as all scales and sub-scales. Individual values of the Dutch group, as hypothesized, have a greater positive impact on the Dutch men than on the women, while collectivistic values seem to have a more positive impact on Indonesian women than men. We further see that the gender differences, as expected, also make a significant contribution to the development of EI competences. This is more specifically related to differences in gender role resulting from cultural values.

**Discussion**

The Indonesian group, as predicted, scored significantly lower than the Dutch group on the total EQ, five scales, and 15 sub-scales with the apparent moderate to large effect size (see Tables). The second hypotheses, that Indonesians were expected to score higher on interpersonal competence was not proven here. The independence orientation of the Dutch has a potential influence not only on their ability to know their own emotional and personal capabilities, but also on their skill in building interpersonal relationship. This result comes up with the possibility for Western society, which is assumed to be more individualistic, to show good social behavior and interpersonal relationships which were assumed stronger in Eastern society.

Eastern society, which tends to be more collectivistic, grow and develop in the emotional and material interdependence family model where the members of a family usually rely on each other,
especially in case of sickness and old age security (Berry et al., 2002). Most Indonesian people tend to assign priority to the role of authority figures as decision makers, dominant, respected, admired, and relied upon. Values of civility, manners, respect, and compliance with authority figures; such as parents, employers, teachers, and religious or community leaders and also to strangers, are recognized through formal and informal education from childhood (Koentjaraningrat, 2002; Setiadi, Supratiknya, Lonner, & Poortinga, 2004). We consider that these values may be embodied in Indonesians’ behavior styles and become a general characteristic of Indonesians society. Indonesians, to some extent, may be more skilled in social interaction with close persons in the neighborhood than in formal relationships. In such formal situations, Indonesian people may feel reluctant to deal with others. They tend to be shy, hesitant, or wary while Westerners are, to some extent, more confident. This fact seems relevant to a previous study on the profile of NEO PI-R in Indonesians, in which Indonesian people scored low in extraversion, values, and competence (Halim et al., 2004).

By performing comparison analyses between countries and gender groups, this study focuses attention on a wider range of Indonesian people instead of a specific group of the community, such as group of ethnicities, persons with a specific disease/disorder, or professions. We consider EI as a trainable intelligence (BarOn & Parker, 2000; BarOn, 2004a) which could be linked to positive psychology which focuses on potentials and well-being of individuals. The illustration of the EI of the Indonesians compared to the Dutch (see Result section and Figure 1) showed the importance of developing EI competences as one of Indonesians’ potentials. For example, Indonesians could be trained to be more assertive, independent, and socially responsible in line with internalized social norms and values as an Indonesian. We think it is possible as now many Indonesian people, especially the middle and young generations, who live in big and small cities, become modern societies who have a modern lifestyle in the meaning of their way of thinking. They are more flexible and open to learn and accept any
information and knowledge through their interaction with people from other countries. We expect the more practical application through prevention and intervention programs would, in some ways, contribute to the development of Indonesians’ quality in terms of emotional and social competences. A wide application of EI in various life settings in Indonesia, such as educational, workplace, and health, might also contribute to the improvements of EI concept and its application in cultural context.
Table 4. Summary of two-way ANOVA of the main and interaction effects of EQ total and scales across countries and gender groups.

<table>
<thead>
<tr>
<th>EQ Total &amp; Scales</th>
<th>Main Effect Countries</th>
<th></th>
<th>Main Effect Gender</th>
<th></th>
<th>Interaction Effect Countries X Gender</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F(1, 2725)$</td>
<td>$p$</td>
<td>Effect size ($\eta^2$)</td>
<td>$F(1, 2725)$</td>
<td>$p$</td>
<td>Effect size ($\eta^2$)</td>
</tr>
<tr>
<td>Intrapersonal</td>
<td>564.27*</td>
<td>.00</td>
<td>0.17</td>
<td>6.31*</td>
<td>.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>409.38*</td>
<td>.00</td>
<td>0.13</td>
<td>77.37*</td>
<td>.00</td>
<td>0.03</td>
</tr>
<tr>
<td>Adaptability</td>
<td>650.20*</td>
<td>.00</td>
<td>0.19</td>
<td>5.45*</td>
<td>.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Stress</td>
<td>537.49*</td>
<td>.00</td>
<td>0.17</td>
<td>0.33</td>
<td>.56</td>
<td>0.00</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Mood</td>
<td>346.39*</td>
<td>.00</td>
<td>0.11</td>
<td>5.23*</td>
<td>.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Total EQ</td>
<td>772.75*</td>
<td>.00</td>
<td>0.22</td>
<td>15.45*</td>
<td>.00</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.
Table 5. Summary of two-way ANOVA of the main and interaction effects of EQ sub-scales across countries and gender groups.

<table>
<thead>
<tr>
<th>EQ Sub Scales</th>
<th>Main Effect Countries</th>
<th>Main Effect Gender</th>
<th>Interaction Effect Countries X Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F(1, 2725)$</td>
<td>$p$</td>
<td>Effect size ($\eta^2$)</td>
</tr>
<tr>
<td>ES</td>
<td>47.66*</td>
<td>.00</td>
<td>0.02</td>
</tr>
<tr>
<td>AS</td>
<td>341.63*</td>
<td>.00</td>
<td>0.11</td>
</tr>
<tr>
<td>SR</td>
<td>163.58*</td>
<td>.00</td>
<td>0.06</td>
</tr>
<tr>
<td>SA</td>
<td>792.41*</td>
<td>.00</td>
<td>0.21</td>
</tr>
<tr>
<td>IN</td>
<td>718.53*</td>
<td>.00</td>
<td>0.21</td>
</tr>
<tr>
<td>EM</td>
<td>330.20*</td>
<td>.00</td>
<td>0.11</td>
</tr>
<tr>
<td>RE</td>
<td>501.18*</td>
<td>.00</td>
<td>0.16</td>
</tr>
<tr>
<td>IR</td>
<td>115.55*</td>
<td>.00</td>
<td>0.04</td>
</tr>
<tr>
<td>PS</td>
<td>29.22*</td>
<td>.00</td>
<td>0.01</td>
</tr>
<tr>
<td>RT</td>
<td>1175.90*</td>
<td>.00</td>
<td>0.30</td>
</tr>
<tr>
<td>FL</td>
<td>239.88*</td>
<td>.00</td>
<td>0.08</td>
</tr>
<tr>
<td>ST</td>
<td>120.05*</td>
<td>.00</td>
<td>0.04</td>
</tr>
<tr>
<td>IC</td>
<td>604.87*</td>
<td>.00</td>
<td>0.18</td>
</tr>
<tr>
<td>HA</td>
<td>774.62*</td>
<td>.00</td>
<td>0.22</td>
</tr>
<tr>
<td>OP</td>
<td>0.70</td>
<td>.40</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Note. **EQ-I Abbreviations:** ES = Emotional Self-Awareness; AS = Assertiveness; SR = Self-Regard; SA = Self-Actualization; IN = Independence; EM = Empathy; IR = Interpersonal Relationship; RE = Social Responsibility; PS = Problem Solving; RT = Reality Testing; FL = Flexibility; ST = Stress Tolerance; IC = Impulse Control; HA = Happiness; OP = Optimism (BarOn, 2004b).
The EI profile of the Indonesian and of the Dutch as shown in this study expectantly could illustrate a possible role of cultural values to the development of behavior styles. We found potential contribution of the contrast between collectivism versus individualism in generating different EI profiles of the Indonesians and the Dutch. To know to what extent the contribution of cultural value to the EI competence, we recommend wider cross-country study.

Specific about the effect size calculation, we noticed that some statistical significance results seem to not strongly support the substantive significance by looking at the almost zero size effects. Concerning a large sample size, however, we would say that the statistical significance results may be, to some extent, valuable to the context of this study. As the interpretation of effect sizes should be contextualized (Ellis, 2009; Field, 2005; Gravetter & Wallnau, 2009), we think that the statistical significance of county, gender, and their interaction to the EI levels could represent substantive significance as well. The difference cultural value between the Eastern society of Indonesians participants and the Western society of Dutch participants potentialy reflect the different EI profile between them.

**Conclusion**

The results of this study showed that the EI levels of the Indonesians are lower than those of the Dutch. We further found that gender difference—that is related to the gender-role identification in a particular culture—also contribute to the EI competence. Regarding the difference of age distribution of the two country groups— in which the Dutch participants are much older than the Indonesians— we may say that this difference possibly contribute to the differences in EI levels between the two groups considering the maturation. In view of that, we think that age can be another factor in examining the EI competences. We think future study on EI that explicitly includes age as a variable to be tested expectantly could give a stronger contribution to the EI concept and its appliance. Although the
criticism of the conceptualization and measurement of EI still continues to this day (e.g. Ashkanasy & Daus, 2005; Nozaki & Koyasu, 2016; Sanchez-Garcia, Extremera, Fernandez-Berrocal, 2016), we believe that more studies on EI will make a valuable contribution to the development of the EI concept.

It is expected that this study can contribute to the examination of EI in terms of conceptual and practical issues. We also consider the importance of a cross-national EI study in the future in which more countries will be encouraged to participate in the study. It possibly contributes to draw a more globally and a wider conclusion about EI concept and applications. Some previous studies that were being participated by tens countries (Chhokar, Brodbeck, & House, 2007; House, Hanges, Javidan, Dorfman, & Gupta, 2004) can be used as a good reference to conduct a cross-national study on EI later.

Various limitations should be noted. First, it is not known to what extent these results can be replicated in other more culturally diverse and multilingual societies. The investigation of the language invariance of the translated versions of the EQ-i compared to the original version from ‘home’ country, Canada-USA, where the instrument was developed would, we think, will be valuable. Second, generalization about the EI competences of Indonesians cannot be made only based on the study in the west part of the Indonesian archipel. Future studies on the middle and east areas of Indonesia expectantly could give a stronger contribution to the EI concept and its application in Indonesian society. Furthermore, the intervention programs of EI development in Indonesians would be more appropriate and reliable after we provide a portrayal of EI competence in a wider Indonesian society later. Third, the large sampel size of this study was not adequately representing the Indonesian population. Consequently, we cannot objectively see the power of significance of the results in the meaning of effect size. The logical reasoning about substantial significance should be confirmed by the calculation. In view of that, a more careful calculation of
References


Chapter 5

Emotional Intelligence Competences of Three Different Ethnic Groups in Indonesia

Published as:

1) Additional analyses were made, therefore this version is slightly modified.
Abstract

This study attempts to provide a portrayal of emotional intelligence (EI) of the Indonesians, one of the fourth most populous countries and the multiethnic societies in the world, specifically across the 404 Bataks, 430 Minangkabau, and 479 Javanese ethnics. The result indicated that the Indonesian version of the EQ-i is invariant across the three ethnic groups. The findings also showed that the three ethnic groups have some shared characteristics in terms of interpersonal, assertiveness, empathy, social responsibility, flexibility, and problem solving competences. We found significant main effects of ethnicity and gender as well as the interaction effect on the EI competences. Cross-ethnic comparison showed that the Minangkabau are the most underdeveloped group in terms of social and emotional capabilities. We recommend replications of this study for other Indonesian ethnic groups to draw a more valid conclusion and to support the development of society.

Keywords: emotional intelligence, Indonesia, Javanese, Bataks, Minangkabau, group differences.
Introduction

Indonesia is a developing country that still needs growth in terms of the individuals’ prosperity and well-being. In the present study, emotional intelligence (EI), which is linked to positive psychology, focuses on individual’s potential and well-being (Sheldon & King, 2001). EI has a more practical meaning than cognitive intelligence as it is a trainable kind of intelligence that can be developed along the lifetime and has empirical finding about its correlation with efficiency and successfulness (BarOn & Parker, 2000; Stough, Saklofske, & Parker, 2009). Assessing EI opens the gate to improving these qualities.

In this study, we think that in exploring an individual’s strength through psychological research—including applying theories, identifying variables, and implementing measurement and interpreting results—considering a variety of cultural values is crucial. Through the interaction with family and social community, cultural value will be internalized passively within individuals and it will contribute to individuals’ behavior pattern along the life time (Berry et al., 2002). Improving the quality of individuals in a particular
group in the Indonesian community may have a positive influence on a wider social and cultural environment in Indonesia. Furthermore, there is a good opportunity for the advancement of Indonesia as a country. The study on some major ethnic groups is a start; this kind of research can be expected to create a beneficial impact on the wider community advancement in Indonesia through the development of the EI theory and its application in society.

The research context: A multiethnic society of Indonesia

As the fourth most populous nation and the largest archipelago in the world, Indonesia consists of more than 630 ethnic groups with about 700 different local languages. As a national language and lingua franca, Bahasa Indonesia unites the all the ethnic groups as one nation (Ananta et al, 2015; National Encyclopedia). According to Koentjaraningrat, each Indonesian ethnic group has its own unique and traditional values, which have resulted in languages, habits, social rules, and also behavioral stereotypes characteristic to that specific group. More importantly, the diversity in these ethnic values contributes significantly to differences in thinking, experiencing and expressing emotions, and behavioral pattern among the Indonesian people (Koentjaraningrat, 2002).

As a multiethnic society, the Indonesians develop not only national identity, but also ethnic identities. National identity is an individual's identity or sense of belonging to one state or nation. It is the sense of a nation that is represented by distinctive traditions and culture. National identity may refer to an individual's subjective feeling that is shared with a group of people about a nation, regardless of an individual's legal citizenship status. In psychological terms, national identity is viewed as an awareness of difference, a feeling and recognition of 'we' and 'they' (Ashmore, Jussim, & Wilder, 2001). Ethnic identity is the extent to which an individual identifies with a particular ethnic group. It refers to an individual's sense of belonging to an ethnic group, and the part of individual's thinking, perceptions, feelings, and behavior that is due to ethnic group membership (Woods, Schertzer, & Kaufmann, 2001).
Javanese, Bataks, and Minangkabau are the major ethnic groups in terms of the population projection in which Minangkabau is the only matrilineal society among them (Badan Pusat Statistik, 2013; “Patrilineal Descent”, 2009). These groups are usually in contrast with each other in terms of their attitudes and behavior styles in everyday life settings such as in community relations, organizations, workplaces, and school. Javanese are very concerned about cooperation, helping, and not being selfish in their social life (Endraswara, 2003). Below this cultural norm—named unggah—ungguh Jawa, Javanese are known as people who are soft spoken and gentle, patient, polite, ‘nrimo’ (accepting), and sincere. They do not like to speak loudly, behave harshly, or express ‘strong emotion’ such as anger (Endraswara, 2003; Jatman, 2000; Koentjaraningrat, 2002; Mulder, 1994). Bataks have a traditional tenet named Dalihan Na Tolu, which is internalized as cognitive and value systems such as independence, openness, self-consciousness, and habitual group discussion. Below this cultural norm, Batak people are known as people with a strong fighting spirit, a hard spoken style, a great courage to stand up for family and relatives, and a very assertive style—on the brink of being aggressive (Harahap & Siahaan, 1987; Koentjaraningrat, 2002; Malau, 2000). Minangkabau are the most significant example of matrilineal society wherein women have greater authority in terms of social and financial affairs compared with their counterparts in a male-dominated society, like the Javanese and the Bataks (“Patrilineal Descent”, 2009). Several nuclear Minangkabau families, traditionally, live in one huge house, called a rumah gadang, and are more likely to be an extended family than the Bataks and the Javanese. Their family structure is rooted in traditional cultural norm, such as togetherness, closeness, possessiveness, and mutual assistance. It is exceedingly rare for a modern community to live in a rumah gadang. However, they still keep their traditional value as part of their ethnic identity (Heider, 1991; Koentjaraningrat, 2002).
CHAPTER 5

This study notices that these cultural norms might be recognized, in some ways, as a part of individuals' personal identity. It is proposed by us that the behavior characteristic of the Javanese, Batak, and Minangkabau, in some respects, may be reflected in individuals' personal experiences, which in this case are individuals' self and others orientations. For example, a Javanese who tends to keep everything in harmony might have difficulty in expressing emotion and conflicting opinion in his or her social group. A Minangkabau adult may feel threatened and insecure if detached from family to become socially and emotionally more independent. Bataks might be viewed negatively by others due to their tendency to be hard-spoken and aggressive in expressing thinking, emotions, and opinions. This study puts attention to a wide Indonesian community in terms of various educational, work, health, and marital status backgrounds. However, we address ethnic value variability in Indonesian society as an important topic for analysis and discussion. In any case, the ethnic values potentially contribute to the development of personality characteristics as well as behavior styles, such as perception, cognition, motivation, emotions, social relations, and attitude.

The EI concept

Intelligence as an important construct in psychology was firstly connected to the concept of cognitive intelligence. Cognitive intelligence or intelligence quotient (IQ) is defined as an individual's ability to learn new things, recall information, think rationally, apply knowledge, and solve problems (Kaplan, Sadock, & Grebb, 1991). IQ is measured by applying several standardized tests designed to assess an individual's intelligence. IQ is used to determine academic abilities and to identify individuals with off-the-chart intelligence or mental challenges. IQ is usually being connected to academic intelligence—an individual's ability to be highly imperative to achieve academic success. Emotional intelligence (EI)—another kind of intelligence—develops later and becomes a new topic of interest to predict academic and life success. EI, or emotional quotient (EQ), can
be broadly defined as the ability to use emotional information, which consists of an individual's own subjective emotional responses and the information conveyed by others' emotional responses, in a constructive and an adaptive manner (BarOn & Parker, 2000). It can be also known as one's emotional, personal, and social knowledge and abilities that influence the overall ability to succeed in coping with environmental demands and pressures. EI represents an individual's ability to identify, evaluate, control, and express emotions. People with high EQ usually make great leaders and team players because of their ability to understand, empathize, and connect with the people around them (Schulze & Robert, 2005). EI as a topic of research in Eastern countries like Indonesia is fairly limited, if not absent, compared to available research in Western societies (BarOn and Parker, 2000; Schulze & Robert, 2005). Cognitive intelligence has also been widely researched in Indonesia, but EI as a complement of cognitive and academic intelligences might be a valuable addition.

A number of improvements in the EI concept and application took place, along with the development of new measures for EI as well as the peer-reviewed research articles on this topic. The number of published papers on EI theories, validated measures, and applications also support the importance of EI as a specific intelligence that potentially contributes to the prediction of individuals' capacities for success in everyday life (BarOn, 1997; Bar-On, 2004a; Schulze and Robert, 2005; Sharma, 2012; Stough, Saklofske, & Parker, 2009; Wong. 2004; Wood, Parker, & Keefer, 2009). The low correlation of the BarOn EQ-i and the General Adult Mental Ability (GAMA-IQ), for example, showed the psychometric independence of EI and cognitive intelligence measures (Derksen, Kramer, & Katzko, 2002). This indicates that EI and cognitive intelligence are accepted as two different kinds of intelligence, which are complementary to each other. The two kinds of intelligences provide independent information about individuals in which the information may have some practical value under certain circumstances. The correlation of the two instruments across ages
shows that the higher correlation between general intelligence and EI may represent a continue relationship between those two intelligence, in both the younger and the older groups of individuals.

The BarOn EQ-i is a self-report measure that estimates the level of EI through assessing emotionally and socially intelligent behavior. Psychometric studies have been performed over the past two decades in many countries (BarOn, 2004b; BarOn & Parker, 2000; Dawda & Hart, 2000). The previous studies of the EQ-i have inspired us to develop the Indonesian version of the EQ-i and apply it in the multiethnic society of Indonesia.

In theoretical models, and for purposes of measurement, EI is considered to be both ability and an expression of various personality characteristics. At the beginning of the 1990s, Mayer and Salovey published a series of articles on EI as well as carried out a study and published the first EI ability measure. They also created the ability model of EI, which explains EI as an intelligence or ability to identify, use, understand, and manage emotions. A number of improvements in the concept of EI and a wide application of EI took place, along with the development of new measures for EI (BarOn, 1997; BarOn, 2004b; BarOn & Parker, 2000; Stough, Saklofske, & Parker, 2009; Wood, Parker, & Keefer, 2009). BarOn’s mixed model, for example, includes traits and competences, and tries to explain the level of intelligence that represents a wide range of personality styles.

The BarOn model of EI was constructed based on the concept of emotional-social intelligence (ESI), which represents the dimensions of emotional, personal, social, and self-defense of the individual’s entire intelligence. This intelligence consists of the interrelation of emotional and social competences that contribute to how effectively individuals understand and express themselves, understand others and relate with them, and then cope with stress and daily demands (Schulze & Robert, 2005; Wood, Parker, & Keefer, 2009). In this study, we are interested in implementing the BarOn mixed model of EI concerning its main idea about intrapersonal and
interpersonal skills. This study posits the close relationship between the intrapersonal and interpersonal competences of EI. The intrapersonal scales tell us something about the orientation of the self, while the interpersonal scales tell about the orientation towards others. In the development of an individual's behavior pattern, both these aspects present in different degrees and work together as a unique characteristic of an individual (Derksen, 2007).

In the cultural context, culture is notable in the development of personality characteristics and behavior styles. For example, Markus and Kitayama (1991) found that relatedness, connectedness, and interdependence characteristics are mostly found in people from an Eastern society. Kagitićibasi (as cited in Berry, Poortinga, Segall, & Dasen, 2002) found that a relational self is mostly developed in Eastern societies which is characterized by the emotional and material interdependence family model. Cultural values will be internalized passively within the self from a very early age through people's interaction with family and a wider social community (Berry et al., 2002; Matsumoto, 1984; Schulze & Robert, 2005).

Every psychological study in the context of indigenous society has to start with recognizing the variety of cultural and ethical value—that play an essential role in developing human behavior and emotional competences, such as self-appraisal, emotional regulation, self-regulation, and emotional closeness. A growing interest in the applications of the EI theories in many settings in the West can greatly stimulate EI competence study in the East. Some previous studies tried to focus their topic on EI and self regulation in the context of culture (Fijneman et al., 1996; Li, Saklofske, Bowden, Yan, & Fung, 2012; van Dierendonck et al., 2009). Those previous findings have inspired us to conduct an EI study in the multiethnic society of Indonesia, which emphasized not only the Indonesian's Eastern culture, but also the ethnic values' variability within the Indonesian society. This focus of attention may make the result of this study contribute to the development of EI theory and application.
As a collectivistic society, Indonesia puts greater importance on the
group rather than on individuals. In the context of social interaction
and closeness, we suppose that family—the Indonesian community's
smallest group and social system—possibly becomes an important
agent for understanding Indonesians. Indonesian people usually have
a long-term commitment to their family and extended family with
“gotong royong” (mutual assistance), “musyawarah” (consultations),
and “mufakat” (consensus) as their important way of life (Countries
and Their Cultures). Through family interactions, the general
Indonesian culture is introduced, embedded, and used as a standard
of conduct for Indonesians from childhood.

Indonesian identity is strongly attached to the value of
Indonesian culture, which is often called as ‘budaya ketimuran’
(Eastern culture) (Koentjaraningrat, 2002). Speech, attitude, and
behavior of Indonesian people will be judged as good or bad
according to cultural values rather than personal values. In this
modern era, we observed that the Indonesian traditional culture,
referred to as ‘warisan leluhur’ (ancestral heritage), is still widely
applied to the present generation in many Indonesian families.

Despite the existence of a general Indonesian culture, the
very strong bond between family members and relatives in each
ethnic group may be different. We think that it is an important aspect
to explain the characteristic of Indonesian society from some
different ethnic groups. For example, some ethnic groups such as
Minangkabau consider a strong attachment and togetherness with
their extended family as their significant identity. In the modern
world nowadays, Minangkabau are still on the old track holding on to
their traditional values. Now, Minangkabau live in more modern
classic homes and may not live in Rumah Gadang anymore, but their
traditional spirit and cultural mindset still are their way of life.
Minangkabau ethnic group—also known as Minang or Padang—is the
world's largest matrilineal society with a complex social structure
based on the matrilineal family system (Heider, 1991; Indonesia
Tourism Forum, 2012; Koentjaraningrat, 2002).
There might be differences with respect to the traditional tenets that are handed down across generations in the family, for example, Javanese and Batak people may be in marked contrast in the way they deal and communicate with others. In Javanese family, for example, nuclear family is the basic unit of society—typically composed of parents and dependent children. Javanese mothers remain close to their children throughout their lives while fathers become more distant after children reach the age of four. Fathers stereotypically play a role as a head figure of the family while mothers become more as a daily activity manager of all family members. Parents are supposed to be constantly correcting and advising their children, no matter how old the children are. Children are not supposed to be criticizing and correcting their parents except in the most indirect ways. Different from the Javanese, Batak families are familiar with the ancient system of mutual assistance in farming in which a group of neighbors and close relatives usually go together to work the land. Rooted in this community system, social interaction in Batak families and also in the wider social community is supposed to use one of their cultural values named “marsisarian”. This value means mutual understanding, respect, and helping each other in a group of family and society. The kinship relationship is based on how much an individual can work well in a group instead of on the age. Forgetting the members of family or the social group is considered to be a serious mistake since indigenous itself is extremely important and sacred for the Batak people. Recognition of blood and marriage ties strengthens the bonds in their everyday life. In this modern era, mutual help between the members of family and relatives is commonly seen among the Batak people. Batak’s tightness of kinship relationship surrounds them and gives them great resilience in responding to the challenges of today (Countries and Their Cultures; Endraswara, 2003; Harahap & Siahaan, 1987; Jatman, 2000; Koentjaraningrat, 2002; Malau, 2000).

We think that this Indonesian culture possibly contributes to the level of the EI competences of the Indonesian people. The meaning of self-independence of Indonesians as representatives of
the Eastern culture or personality characteristic, for example, seems to be different from those in the Western societies. Independence for Indonesians, to some degree, still implies the involvement of parents in many areas of their personal and social life of Indonesian adults. This study notices that this characteristic is often reflected in how they deal with themselves (intrapersonal skills) and others (interpersonal skills) in their everyday lives.

Social and cultural forces make an important contribution to the differences in psychological development between men and women. Since early childhood, prevailing gender stereotypes influence the socialization of gendered behavior and become increasingly important during adolescence and adulthood. Cultural values lead to a male–female difference in socialization, role differentiations, and eventually to a number of psychological characteristics, such as gender stereotyping, abilities, and intelligence (Berry et al., 2002; Gardiner & Kosmitzki, 2005; Steinmetz, Bosak, Sczesny, & Eagly, 2014). The study on Dutch male and female nurses, for example, found different EI profiles in men and women (Dusseldorp, Meijel, & Derksen, 2011; Gerits, Derksen, & Verbruggen, 2004; Gerits, Derksen, Verbruggen, & Katzko, 2005). Studies in a Western context revealed gender effects on EI levels. In North America, for example, women were shown to be significantly stronger in interpersonal competence, greater awareness of others’ feeling, and more empathy than men. In contrast, men were significantly higher in intrapersonal, adaptability, stress management, and general mood competences than women (BarOn, 2004b; BarOn & Parker, 2000). There were stronger interpersonal skills, greater awareness of others' feelings, and more empathy in women than in men (BarOn 2004b; BarOn & Parker, 2000; Dusseldorp, Meijel, & Derksen, 2011; Gerits. Derksen, Verbruggen, & Katzko, 2005).

**The current study**

The main objective of this study is to examine the EI competence of three different ethnic groups in Indonesia. Emotional
quotient (EQ) can be widely used as a technical terminology in assessing the level of EI. By applying the EQ-i, we assess the EQ total, the five scales, and the 15 subscales of the Indonesian version of the EQ-i across the Javanese, Batak, and Minangkabau ethnic groups. Measurement invariance test was carried out first to test whether the model underlying the EQ-i was invariant across ethnic groups. Regarding the invariance test, we hypothesize that the EQ-i measures the same construct of EI in Javanese, Batak, and Minangkabau groups. By assuming there is an invariance of the EQ-i among the three ethnic groups, this study intends to generate the EI profile of each group in the sample. To complete the investigation, this study aims to carry out the cross-group comparison analyses. Based on the importance of ethnic value on individual’s behavior, the cross-ethnic comparison in this study works on the assumption that different ethnic values of Javanese, Batak, and Minangkabau contribute to the development of behavior characteristic of the member of each particular ethnic group.

**Method**

**Participants**

One thousand three hundred and thirteen Indonesian participants from the cities of Yogyakarta and Surakarta (Javanese ethnic), Medan (Batak ethnic) and Padang (Minangkabau ethnic) participated in this study, as shown in Table 1. All participants were in the age range 18–45 years ($M = 24.34$, $SD = 5.97$). In this range of ages, most Indonesian people usually have a higher-education program or get a job wherein having a wider social interaction and communication are very possible for them. Intrapersonal and interpersonal competences as the main points of EI can be assessed and also assumed well-developed in this range of age through expanding personal and social involvement and responsibility—such as personal and economic independence, career development, selecting a mate, starting a family and rearing children, and assisting the next generation in becoming competent and mature individuals.
In terms of ethnicity background, participants had to meet the defined ethnic identity criteria, explicitly by looking at: the ethnic background similarity of their father and mother, their ability to understand the local language, and the experience of living with family for more than half their lives. The participants in this study comprised 479 (36.5 %) Javanese, 404 (30.8 %) Bataks, and 430 (32.7 %) Minangkabau. All participants gave their written informed consent to participation in the study after an explanation had been given.

All participants (1313, 100 %) have the experience of living with family— in the meaning of a nuclear family— since their very first day of life. From the total 1313 participants, 308 (23.46 %) participants have the past experience of living together with relatives in their family, consisting grandparents, uncle/aunty, cousin, nephews/nieces, sister/brother-in-law. More specific for each ethnic group, there are 89 (18.58 %) Javanese, 98 (24.26 %) Bataks, and 121 (28.14 %) Minangkabau participants who live in an extended family.

The number of participants in each group was proportional and the majority was women (see Table 1 below). We ensured that participants had sufficient verbal skills, necessary for self-evaluation questionnaires. Of the sample, this study took care that two participants (2 %) had completed junior high, 1122 (85.5 %) had completed high school, 38 (2.9 per cent) had completed a Diploma (non-degree courses), 150 (11.4 %) had an Undergraduate degree, and one (.1 %) had a Master’s degree. We rely on an unmarried sample; in turn this factor might influence the EQ scores. This possibility was not confirmed here, considering that the main interest of the current study is the ethnicity-based differences across all EQ scales and subscales.
Table 1. Sample sizes by ethnic and gender groups.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Javanese</th>
<th>Batak</th>
<th>Minangkabau</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>229</td>
<td>143</td>
<td>198</td>
<td>570</td>
</tr>
<tr>
<td>Women</td>
<td>250</td>
<td>261</td>
<td>232</td>
<td>743</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>479</td>
<td>404</td>
<td>430</td>
<td>1313</td>
</tr>
</tbody>
</table>

**Measures**

**Demographic Questionnaire**

This consists of initials, date of birth, sex, ethnicity, ethnicity of their father and mother, experience in living with family, local language ability, education background, and work experience.

**The Indonesian Version of the BarOn Emotional Quotient Inventory (EQ-i)**

The standard 133–item EQ-i version consists of 133 items that are divided into 117 items for the 5 comprising scales and 15 subscales, i.e. intrapersonal scale (self-regard, emotional self-awareness, assertiveness, independence, and self-actualization subscales), interpersonal scale (empathy, social responsibility, and interpersonal relationship subscales), adaptability scale (reality testing, flexibility, and problem solving subscales), stress management scale (stress tolerance and impulse control subscales), and general mood scale (happiness and optimism subscales), 15 items for the positive impression (PI) and negative impression (NI) scales, and the final item as a continuation of the instruction (item 133). We focused on the analyses of the EQ total, the five comprising...
scales, and the 15 subscales of the EQ-i. In response to each item, respondents were faced with a 5-point response scale, ranging from 'not true of me' to 'true of me' (BarOn, 2004b).

The EQ-i was adapted for Bahasa Indonesia according to the scientific standards available in this domain. The results of the adaptation process found a good reliability with the alpha coefficient of total EQ of .96. The alpha coefficients of EQ-i scales ranged from .74 to .87 while the alpha coefficients of EQ-i subscales ranged from .40 to .78. The factor loadings over the Indonesian normative sample were statistically significant with completely standardized loadings ranging from .51 to .86. With these factor loadings, all items contained in the Indonesian version make a meaningful contribution to the representation of the construct of EI to be measured (Dewi, Halim, & Derksen, 2015).

**Procedure**

The first step was to seek approval from the dean or head of division of universities at the cities of Yogyakarta, Surakarta, Medan, and Padang to recruit students and staff as participants, while informal permission from the community leaders was also sought to carry on an individual and personal approach to gather participants directly from the community. The research team who was involved in recruiting participants consisted of a psychologist as team leader, three newly graduated students as the main assistants, and a representative from each local site as the supporting assistants, i.e. a community leader, a head of Faculty, and three to five senior students. Those who agreed to participate signed the informed consent and received a package of questionnaires. This study was conducted simultaneously either in a small group (5-10 people) or in a larger group (25 people maximum); they were given standardized explanation and instruction from the research team.

There were two steps in the selection process. Those who filled out all the questionnaires completely were later included as prospective participants and then were further selected based on the
defined ethnic identity criteria, explicitly by looking at: the ethnic background similarity to their father and mother, the experience of living with family for more than half of their lives, and their ability to understand the local language. The research locations (Central Java, North Sumatera, and West Sumatera) were chosen to make sure we will find the participants who meet those selection criteria for the second round. In Yogyakarta and Surakarta, 479 Javanese were selected out of the 700 people who filled out questionnaires. In Medan, 404 Bataks were selected out of the 600 who filled out questionnaires, while in Padang, 430 Minangkabau were selected out of the 640 respondents.

Data analysis

Multiple-group confirmatory factor analysis (MGCFA) was carried out to evaluate the measurement invariance of the Indonesian version of the EQ-i across Javanese, Bataks, and Minangkabau ethnicities simultaneously. The CFA was performed by using IBM SPSS AMOS 20 (Arbuckle, 2011). Model evaluation was performed based on BarOn’s five-factor model of EI, that is intrapersonal, interpersonal, adaptability, stress management, and general mood (BarOn, 2004b; BarOn & Parker, 2000). Model 1 (the configural model) is an unconstrained model in which all the three ethnic samples are included in a joint analysis. A good fitting would confirm that the five-factor structure of the EQ-i is shared across groups.

In the next step, Model 2 (the metric invariance model) is tested to investigate whether all samples respond to the items of the scale in the same way. Metric invariance adds equality constraints across groups for the factor loadings. Then, Model 3 (the scalar invariance model) is tested by retaining the constraints from Model 2 and adding equality constraints across groups for item intercepts. To assess the fit of the proposed models, we use some indices, including chi-square ($\chi^2$), the related degrees of freedom (df), chi-square/degree of freedom ratio ($\chi^2$/df), comparative fit index (CFI), and root mean square error of approximation (RMSEA). The $\chi$
2/df is acceptable when the value falls within 2–5 (Arbuckle & Wothke, 2006). The RMSEA value was set between .03 and .08, with smaller values indicating a reasonable fit and values above .10 indicating poor fit (Knight et al., 2004). ΔRMSEA ≤0.015 indicates invariance. The model fits the data well when the CFI value falls within .90 –1.0. When the CFI value within .80 –.90, it indicates adequate model fit. Cheung and Rensvold recommended that when change in CFI (ΔCFI) is less than .01, it indicates invariance (Cheung & Rensvold, 2002).

By performing description analyses, we expected to generate the EI profile of each ethnic group. To maximize comparison among groups, the raw scores were converted to standardize T-scores illustrated in Figure 1 and Figure 2. Following previous studies, we calculated the standard T-score using 100+15(z-score) (BarOn, 2004b). We used the Dutch norm as a reference point, as the Netherlands is one of the major Western countries where the EQ-i has been previously developed. Additionally, this study is the first study of the EQ-i adaptation in Indonesia and it aims to apply the EQ-i in the cultural context. By using the Dutch normative sample as a reference, this study expects to explain the EI competence, both from the multiethnic perspective of the Indonesian community and from the cross-cultural perspective of an Eastern society of Indonesia and a Western society of the Netherlands.

To complete the cross-group comparison analyses, the independent t test and the one-way between-subjects ANOVA was conducted to examine group and ethnic difference in total EQ, scales, and sub scales. Further, the two-way ANOVA was then tested to see the main effect of ethnicity and gender, as well as possible significant interactions, in EQ total, scales, and sub scales within each group. This study applied Cohen's effect size criteria commonly used across many fields. In general, ≤ 0.20 is a small effect size, 0.50 is a moderate effect size, and ≥ 0.80 is a large effect size (Cohen, 1988).
Results

Measurement invariance across ethnic groups

As recommended by Byrne, we provide the fit statistics for all models in which the fit indices for each model fitted the observed data (Byrne, 2006). Model 1 was a configural model—a model without equality constraints across the groups. In configural invariance, all items loaded significantly onto the EI construct and revealed good fit ($\chi^2/df = 4.87$, RMSEA=.067, and CFI=.909). Accordingly, Model 1 was judged to have configural invariance. The next step, Model 2, added equality constraints across the three ethnic groups for the factor loadings. The fit indices revealed good model fit. Compared with the configural model, $\Delta$RMSEA was .006 and $\Delta$CFI was .005. This result showed that the models did not significantly change using the criterion of $\Delta$RMSEA less than .015 and $\Delta$CFI less than .01. Model 3 maintained the constraints from Model 2 and added equality constraints for item intercepts. We found that the test result of Model 3 indicated a good model fit. When compared with Model 2 ($\Delta$RMSEA = .001 and $\Delta$CFI = .003), the result showed that there was no significant change in Model 3. Accordingly, we accepted this strong invariance model of the EQ-i in Javanese, Batak, and Minangkabau samples. This finding suggests that any comparison of scores across the three ethnic groups will be meaningful because any differences among scores represent true results and they are not due to response bias among the groups.

Descriptive analyses

The EQ profiles of the three ethnic groups (see Figures) were below the average for total EQ, scale, and sub scales. This indicates that the EI competences of Indonesian participants seem to be relatively lower than the Dutch. Besides a possible explanation about the EI level of the Indonesian participants, the result may also demonstrate a potential effect of the cultural difference between the individualistic tendency of the Dutch group and the collectivistic tendency of the Indonesian group on the response to the behavior patterns presented in each scale.
For example, the Indonesians to some degree may see more negatively about independent behavior concerning its possible meaning as a disrespectful and less-sociable behavior, instead of the reflection of personal maturity. The EQ profile of each ethnic group which showed a similar pattern on total EQ, scale, and subscale, can also indicate the presence of typical behavior styles in terms of EI competences in the Indonesian people. Even so, the gap among these profiles may indicate a difference in EI competence on the three different ethnic groups.

Figure 1. The T-score profile of EQ total and the five composite scales of Javanese, Bataks, and Minangkabau by using the Dutch norm as the reference point.
Figure 2. The T-score profile of EQ 15 sub-scales of Javanese, Batak, and Minangkabau by using the Dutch norm as the reference point.

Note: EQ-i Abbreviations: SR = Self-Regard; ES = Emotional Self-Awareness; AS = Assertiveness; IN = Independence; SA = Self-Actualization; EM = Empathy; RE = Social Responsibility; IR = Interpersonal Relationship; RT = Reality Testing; FL = Flexibility; PS = Problem Solving; ST = Stress Tolerance; IC = Impulse Control; OP = Optimism; HA = Happiness (BarOn, 2004b).

Ethnic Group Differences in the EQ Total, Scales, and Sub Scales

There were no significant differences in interpersonal scale among the groups (see Table 2). The level of interpersonal skills on all participants can be assumed equal although they come from three different ethnic groups. Significant differences in total EQ as well as intrapersonal, adaptability, stress management, and general mood scales among the three groups (see Table 2) indicate a possible contribution of ethnic values to the development of EI.

Table 2. The EQ total and the five scales of the EQ-i by ethnic differences.

<table>
<thead>
<tr>
<th>EQ Total and Scales</th>
<th>Ethnicity</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>Sig.</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrapersonal</td>
<td>Javanese</td>
<td>140.41</td>
<td>15.60</td>
<td>9.96</td>
<td>.00</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Batak</td>
<td>143.02</td>
<td>16.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minangkabau</td>
<td>138.19</td>
<td>14.97</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Javanese</td>
<td>90.82</td>
<td>9.28</td>
<td>2.04</td>
<td>.13</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Batak</td>
<td>91.23</td>
<td>10.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minangkabau</td>
<td>89.92</td>
<td>8.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptability</td>
<td>Javanese</td>
<td>88.09</td>
<td>9.62</td>
<td>4.84</td>
<td>.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Batak</td>
<td>88.48</td>
<td>10.36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minangkabau</td>
<td>86.54</td>
<td>8.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress Management</td>
<td>Javanese</td>
<td>59.07</td>
<td>8.18</td>
<td>3.54</td>
<td>.03</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Batak</td>
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* $p < .05$
Further analyses by applying the Tukey's test that showed the mean score (M) and Standard Deviation (SD) of the Bataks (M = 419.66, SD = 42.77) for total EQ were significantly different from those of the Minangkabau (M = 409.52, SD = 36.99) with effect size $\eta^2 = 0.01$. The Bataks also obtained the highest score for most EQ scales. We found significant differences in intrapersonal scale in which the Bataks (M = 143.02, SD = 16.27) were significantly higher than the Javanese (M = 140.41, SD = 15.6) and the Minangkabau (M = 138.19, SD = 14.97) with effect size $\eta^2 = 0.02$. On stress management scale, the Bataks (M = 60.13, SD = 8.94) scored higher than the Minangkabau (M = 58.63, SD = 7.89) with effect size $\eta^2 = 0.01$. The Bataks also obtained the highest score in adaptability (M = 88.48, SD = 10.36) immediately followed by the Javanese (M = 88.09, SD = 9.62). Both the Bataks and Javanese scored higher than the Minangkabau (M = 86.54, SD = 8.89), with effect size $\eta^2 = 0.01$. The Minangkabau scored significantly lower in general mood than the Javanese and the Bataks. Significant differences were found among Minangkabau (M = 64.52, SD = 7.03) and the two other ethnic groups, i.e. the Javanese (M = 66.21, SD = 7.01) and the Bataks (M = 65.7, SD = 7.76) with effect size $\eta^2 = 0.01$.

Analyses at the subscale level were in line with the result on the scales level. Bataks scored significantly higher than the other two groups on most EQ sub scales while the Minangkabau obtained the lowest score on almost all EQ sub scales (see Table 3). These results indicate that the Bataks self-reported higher score on the EQ-i than the Javanese and the Minangkabau. In contrast, the Minangkabau self-reported a lower score on the EQ-i.
Table 3. The fifteen sub-scales of the EQ-i by ethnic differences.

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<th>EI Sub-Scales</th>
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* p < .05

Note. **EQ-i Abbreviations**: SR = Self-Regard; ES = Emotional Self-Awareness; AS = Assertiveness; IN = Social Responsibility; IR = Interpersonal Relationship; RT = Reality Testing; FL = Flexibility; PS = Probl Optimism; HA = Happiness (BarOn. 2004b)
This study also completed the analysis by treating the gender of participants as another independent variable. Thus, the two-way ANOVA was conducted to see the effect of ethnicity, gender, and their interaction with EI (see Table 4). As reported before, ethnicity appeared as a significant main effect for total EQ as well as most scales and sub scales. Gender appeared as a significant main effect in interpersonal, empathy, social responsibility, and stress tolerance. The result also revealed that ethnicity appeared to have significant interactions with gender on the level of EQ-i such as in interpersonal, $[F(2, 1307) = 5.7, p = .00, \eta^2 = 0.01]$ and general mood, $[F(2, 1307) = 4.36, p = .01, \eta^2 = 0.01]$. Sub scales level analyses also showed the interaction effects in empathy, $[F(2, 1307) = 3.93, p = .02, \eta^2 = 0.01]$, social responsibility, $[F(2, 1307) = 9.88, p = .00, \eta^2 = 0.02]$, reality testing, $[F(2, 1307) = 3.05, p = .05, \eta^2 = 0.01]$, and happiness, $[F(2, 1307) = 6.70, p = .00, \eta^2 = 0.00]$.

The Tukey’s test showed that the mean score (M) and Standard Deviation (SD) of the Batak women (M = 92.74, SD = 10.80) for interpersonal were significantly different from those of the Javanese men (M = 90.03, SD = 9.47), Batak men (M = 88.49, SD = 10.81), The Minangkabau men (M = 90.10, SD = 9.19), and Minangkabau women (M = 89.77, SD = 8.67). We found significant differences in general mood in which the Minangkabau women (M = 63, 95, SD = 7.08) were scored significantly lower than the Batak women (M = 66.32, SD = 7.61) and Javanese women (M = 66.60, SD = 6.96). On empathy, the Batak men (M = 28.41, SD = 4.69) were scored significantly lower than the Batak women (M = 30.08, SD = 4.07) and the Javanese women (M = 29.70, SD = 3.85), while the Batak women (M = 30.08, SD = 4.07) were also scored significantly higher than the Javanese men (M = 28.86, SD = 3.82). We found significant differences in social responsibility in which the Batak men (M = 36, 31, SD = 5.02) were scored significantly lower than the Batak women (M = 38.78, SD = 4.54), Minangkabau men (M = 38.04, SD = 4.45), Minangkabau women (M = 37.73, SD = 4.26), and Javanese women (M = 37.85, SD = 4.07). The Batak women (M = 33.70, SD = 4.86) were scored significantly higher in reality testing.
men ($M = 32.52$, $SD = 4.61$). We found significant differences in
happiness between the Bataks men ($M = 33, 99$, $SD = 4.64$) and the
Javanese women ($M = 35, 41$, $SD = 4.40$), between the Bataks women
($M = 35.14$, $SD = 4.99$) and the Minangkabau women ($M = 33.74$, $SD$
$= 4.54$), and also between the Minangkabau women ($M = 33.74$, $SD =$
$4.54$) and the Javanese women ($M = 35.41$, $SD = 4.61$),

Further, the independent $t$ test analysis was also conducted
to evaluate the gender differences among the three ethnic groups. In
Table 5, we found that gender differences are different among the
ethnic groups. These results support the interaction effect of gender
and ethnicity to the EI competence. To be more specific, gender
differences will give a significant effect on interpersonal, general
mood, self-awareness, empathy, social responsibility, interpersonal
relationship, reality testing, and happiness competences in relation
to the interaction with ethnic variability. To complete the
examination on the interaction between gender and ethnicity on the
EI competence in the Indonesian context, another one-way ANOVA
was also conducted to see the variance among the six ethnic–gender
groups (Javanese men, Javanese women, Bataks men, Bataks women,
Minangkabau men, and Minangkabau women) (see Table 6).
Table 4. Summary of two-way ANOVA of ethnicity and gender on the EQ total, scales, and sub-scales of the EQ-i.

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<td>Total and Scales:</td>
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Note. EQ-i Abbreviations: SR = Self-Regard; ES = Emotional Self-Awareness; AS = Assertiveness; IN = Independence; SA = Self-Actualization; EM = Empathy; RE = Social Responsibility; IR = Interpersonal Relationship; RT = Reality Testing; FL = Flexibility; PS = Problem Solving; ST = Stress Tolerance; IC = Impulse Control; OP = Optimism; HA = Happiness (BarOn, 2004b).
Table 5. The gender differences among the three ethnic groups.

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</table>
| Intrapersonal | Men    | 140.14   | 15.10 | .71  | .03 | 141.59      | 14.78  | .19 | .014
|              | Women  | 140.66   | 16.07 | .71  | .03 | 143.80      | 17.02  | .17 | .016
| Interpersonal | Men    | 90.04    | 9.45  | .08  | .16 | 88.49       | 10.81  | .00 | .40
|              | Women  | 91.52    | 9.08  | .08  | .16 | 92.74       | 10.36  | .08 | .003
| Adaptability  | Men    | 87.80    | 10.18 | .52  | .06 | 88.77       | 10.17  | .08 | .04
|              | Women  | 88.36    | 9.09  | .52  | .06 | 88.32       | 10.49  | .08 | .11
| Stress        | Men    | 59.47    | 8.49  | .31  | .09 | 59.78       | 8.71   | .56 | .006
| Management    | Women  | 58.70    | 7.89  | .31  | .09 | 60.32       | 9.08   | .58 | .007
| General Mood  | Men    | 65.84    | 7.06  | .28  | .10 | 64.58       | 7.94   | .03 | .22
|              | Women  | 66.54    | 6.96  | .28  | .10 | 66.32       | 7.61   | .65 | .017
| EQtotal       | Men    | 413.99   | 39.17 | .48  | .06 | 414.55      | 41.61  | .08 | .19
|              | Women  | 416.48   | 37.51 | .48  | .06 | 422.46      | 43.22  | .60 | .013
| EQ Sub Scales |        |          |    |       |    |             |    |
| SR            | Men    | 27.76    | 3.99  | .81  | .10 | 27.63       | 4.14   | .18 | .009
|              | Women  | 28.16    | 4.39  | .81  | .10 | 28.03       | 4.63   | .26 | .009
| ES            | Men    | 22.31    | 3.30  | .29  | .01 | 22.89       | 3.33   | .39 | .005
|              | Women  | 22.26    | 3.54  | .29  | .01 | 23.07       | 3.69   | .21 | .009
| AS            | Men    | 33.94    | 4.90  | .88  | .02 | 33.85       | 4.83   | .64 | .014
|              | Women  | 34.05    | 5.15  | .88  | .02 | 34.58       | 5.39   | .33 | .019
| IN            | Men    | 33.31    | 3.78  | .51  | .09 | 33.25       | 3.80   | .94 | .022
|              | Women  | 33.64    | 3.70  | .51  | .09 | 34.12       | 4.08   | .32 | .013
| SA            | Men    | 22.82    | 4.34  | .35  | .06 | 23.97       | 4.23   | .04 | .011
|              | Women  | 22.55    | 4.36  | .35  | .06 | 24.00       | 4.19   | .38 | .013
| EM            | Men    | 28.88    | 3.82  | .02  | .21 | 28.41       | 4.69   | .00 | .38
|              | Women  | 29.68    | 3.85  | .02  | .21 | 30.08       | 4.07   | .29 | .017
| RE            | Men    | 36.84    | 4.17  | .01  | .24 | 36.31       | 5.02   | .00 | .52
|              | Women  | 37.84    | 4.08  | .01  | .24 | 38.78       | 4.54   | .37 | .007
| IR            | Men    | 42.63    | 5.44  | .53  | .06 | 41.68       | 5.88   | .01 | .26
|              | Women  | 42.94    | 5.24  | .53  | .06 | 43.23       | 5.99   | .41 | .004
| RT            | Men    | 29.23    | 3.90  | .01  | .08 | 29.48       | 4.10   | .11 | .019
|              | Women  | 29.11    | 3.38  | .01  | .08 | 28.71       | 4.04   | .28 | .006
| FL            | Men    | 32.50    | 4.61  | .42  | .23 | 32.90       | 4.45   | .34 | .017
|              | Women  | 33.51    | 4.31  | .42  | .23 | 33.70       | 4.86   | .32 | .013
| PS            | Men    | 26.06    | 4.45  | .72  | .08 | 26.39       | 4.85   | .07 | .010
|              | Women  | 25.74    | 4.00  | .72  | .08 | 25.92       | 4.67   | .25 | .007
| ST            | Men    | 30.31    | 4.93  | .06  | .17 | 30.35       | 5.13   | .41 | .008
|              | Women  | 29.49    | 4.58  | .06  | .17 | 29.92       | 5.07   | .28 | .006
| IC            | Men    | 29.16    | 5.52  | .91  | .01 | 29.43       | 5.42   | .09 | .018
|              | Women  | 29.21    | 5.25  | .91  | .01 | 30.41       | 5.53   | .29 | .007
| HA            | Men    | 34.72    | 4.52  | .01  | .15 | 33.99       | 4.64   | .02 | .24
|              | Women  | 35.40    | 4.41  | .01  | .15 | 35.14       | 4.00   | .33 | .004
| OP            | Men    | 31.12    | 3.98  | .96  | .01 | 30.59       | 4.58   | .08 | .014
|              | Women  | 31.14    | 3.80  | .96  | .01 | 31.19       | 4.03   | .30 | .004

Note. EQ-i Abbreviations: SR = Self-Regard; ES = Emotional Self-Awareness; AS = Assertiveness; IN = Independence; SA = Self-Actualization; EM = Empathy; RE = Social Responsibility; IR = Interpersonal Relationship; RT = Reality Testing; FL = Flexibility; PS = Problem Solving; ST = Stress Tolerance; IC = Impulse Control; OP = Optimism; HA = Happiness (BarOn, 2004b).

p < .05
Table 6. The EQ total, scales, and sub-scales of the EQ-i by ethnic-gender groups.

<table>
<thead>
<tr>
<th>EQ-1</th>
<th>Javanese</th>
<th>Batak</th>
<th>Minangkabau</th>
<th>F (2, 1310)</th>
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<td>Men (n=143)</td>
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</table>

*p < .05, **p < .01

Note: EQ-1 Abbreviations: SR = Self-Regard; ES = Emotional Self-Awareness; AS = Assertiveness; IN = Independence; SA = Self-Actualization; EM = Empathy; RE = Social Responsibility; IR = Interpersonal Relationship; RT = Reality Testing; FL = Flexibility; PS = Problem Solving; ST = Stress Tolerance; IC = Impulse Control; OP = Optimism; HA = Happiness (BarOn, 2004b)
In Table 6, significant differences were found in most of EI scales and sub scales, except interpersonal, assertiveness, empathy, social responsibility, flexibility, and problem solving. The Tukey’s test showed significant differences of the mean score (M) and Standard Deviation (SD) among the groups. For example, of the Batak women (M = 407.38, SD = 35.14) for total EQ were significantly different from those of the Javanese women (M = 422.33, SD = 43.08). We found significant differences in intrapersonal in which the Javanese women (M = 143, 74, SD = 16.97) were scored significantly lower than the Batak men (M = 139.50, SD = 15.58) and Batak women (M = 137.09, SD = 14.43). On emotional self-awareness, the Batak women (M = 26.51, SD = 3.67) were scored significantly lower than the Javanese women (M = 28.03, SD = 4.62), Minangkabau men (M = 27.74, SD = 3.99), and Minangkabau women (M = 28.16, SD = 4.39).

Discussion

Based on the effect size calculation results, we noticed that the statistical significance results of compared group analyses seemed to not directly support the substantive significance. However, by considering a large sample size, we think that the statistical significance results may be still relevant to examine the group differences in the context of the multi-ethnic society of Indonesia since the interpretation of effect sizes should be contextualized (Ellis, 2009; Field, 2005; Gravetter & Wallnau, 2009). The variability of ethnic values within Indonesian society possibly influences the difference profile of EI levels—which consist of how Indonesians relate to each other in their closest social groups such as family and ethnic group, and learn to express thought and emotion since their early life.

Despite the similar pattern of the EI profile among the three ethnic groups (see Figure 1 and Figure 2), the results show that the Javanese, Batak, and Minangkabau have different levels of EI competences. However, our results also indicate shared characteristic
among those ethnic groups, specifically in terms of interpersonal, assertiveness, empathy, social responsibility, flexibility, and problem solving competences (see Table 2 and Table 3). These shared characteristic can be seen as a general characteristic of the Indonesians assessed in this study regarding the insignificant different level of these competences across the ethnic groups. At the community level, we think that the Indonesian culture value has a more significant influence than the ethnic specific value in developing some shared characteristic of the Indonesians. Culture value—as a part of culture— is the complex and elaborate system of meaning and behavior that defines the way of life for a group or society (Koentjaraningrat, 2002). Indonesia's national motto Bhineka Tunggal Ika (Unity in Diversity) refers to the variety in the country's internal composition but also indicates that—despite all differences in its multicultural society—there is a true sense of unity (Indonesianess) among the people of Indonesia. Indonesia is a nation comprising a great variety of peoples and cultures, all of which are being affected by modern values through the media, films, satellite television, the internet, education, commerce, and tourism. Nevertheless, family, social, and traditional values remain and form a basis for Indonesian culture, which guide and provoke interpersonal relations and behavior of Indonesians (Alisjahbana, 1989).

Bataks tend to be more competent in intrapersonal, adaptability, stress management, emotional self-awareness, assertiveness, self-actualization, independence, stress tolerance, and impulse control compared to Javanese and Minangkabau. In line with these results, Bataks achieve the highest level of total EQ. In contrast, Minangkabau obtain the lowest scores for almost all scales and subscales. They seem to be the most underdeveloped group in terms of EI competences. We think the differences are to be expected in a multiethnic society like Indonesia, as each ethnic value is usually attached to their behavior styles (Alisyahbana, 1989; Koentjaraningrat, 2002). Local ethnic values do appear to have an influence on the emotional characteristics of each ethnic group and may even be opposed to each other. Based on the result, for example,
Bataks are expected to be more competent in intrapersonal, assertiveness, self-actualization, and independence skills. This finding, however, was not surprising because all the characteristics of these ethnic groups were parts of their main values (Harahap & Siahaan, 1987). Javanese values that teach the Javanese to maintain harmony through pleasing and serving others may be contributing to their unassertiveness (Endraswara, 2003). According to the result, we also concerned about the low level of almost all EI competences in Minangkabau. Their strong attachment in family relationships and traditional customs that make up the unity, intimacy, and sense of belonging among family members of the Minangkabau family have a relatively negative influence on achieving an adequate level of the EI competences (Heider, 1991; Koentjaraningrat, 2002). We notice that some ethnic values of Minangkabau society appear to potentially discourage the social and emotional improvement of the member of this ethnic group. For example, low level of independence competence of Minangkabau—such as in decision making—may be influenced by their value to consider group's opinion rather than personal judgement.

At a wider society level, shared behavior characteristics in terms of EI competences of the three ethnic groups could be understood as a reflection of the traditional Indonesian culture that have been handed down across generations (Alisyahbana, 1989; Berry et al., 2002; Koentjaraningrat, 2002; Matsumoto, 1984). For example, the way the members of the three ethnic groups deal with others in social life can be reinforced by the collectivistic tendency of Indonesian society in general. The interpersonal relationships of Indonesians tested so far are the most prominent competences. Concerning the level of interpersonal skill, the results indicate that the three ethnic groups did not differ from each other (see Table 2). This means that interpersonal skills probably develop into a universal characteristic of Indonesians instead of an exclusive characteristic of a particular ethnic group. To the extent that Indonesia is an Eastern country that tends to be more collectivistic, it is not surprising that connectedness, interdependence, and togetherness among family or
community group members become the main values for the broad Indonesian society (Berry et al., 2002). Even so, some ethnic groups, such as the Minangkabau, also put these values as a part of their ethnic identity. In this respect, the collectivistic behavior of Indonesian people, developed through formal and informal education from childhood, has led Indonesians to become skilled in interpersonal interaction with others in the neighborhood. Probably this is what is sometimes regarded as the character of Indonesians, known as friendly people.

We increasingly believe that the family is a highly significant agent in delivering cultural values (Koentjaraningrat, 2002). As the smallest social unit in society, family will be an ideal place for Indonesian children to learn to interact with others and also get to know their own strengths and weaknesses in everyday life. In this case, parents and older family members play an important role in introducing Indonesian culture to children to guide them to behave as Indonesians. However, we observed that the Indonesian culture tends to give priority to the hierarchy of authority based on age and social status, not only in the family, but also in most of the groups in society. For most Indonesians, the values of civility, manners, respect, and compliance with authority figures such as parents, employers, teachers, and religious or community leaders are considered very important and are clearly visible in their social behavior. The role of authority figures as decision makers, dominant, respected, admired, and relied upon could be factors that minimize the chance to be more assertive, empathetic, socially responsible, flexible, and capable of solving problems. With these characteristics, it could be possible if Indonesian people also tend to feel reluctant to deal with others, especially with authority figures and might be also so with strangers.

We discover a noteworthy result in which the interaction of gender and ethnicity variability in the Indonesian participants was considerably essential in the emergence of differences in EI competences among groups. For example, the interaction effect of gender and ethnicity in the interpersonal and general mood
competences (see Table 4). These results can be seen further in which gender plays an important effect in the difference of interpersonal and general moods specifically in the Bataks groups—the Bataks men have lower scores than those of the Bataks women in these two competences. Based on these findings, we may say that gender differences differ among cultures. In the Indonesian context, gender role that places a woman as a key person for almost all domestic duties makes it possible for most Indonesian women to become more sensitive to and aware of others’ needs and feelings (Berry et al., 2002). Generally Indonesian women may learn from their daily responsibilities to think not only about themselves, but also about others, in accordance with the wide acceptance of gender role in the Indonesian society. We think it is very possible in the light of Indonesian traditional values that are still being internalized and accepted by most Indonesian women compared to their modern counterparts. Based on the result, however, women from the three ethnic groups showed different levels of interpersonal skills, empathy, and social responsibility. We think that ethnic values might also contribute to the roles and responsibilities of women. To be more specific, women’s duties in a matrilineal society, for example, may be different from those of women from patrilineal societies. Matrilineal descent is a system in which family descent traced through mothers rather than through fathers. The woman in a matrilineal society represents the clan and her children carry on the name of her clan. Minangkabau are the most significant example of a matrilineal society wherein women have a greater authority in terms of social and financial affairs than their counterparts in a male-dominated society, like the Javanese and the Bataks.

Despite the distinctive feature of ethnic values in the Indonesia community, we observed that the conventional roles of Indonesian women generally have been adjusted to the more modern Indonesian society. Many Indonesian women from various ethnic backgrounds now play an important role, not only in the family, but also in industrial organization, education, government and other community organizations. We think that our findings (see Table 3)
can represent a positive influence of a modern gender role for the EI competence of Indonesian women. For example, Indonesian working women can learn to know more about their strength and weakness in dealing with more people around them in the work place. They are also trained to solve more complicated problems, to manage much more stressful situations, and to be more assertive in their activities as workers.

Our findings will also be addressed with regard to health issues in Indonesia concerning a strong relation between stress and health (BarOn, 1997; BarOn & Parker 2000; Hansen, Llyod, & Stough, 2009; Keefer, Parker, & Saklofske, 2009). We think that the lower level of EI competences among the Minangkabau possibly predicts a higher occurrence of health problems among them. This should raise concern because EI competences are essential to survive in facing the social situation of Indonesia, which is currently very unstable and difficult in the sense that well-being, physical condition, and mental condition are constantly being threatened. However, to come to a valid conclusion about EI level at the ethnic level, we consider the possibility of a self-report response bias due to the content of the items. For example, Minangkabau, who tend to be more collectivistic than the other ethnic groups, might interpret the items that reflect an independent or autonomous sense of self as an indication of a counter-culture of self-promotion and behavior.

We assumed that the collectivistic tendency of the Indonesians society may lead the Indonesians to have great interpersonal skill. Based on the result, the assumption can be accepted that the interpersonal competences of Indonesians are their most prominent competences. Accordingly, it can be concluded that interpersonal skills represent the universal characteristic of the Indonesian society regarding the significance of connectedness, interdependence, and togetherness as the general value for the Indonesians. However, we find that this general characteristic of the Indonesians could minimize the development of the other characteristics that are assumed to be well-developed in the
Indonesians such as assertiveness, empathy, social responsibility, flexibility, and problem-solving skills. Interestingly, the Minangkabau group had the lowest level of EI competences. It cannot be excluded that some ethnic values of the Minangkabau possibly discourage the development of the social and emotional capability of this ethnic group. Minangkabau’s strong traditional family structure and norms which put familial and group conformity, togetherness, closeness, possessiveness, and mutual assistance as their main value possibly discourage the development of almost of the EI competences. For example, Minangkabau may find it difficult to independently make a decision and tend to let their family do it instead. Based on that portrayal of the Indonesian characteristic, we notice that the findings to some extent are consistent with the popular stereotypes of each ethnic group. The EI competence of the Javanese, Bataks, and Minangkabau might represent their stereotypes.

**Limitation**

The three groups of participants cannot represent the whole Indonesian society. Concerning the low effect size results, a more careful calculation of sample size is highly recommended for future research. By determining effect size in the beginning of the data gathering process, a more representative sample size will be met in future studies.

In this study, we applied the purposive sampling based on the ethnic specific criteria that are specifically defined in this study (see Participants section). These criteria are used by considering the possible significant role of family interaction in passing the ethnic value down across generations. However, we should say that the sample of this study may not accurately reflect the three ethnic groups regarding the wave of globalization in Indonesia—including population mobility, interethnic marriage, and daily communication among people from different ethnic groups.
Conclusion and Recommendation

The psychometric assessment of the EQ-i, specifically the measurement of invariance across ethnic groups, provides a widely applicable of the EQ-i to any cross-ethnic comparisons within the Indonesian society. By applying the adapted EQ-i, we found a relatively low level of EI in the Indonesian participants such as in adaptability and stress management competences. Regarding the context of culture, Indonesians' culture value places as an important sociocultural influence for all Indonesian participants from different ethnic groups. The sense of unity as an Indonesian seems to develop well in the society. Various ethnic values in Indonesian society also contribute to the social and ethnic nuance among Indonesians' behavior stereotype. Furthermore, gender difference seems to contribute to the difference of EI level among the Indonesian from different ethnic groups. Gender role difference between men and women—which is culturally embedded—was accepted as a part of general behavior guidance for Indonesians.

Based on the limitation and conclusion, we come up with some recommendations. First, regarding population growth and socioeconomic development that was various among different ethnic groups in Indonesia, we suggest that any research topic on a cross-ethnic study in the future should be preceded by a caveat on the ongoing globalization and socioeconomic development issue in many local areas and cities of the Indonesian country. Second, in the context of a multiethnic society, further research in many other ethnic groups in Indonesia is needed in drawing the EI competence of the Indonesians. Third, future studies also should consider providing a complete description of EI in Indonesia by examining different marital status, both between and within ethnic groups. Forth, future studies in Indonesia should also consider seeing the EI competence of different ethnic groups as a function of the differences in socioeconomic status (SES) concerning the variability of the level of SES in the Indonesian community within ethnic groups. Fifth, we realize that the cultural values that contribute to the EI level may
have a major effect on the quality and quantity of adaptive behavior among some different ethnic groups. Concerning the multi religious society of Indonesia, also religion possibly plays a significant role in influencing the Indonesian identity, at both the community and individual levels. Accordingly, future studies of Indonesians may consider religion as an important variable in homogenizing the individual and group identity of Indonesians with differing ethnicities. The last one, the relatively low level of EI of Indonesians will make interventions possible by means of EI as a trainable aspect of personality. This idea of intervention could also support health in Indonesia through applying the EI measurement as a diagnostic testing and theoretical framework of the intervention program.
References


Chapter 6

Demographic factors, attachment, and emotional intelligence: Investigation of moderation and mediation model in Indonesian context

Submitted as:
Dewi, Z.L., Halim, M. S., & Derksen, J. Demographic factor and attachment to emotional intelligence: Developing the interaction model in Indonesian context.

1) Additional analyses were made, therefore this version is slightly modified.
Abstract

An interrelationship model among two demographic factors including age and living with family experience, five attachment style, and five EI competences in the context of gender and ethnic differences of Indonesian society is created. The results showed that the model was the same for the three ethnic groups. It was also found that the relationship of the two demographic factors—age and living-with-family experience—was different for males and females and that attachment plays a larger role in EI of females than in males. The relationship of demographic factors to EI competence can be mediated by attachment style—age difference predicts the level of stress management competence of Indonesian males and females. Besides, age difference also contributes to evolve attachment styles—specifically need for approval and confirmation by others (N for A) and preoccupation— that those will predict the level of stress management. Replication studies on other ethnic groups are suggested to make a more representative conclusion.

Keywords: Age, living-with-family experience, attachment style, emotional intelligence competence, ethnicity, gender,
Introduction

Bowlby and Ainsworth’s (Cassidy and Shaver, 2016) attachment theory explains that the child’s expectation of the caregiver’s availability and responsiveness forms the core of attachment-related features of the child’s personality (Kobak, Cassidy, Lyons-Ruths, & Ziv, 2006). Following Bowlby and Ainsworth’s theory, Mikulincer and Shaver (2007) extended this theory to adolescence and adulthood. They posited that the attachment development of the individuals potentially supports the development of personality and social behavior throughout their ages. Different from Hazan and Shaver’s (1987) idea about romantic attachment style, Feeney, Noller, and Hanrahan (1994) went back to Bowlby and Ainsworth’s basic theory of attachment in explaining close relationship among adults. The authors explained that the development of attachment promotes positive or negative schemes in the individuals about their own capacities and their expectations of others. In social life, these schemes refer to how individuals plan their own behavior and predict the others’ behavior, usually in a complementary fashion, in building a social relationship. The
individuals with a positive scheme of self and others are predicted to be confident in making a close relationship and dealing with any life problems (secure/confidence attachment style). In contrast, the individuals with a negative scheme of self, or of other, or both are predicted to have problems in their life (insecure attachment style).

EI can be classified into ability, a trait, and a mixed model (ability and trait). The BarOn’s model of EI is a mixed model, known as a non-academic intelligence. The model incorporates a wide range of cognitive processes and personality characteristics, such as social judgment, problem solving, and emotion perception, self-actualization, and motivation. As one of specific and trainable intelligences, EI contributes to the prediction of an individual’s success in life (BarOn, 1997; BarOn & Parker, 2000; Ciarrochi, Forgas, & Mayer, 2001; Schulze & Robert, 2005; Stough et al., 2009; Wood, Parker, & Keefer, 2009). We identify three similarities between attachment and EI theories that could create an interrelation to each other. First, both theories consider an individual’s self capacity as an important personality characteristic necessary for making successful adaptations to emotional and social circumstances. Second, both theories emphasize the relevance of an individual’s ability in analyzing other’s behavior to establish an adequate social relationship. Third, both theories recognize the significance of a positive development of, in this case, the attachment style and EI competence, in predicting individual’s success in life. The theoretical relationship between these theories has been supported by several previous studies (Cooper, Shaver, & Collins, 1998; Hazan & Shaver, 1987; Kafetsios, 2004; Kim, 2005; Mikulincer, Orbach, & Iavnieli, 1998; Mikulincer et al., 2001; Simpson, 1990).

In this study we include the multi-ethnic society of Indonesia. Indonesia is a developing country which still needs, to some extent, to be developed in terms of the people’s potential. Accordingly, ethnic value was recognized as a potential factor influencing the connection between attachment style and EI competence. Each ethnic group in Indonesian society has its traditional value, habit,
social rule, and behavioral stereotype. This variability of ethnic values significantly contributes to the differences in thinking, emotion, and behavior patterns among Indonesian people (Alisyahbana, 1989; Koentjaraningrat, 2002). Indonesians also have shared and universal values, next to a diversity of ethnic values. For example, Indonesians share mutual dependency, social tolerance, and harmony as a general community system. Schwarz, Trommsdorff, and Chakkarath (as cited in Setiadi, Supratiknya, Lonner, & Poortinga, 2004) noticed that emotional aspects as well as filial responsibility plays an important role in Indonesians. Furthermore, the memories of parenting experienced during adolescence have a strong influence on the relationships of Indonesian adults. In the Indonesian context, some of ethnic group, such as Minangkabaus, tradionally come from extended family with multiple attachment figures. This multiple primary attachment availability, which are assumed to be commonly found in most Indonesian families, does not seem to contribute to the development of a secure attachment style (Dewi, Halim, & Derksen, 2016). Accordingly, we cannot strongly claim that the Indonesians, which tend to be collectivistic, develop a great secure attachment bonding.

**Conceptual model**

The theoretical relationship between attachment and EI theories has been supported by several previous studies (Ávila, Brandão, Teixeira, Coimbra, & Matos, 2015; Cooper, Shaver, & Collins, 1998; Farinelli, Panksepp, Gestieri, Maffei, Agati, Cevolani, Pedone & Northoff, 2015; Hazan & Shaver, 1987; Kafetsios, 2004; Kim, 2005; Mikulincer, Orbach, & Iavnieli, 1998; Mikulincer et al., 2001; Murphy, Laible, Augustine, & Robeson, 2015; Simpson, 1990). These studies found a positive relationship between secure attachment orientation and EI, both directly to the level of EI and indirectly to several aspects of emotional function.
In this study, we intend to construct a conceptual model where demographic factor is added as another factor that also contributes to the EI competence but whose influence is partially mediated by attachment styles (see Figure 1). Partial mediation is supported when demographic factor as the independent variable and attachment style as the mediating variable are significantly related to EI competence as the dependent variable. Full mediation occurs when the prior significant path between demographic factor and EI competence is non-significant after attachment style is introduced. Indirect effects occur when there is no prior significant path between demographic factor and EI competence.

**Demographic factor as the predictor**

This study puts demographic factor as a predictor variable in our conceptual model. Our demographic data, particularly age and the living-with-family experience, both are measured by years, will be used as the indicators of demographic factor in the model. In some ethnic groups, such as Batak and Minangkabau, age is a standard criterion for the children to start, physically, living separated from their parent and origin (“merantau”) (Harahap & Siahaan, 1987; Heider, 1991; Koentjaraningrat, 2002; Malau, 2000). Indonesian society is an Eastern society that tends to be more collectivistic than a Western and usually places family as the most important social environment. Relatedness, togetherness, and interdependency among the member of family are the important value for Indonesian people (Berry et al., 2002). We propose that the living-with-family experience may represent the readiness of an Indonesian to become a more independent person in terms of decision making, financial affairs, secure feelings in a broad range of social interaction, and appropriate responses to the environment.

Through our conceptual model, we hypothesize that demographic factor, which consists of age and living-with-family experience as the indicators, is related to the development of EI competences. The model was expected to show a direct association
between demographic factor and EI. This connection is supported by some previous findings about the connection between age and EI competence (BarOn, 2004). The study on the developmental regulation of age-related challenges across adulthood found that, at increasing age, the older age expressed greater regulations than the younger (Heckhausen, 1997).

**Attachment as the mediating factor**

The transformations in attachment patterns have been suggested to occur with age (Dewi, Halim, & Derksen, 2016). For example, Mikulincer and Shaver (2007) and Cassidy and Shaver (2016) posit the discontinuities in attachment patterns between infancy and adulthood. Some attachment-relevant experiences during childhood potentially affect the development of adult attachment which is stable during adulthood but still possible to be reshaped by having new experiences. Hesse (2008) found that an infant with a disorganized attachment style was transformed into a student with the controlling forms of attachment at kindergarten, and tended to become an adult with a dismissing attachment style.

Figure 1. Model—Solid lines are paths of demographic factor, attachment, and emotional intelligence, dashed lines are control variable paths.
Note. EI: Emotional Intelligence, Confidence: Confidence in self and others, Discomfort: Discomfort with closeness, N for A: Need for approval and confirmation by others, Preoccupation: Preoccupation with relationship, and R as S: Relationship as secondary.

These transformations have not been speculated to change across age, with one possible exception, the adolescence stage. Allen (2008) found that adolescents may temporarily show elevated levels of dismissing attachment style because they, literally or psychologically, move away from parents, their primary attachment figures. They are more involved with peers and romantic partners who become additional attachment figures.

According to the factors included in the model on Figure 1, this study aims to examine some interactions between demographic factor, attachment, and EI factors explicitly by evaluating: First, a direct relationship between demographic factor and EI. Second, a direct relationship between demographic factor and attachment. Third, partial and full mediations relationships between demographic factor, attachment style, and EI competence.

**Gender and ethnic as the control variables and moderating effects**

This study places gender and ethnic difference as the considerable factors in explaining the relationship between attachment style and EI competence. We hypothesized that the relationship among demographic factors, attachment style, and EI competences may differ based on gender and ethnic groups. Previous studies supported this possible connection (Bartholomew & Horowitz, 1991; Kafetsios, 2004; Karairmak & Duran, 2008; Mandell & Pherwani, 2003; Opel, 2008). Metzger, Erdman, and Mun Ng (2010) posited that more cross-cultural studies of attachment in non-Western countries are needed because prior studies of attachment are mostly referred to the Western culture. Through an attachment study of Chinese, Wang and Song (2010) suggested the
more cultural studies of attachment in other Eastern countries are imperative in order to add a multicultural layer to the attachment theory. They posited that other studies with an indigenous perspective might give alternative frameworks to the development of attachment concept.

Method

Participants

One thousand three hundred and thirteen Indonesian from the cities of Yogyakarta, Surakarta, Medan, and Padang participated in this study. Their ages ranged from 18–45 years ($M = 24.34$, $SD = 5.97$) and grouped based on gender and ethnic diversities (Javanese, Batak, Minangkabau). In terms of ethnic background, participants were selected based on the defined ethnic identity criteria with regard to the ethnic background similarity of their father and mother, their ability to understand the local language, and the experience of living with family for more than a half of their life.

The number of participants in each group was proportional and the majority was women (see Table 1 below). To ensure adequate verbal skills, necessary for self-evaluation questionnaires, this study took care that two participants (.2%) had completed junior high school, 1122 (85.5%) had completed senior high school, 38 (2.9%) had completed Diploma, 150 (11.4%) had an Undergraduate degree, and one (.1%) had a Master’s degree. All participants gave their written informed consent to participate in the study after its detailed description.
Table 1. Sample sizes by ethnic and gender groups.

<table>
<thead>
<tr>
<th></th>
<th>Indonesians</th>
<th>Javanese</th>
<th>Bataks</th>
<th>Minangkabau</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>229</td>
<td>143</td>
<td>198</td>
<td>570</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>250</td>
<td>261</td>
<td>232</td>
<td>743</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>479</td>
<td>404</td>
<td>430</td>
<td>1313</td>
<td></td>
</tr>
</tbody>
</table>

Measures

The model consists of three latent variables: demographic factors, as the predictor variable; attachment style, as the intermediate variable; and EI competence, as the dependent variable.

Demographic factor

Our participants’ personal data will be used as the indicator of demographic factor. Age (in years) and living-with-family experience (in years) potentially contribute to the development of attachment style and EI competence among Indonesians as a collectivistic society.

Attachment style

The Attachment Style Questionnaire (ASQ; Feeney et al. 1994), a self-report questionnaire, designed to measure five dimensions of adult attachment: Confidence in self and others (Confidence, eight items), Discomfort with closeness (Discomfort, 10 items), Need for approval and confirmation by others (N for A, seven items), Preoccupation with relationships (Preoccupation, eight items), and Relationships as secondary (R as S, seven items) was filled in by the participants. Its 40 items were assigned to measure the five dimensions of attachment through a 6-point scale, from 1
(totally disagree) to 6 (totally agree). The ASQ indicators have to be measured as a dimension in which the conclusion about attachment models in individuals describes the quality of indicators instead of labeling individual as a particular type.

Reliability and validity data have been provided for original English (Feeney et al. 1994), German (Hexel 2004), and Italian (Fossati et al. 2003) versions. In this study, the ASQ was firstly adapted for Bahasa Indonesia according to the scientific standards available in the five domains (Dewi, Halim, & Derksen, 2016).

EI competence

The Indonesian Version of the BarOn Emotional Quotient Inventory (EQ-i) consists of 133 items that are divided into 117 items for the 5 comprising scales and 15 sub-scales, i.e. intrapersonal scale (self-regard, emotional self-awareness, assertiveness, independence, and self-actualization sub-scales), interpersonal scale (empathy, social responsibility, and interpersonal relationship sub-scales), adaptability scale (reality testing, flexibility, and problem solving sub-scales), stress management scale (stress tolerance and impulse control sub-scales) and general mood scale (happiness and optimism sub-scales), 15 items for the positive impression (PI) and negative impression (NI) scales, and the final item as a continuation of the instruction (item 133). In response to each item, respondents will be faced with a 5-point response scale, ranging from ‘not true of me’ to ‘true of me’.

The EQ-i was adapted for Bahasa Indonesia with a high test–retest reliability score for total EQ (.96). The alpha coefficients of EQ scales were ranging from .74–.87 while the alpha coefficients of EQ sub-scales were ranging from .40 –.78. The factor loadings over the Indonesian normative sample were statistically significant with standardized loadings which were ranging from .51 to .86. This implies that all items contained in the Indonesian version has a meaningful contribution to represent the construct of EI to be measured (Dewi, Halim, & Derksen, 2015). This study uses the five-scales as the indicator of EI competence latent variable.
Statistical analyses

This study aims to correlate the data from our previous studies (Dewi, Halim, & Derksen, 2016; Dewi, Halim, & Derksen, 2017). By performing a different analyses strategy on the data from two previous studies, we expect to give a novel and a comprehensive feature about the dynamic interaction among demographic factor, attachment, and EI specifically in the context of Indonesian society. In this study, the relationship between each latent concept with its dimensions in the conceptual model (Figure 1) was formative. Accordingly, the position of latent concepts (demographic factor, attachment style, and EI competence) in the operational model were directly replaced by its dimensions: age and living–with–family experience dimensions (demographic); confidence, discomfort, N for A, preoccupation, and R as S dimensions (attachment style); and intrapersonal, interpersonal, adaptability, stress management, and general mood dimensions (EI competence). Each dimension and its indicator were identical as each dimension had only one indicator. Accordingly, each dimension in the operational model was tested directly through its indicator (see Figure 2).

There were 45 parameters that represented the relationship among the two indicators of demographic factor, the five indicators of attachment style, and the five indicators of EI competence. These parameters were estimated by two control variables, gender and ethnic groups. The likelihood–ratio test was used to compare the fit of two models, one of which (the null model) was a special case of the other (the alternative model). In this case, we calculated the difference of $\chi^2$ in $H_0$ and $H_1$. Based on the equality test of the 45 parameters among gender and ethnic groups, we estimated the final model. More specifically, our analyses design consisted of two stages. First, a moderation effect analysis. In this stage we tested the equality of all parameters between hypothesized models, the null model ($H_0$) and the alternative model ($H_1$). We analyzed the fit of the paths in Figure 2 between these two models on the six gender–ethnic groups, the two gender groups within each ethnic group, and the
three ethnic groups within each gender. Evaluation of the model involved examination of goodness of fit through various indices of goodness of fit: IFI, CFI, and RMSEA. Selection criteria for the final model included achieving IFI and CFI scores greater than .90 (Byrne, 1994) and RMSEA of .08 or less for an acceptable fit and .05 or lower for a good fit (McDonald & Ho, 2002). Chi-square, which was also an index of goodness of fit, was not used to determine goodness of fit, but was used to compare models according to its potential application for a large sample size such as occurs in this study (Sivo et al., 2006). Comparisons were made for significant change in Chi-square while goodness of fit was examined for the evaluation of models. The first stage tested for possible moderation effects by comparing the model constrained, in turn, for gender and ethnic groups, with corresponding unconstrained models. The analyses need to be considered in order to evaluate the extent to which the model can be adopted in two gender groups and three ethnic groups. Significant change in Chi-square among the models represented significant moderating effects. It was only significant moderating effects which were continued to the next stage of analysis, a stage that examined the possible mediation effect of attachment style in the relationship between demographic factor and EI competence.

In the second stage, we tested the mediation effect by using Baron and Kenny's (1986) four steps in establishing mediation. Step 1, evaluated a direct association between an independent variable (IV) and a dependent variable (DV). This step established that there was an effect that may be mediated. In the absence of a significant the IV-DV path, then indirect path via mediator variable was evaluated. Step 2, evaluated a direct association between an IV and a mediator. This step essentially involved treating the mediator as if it were an outcome variable. Step 3, evaluated a regression an DV on both the mediator and an IV. Step 4, established that a mediator completely mediated the IV-DV relationship. If all four of these steps were met, then the data were consistent with the hypothesis that the mediator completely mediates the IV-DV relationship. However, if the first three steps were met but the Step 4 was not, then partial mediation
was indicated. Mediation can be either full (complete) or partial. With full mediation, the entire (total) effect of an IV on a DV is transmitted through a mediator variable. Thus, the IV has no direct effect on the DV; rather, its entire effect is indirect. With partial mediation, an IV has both direct and indirect effects on a DV. The direct effect is not mediated, whereas the indirect effect is transmitted through a mediator.

![Diagram]

Figure 2. Estimated operational model—Solid lines are paths of demographic factor, attachment, and emotional intelligence, dashed lines are control variable paths.

In this study, direct effects were evaluated between demographic factor and EI competence, demographic factor and attachment style, and also between attachment style and EI competence (see Figure 1). Indirect effect between demographic factor and EI competence was done to examine the possible mediation effect of attachment style. As what we did in the moderation test, each latent variable was replaced with its observed variable. Full mediation was accepted when the IV–DV path was not significant any longer (the path was zero) due to the significance of the IV–mediator and the mediator–DV paths. Partial mediation was accepted when all the paths were significant and the IV–DV path was reduced in absolute size but was still different from zero when the mediator was introduced.

**Results**

**Descriptive Statistics**

Table 2 provides the mean scores, standard deviations, and correlation matrix among all primary variables in this study. The result yielded that discomfort–with–closeness and preoccupation–with–relationship were the most dominant attachment styles for Indonesians. The result also showed that intrapersonal and interpersonal competences potentially become the most developed competences for most Indonesians. Indonesians have the ability to understand their own emotions as well as others, and to build interpersonal relationships. The result also showed that age and living–with–family experience were positively correlated with confidence style or security attachment style, in agreement with the results from Hazan and Shaver (1987). However, age and and living–with–family experience were negatively correlated to N for A and preoccupation styles in which both dimensions are anxiety–attachment style (Hazan & Shaver, 1987); see Table 2. The younger Indonesians tended to have anxiety–attachment style, whereas the longer the Indonesians live with their family, the higher possibility for them to have a security–attachment style.
Table 2. Correlation matrix, means, standard deviations (N=1313).

<table>
<thead>
<tr>
<th>Primary Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Living-with-family experience</td>
<td>.36*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Confidence</td>
<td>.36*</td>
<td>1.00**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Discomfort</td>
<td>-.01</td>
<td>-.02</td>
<td>-.02</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. N for A</td>
<td>-.11*</td>
<td>-.05*</td>
<td>-.05*</td>
<td>.34**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Preoccupation</td>
<td>-.11*</td>
<td>-.07*</td>
<td>-.07*</td>
<td>.35**</td>
<td>.56**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. R as S</td>
<td>.05</td>
<td>.03</td>
<td>.03</td>
<td>.30**</td>
<td>.20**</td>
<td>.23**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Intrapersonal</td>
<td>.07*</td>
<td>.07*</td>
<td>.07*</td>
<td>-.13**</td>
<td>-.37**</td>
<td>-.36**</td>
<td>-.12**</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>9. Interpersonal</td>
<td>.02</td>
<td>.02</td>
<td>.02</td>
<td>-.18**</td>
<td>-.16**</td>
<td>-.18**</td>
<td>-.19**</td>
<td>.64**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>10. Adaptability</td>
<td>.08**</td>
<td>.08**</td>
<td>.08**</td>
<td>-.17**</td>
<td>-.36**</td>
<td>-.40**</td>
<td>-.12**</td>
<td>.73**</td>
<td>.58**</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>11. Stress management</td>
<td>.11**</td>
<td>.03</td>
<td>.03</td>
<td>-.18**</td>
<td>-.35**</td>
<td>-.43**</td>
<td>-.13**</td>
<td>.50**</td>
<td>.36**</td>
<td>.68**</td>
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<td></td>
</tr>
<tr>
<td>12. General mood</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>-.12**</td>
<td>-.22**</td>
<td>-.28**</td>
<td>-.15**</td>
<td>.73**</td>
<td>.67**</td>
<td>.61**</td>
<td>.46**</td>
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<tr>
<td>Mean</td>
<td>24.35</td>
<td>19.58</td>
<td>19.58</td>
<td>37.10</td>
<td>25.59</td>
<td>29.91</td>
<td>21.44</td>
<td>140.48</td>
<td>90.65</td>
<td>87.70</td>
<td>59.25</td>
<td>65.50</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>5.96</td>
<td>3.50</td>
<td>3.50</td>
<td>5.49</td>
<td>4.38</td>
<td>5.76</td>
<td>4.67</td>
<td>15.71</td>
<td>9.63</td>
<td>9.65</td>
<td>8.35</td>
<td>7.29</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Note. Confidence: Confidence in self and others, Discomfort: Discomfort with closeness, N for A: Need for approval and confirmation by other, Preoccupation: Preoccupation with relationship, and R as S: Relationship as secondary.

With respect to the development of EI competence, we found that age was positively correlated with intrapersonal, adaptability, and stress management competences. Likewise, living-with-family experience was positively correlated with intrapersonal and adaptability competences; see Table 2. These results showed that age and living-with-family experience possibly support Indonesian people to have abilities in understand their selves, adjust to a new situation, and cope with life stress. The result also yielded that attachment styles, except confidence style, are negatively correlated with all EI competences. On the basis of these correlations, we investigated further the relationship among all indicators through the structural equation model analysis below.

**Structural Equation Model**

The structural equation model with three latent variables (demographic factor, attachment style, and EI competence) was tested using Lisrel 9.1. The model reflected relationships among two observed variables of demographic factor, five observed variables of
attachment style, and five observed variables of EI competence in two control variables, gender and ethnic groups (see Figure 3).

**Moderation effects**

Table 3 showed that the constrained and unconstrained models were not significantly different among the three ethnic groups within each gender group. It means that the 45 parameters in the models of Javanese, Batak, and Minangkabau were equal and, as a consequent, equality test was not needed. The result also showed significant differences among the models of the six gender-ethnic groups and also the two gender groups within each ethnic group. It indicated that at least one of the 45 parameters in the models of men and women was unequal. Accordingly, equality test of each parameter was done across gender group to find path differences between the men and women models. Evaluation of the model which involved the examination of goodness of fit through IFI, CFI, and RMSEA indices are also shown in Table 3. We found several path parameters inequalities between the model of men and women that are shown in Table 4.

**Mediation effects**

Based on the analyses for moderation effects across gender groups, we found both significant and non-significant parameters that were used to estimate the final models. Through the tests for the significance of direct and indirect effects that were carried out on men and women group separately, an association between demographic factor and EI competence was tested, either directly or indirectly through attachment style. Table 5 and Table 6 illustrated the direct path results across the 12 variables that can be evaluated through coefficient estimate ($\beta$, see the line 1 with normal style), standard error (the line 2 with brackets), and the t-value (the line 3 with italic style).
We hypothesized that demographic would have a direct relationship with EI competence as well as with attachment style. For more specific, more years of age and living-with-family experience would develop greater EI competence and also higher secure attachment style (confidence). While, higher secure attachment style (confidence) would develop greater EI competence. The results in Table 5 and Table 6 supported the hypotheses which revealed several significant direct relationships among the observed variables. For example, as predicted for the direct path, age had a direct effect on EI competence for men and women models, even we found only on stress management competence (standardized β weight = .06, p < .05). In the case of direct effect of demographic factor on EI competence, we found that living-with-family experience, as another indicator of demographic factor, was not a direct prediction for EI competence for both men and women models.
Figure 3. Interaction models for Indonesian men and women—Solid lines: Standardized regression coefficients for the relationship between demographic factor and EI competence as mediated by attachment style; Dash lines: Direct relations between attachment style and EI competence.

Note. EI: Emotional Intelligence, Confidence: Confidence in self and others, Discomfort: Discomfort with closeness, N for A: Need for approval and confirmation by others, Preoccupation: Preoccupation with relationship, and R as S: Relationship as secondary.
Table 3. Model fit for full and modified model and moderation.

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Table 4. Path parameters inequality between the model of Men and Women groups.

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Table 5. Path Parameter estimates on attachment.

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*p < .05, ** p < .01; *** p < .001

Note. Confidence: Confidence in self and others, Discomfort: Discomfort with closeness, N for A: Need for approval and confirmation by other, Preoccupation: Preoccupation with relationship, and R as S: Relationship as secondary.

Table 6. Path Parameter estimates on Emotional Intelligence.

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*p < .05, ** p < .01; *** p < .001

Note. Confidence: Confidence in self and others, Discomfort: Discomfort with closeness, N for A: Need for approval and confirmation by other, Preoccupation: Preoccupation with relationship, and R as S: Relationship as secondary.
Our finding also showed some direct effects of attachment on EI competences that supported the hypotheses (see Table 6). For example, confidence directly predicted EI competences for men and women models with standardized β weight = .41, .47, .35, .23, and .44 (p < .001) for intrapersonal, interpersonal, adaptability, stress management, and general mood; respectively. Direct path between demographic factor and attachment style (see Table 5) showed that age directly predicted N for A (standardized β = .10, p < .001) and preoccupation (standardized β = .10, p < .001). In this case, living-with-family experience was also not a predictor for attachment such occurred for EI competence.

Rather than hypothesizing a direct causal relationship between demographic factor and the EI competence, we also hypothesized a mediation model (indirect causal relationship) that demographic factor influences attachment style, which in turn influences EI competence. Once the variable of attachment style is added to the structural equation model, the direct relationship between demographic factor and EI competence should weaken. Attachment style, therefore, was expected to function as a partial mediator between demographic factor and EI competence. These entire latent variables are directly replaced by their own indicator. Accordingly, both direct and indirect relationships in the model were assessed through the relationships among indicators as what we did for the moderation test.

Table 5 and Table 6 illustrated the results of mediation test using the Baron and Kenny’s (1986) procedure. In the first step, we found that demographic factor directly relate to EI competence. More specific, we found a relationship between age and stress management (standardized β weight = .06, p < .05). With respect to the first step, we focused only on age and evaluated its relationship with attachment style. In the second step, we found that the relationships between age and both N for A (standardized β = .10, p < .001) and preoccupation (standardized β = .10, p < .001). These results showed the possible mediation effect of N for A and
preoccupation on the relationship between age and stress management. In the third step, we found that almost all attachment styles relate to almost all EI competence. However, concerning the results of the first and second steps, we focused only on two attachment styles, the N for A and preoccupation, and evaluated their relationships with stress management. In Table 6, we found relationships between N for A and stress management (standardized $\beta = -.12, p < .001$) and also between preoccupation and stress management (standardized $\beta = .28, p < .001$). These results support the possible mediation effect of N for A and preoccupation on the relationship between age and stress management.

The condition of the first three steps indicated partial mediation in which age indirectly relate to stress management either through N for A or preoccupation styles. The correlation result between age and stress management in Table 2 support the possible partial mediation of N for A and preoccupation styles in the relationship between age and stress management in which the path from age to stress management is reduced in absolute size but is still different from zero when N for A and preoccupation styles (the mediators) are introduced. The results showed that the correlation coefficient between age and stress management without mediator ($r = .108, p < .01$; Table 2) was dropped after the inclusion of mediator variable (standardized $\beta$ weight = .06, $p < .05$; Table 6).

**Discussion**

The relationship of demographic factor, attachment style, and EI competence in Indonesian society has been tested. We found that gender significantly worked as the moderator factor, whereas attachment style worked as the mediation factor between age and EI competence in both Indonesian men and women in the relationship model. It means that the level of EI competence of Indonesian men and women is not only related to age, but also to their attachment style. To be more specific, the level of stress management competence of the Indonesians is not only directly related to age, but
also to the extent to which the Indonesians demonstrate their need for approval from others and preoccupation with relationships in their social life. It is proposed that this significance of need for approval from others and preoccupation with relationships for the Indonesians may represent their strong relatedness, connectedness, and interdependence with others as a collectivist Eastern society. This also demonstrates the importance of family for the Indonesians in gaining a feeling of being attached to others (Berry et al., 2002; Hazan & Shaver, 1987).

From the result as presented in Table 4 it can be inferred that stress management is the only one of the EI competence that was not affected directly either by demographic factor or attachment style, both for men and women. However, the mediating test (see the result section) showed that stress management is the only one of the EI competence that has an indirect connection with demographic factor and attachment style. Mediating test showed the possible partial and full mediation among them. The results support for the theory and findings about age and the insecure attachment style (Cassidy & Shaver, 2016; Kobak et al., 2006; Mikulincer & Shaver, 2007). The older Indonesians were predicted to have weaker N for A and preoccupation styles and then greater stress-management ability. The ability to deal with life stress of the older Indonesians would be much greater in case that they are not dominated by insecure attachment. Gender does not play an important role in maturity as we think that biological maturity could be developed in the same way between men and women.

The testing of the moderating effects for ethnic variable indicated that ethnic group is not a significant moderator factor to clearly distinguish the models of Javanese, Bataks, and Minangkabau. The result may indicate that the general characteristics of Indonesian possibly play a dominant role in the development of attachment style and EI competence, instead of specific ethnic characteristics. According to the previous result about the EI competence across Javanese, Bataks, and Minangkabau, the Indonesian people have
relatively similar profiles of EI competences and are assumed to have quite some shared characteristics (Dewi, Halim, & Derksen, 2017).

Concerning the result of the moderation effect of ethnic in the interaction model of demographic factor, attachment style, and EI competence in the Indonesians, we think that ethnic value is still important in discussing about Indonesians' behavior. It would not be easy to make a generalization about Indonesians' behavior characteristics because a sense of group identity as a member of a particular ethnic group is strongly expressed in Indonesians' social behaviors and attitudes (Alisyahbana, 1989; Berry et al, 2002; Koentjaraningrat, 2002; Matsumoto, 1984; Schulze & Robert, 2005; Setiadi, Supratiknya, Lonner, & Poortinga, 2004; Wood, Parker, & Keefer, 2009).

At the individual level, ethnic values may be accepted, in some ways, as part of individuals' personal identity. Ethnic behavioral stereotypes may be expressed in the individuals' personal experiences, which in this case is attachment style and EI competence. For example, a Bataks who tend to be hard-spoken and aggressive in expressing thinking, emotion, and opinion might have a negative perception from social environment. In contrast, a Javanese who tends to keep everything in harmony might have a more positive impression than a Bataks in terms of express emotion and conflicting opinion in their social group interaction.

With regard to possible cultural effects on attachment styles, some prior studies supported the cultural universality of the working model of attachment by comparing percentages of children classified in three attachment categories across cultures and found that the majority of children have secure attachments (IJzendoorn & Sagi, 1999). On the other hand, Rothbaum, Weisz, Pott, Miyake, and Morelli (2000) argued that there are fundamental differences in the underlying philosophies and assumptions of attachment theory in Western and other cultures. Thus, creating culture-specific of attachment theory is still necessary. You and Malley-Morrison
(2000) found that Korean adults scored higher on preoccupied attachment than Americans and Europeans. The researchers speculated that differences in cultural ideals may have led to these significant differences. Furthermore, Wang and Mallinckrodt (2006) explored the differences in Taiwanese and U.S. cultural beliefs about the definition of ideal adult attachment. They found that based on Taiwanese culture, behavioral norms involved more anxiety and avoidance than norms concerning ideally secure attachment from a western culture perspective. We think that the influence of culture in the development of attachment style of the people from a certain society can be also connected to the issue about the development of gender role behavior from childhood to adulthood.

Schultz, Izard, and Abe (as cited in Schulze & Robert, 2005), for example, posited that the adaptive functioning of emotion is shaped since an early childhood by a person’s social relationship and emotion experiences. There are some previous findings that support the notion of gender differences in EI competence (BarOn, 2004; BarOn, 2006; Schulze & Robert, 2005). Gardiner and Kosmitzki (2005) posited that social and cultural forces will contribute to the psychological development of men and women in different societies. Since early childhood, prevailing gender stereotypes already influence the socialization of gendered behavior. Cultural/ethnic customs and arrangements determine the structure and content of social interaction between boys and girls. These interactions become increasingly important during adolescence and adulthood. Berry, Poortinga, Segall, & Dasen (2002) posited that collecting indications of a particular culture/ethnic group, such as values, cultural beliefs (stereotypes), and expectations (ideology), swing into action and lead to male–female differences in socialization, role differentiations and assignment, and eventually to differences in a number of psychological characteristics (abilities, aggression, intelligence, etc.).

With regard to the health issue, this study on the interrelation of attachment and EI can be applied to the explanation about people’s strengths in the promotion of health and the
improvement of live. Some previous studies showed that people with a lower level of EI are predicted to be prone to experience life burdens and health problems. In contrast, individuals with high levels of EI were reported to have low levels of psychological distress and instead have better health (BarOn, 2004; BarOn & Parker, 2000; Ciarrochi & Diane, 2001; Hansen, Llyod, and Stough, 2009; Keefer, Parker, & Saklofske, 2009; Slaski & Cartwright, 2002). As EI is a trainable ability of individuals, an EI development program is needed to be applied as a prevention program. The result of this present study comes up with the suggestion that the EI development program should be created by considering the gender, age, and also attachment style of the individuals. For example, the result shows that there is the interrelationship among age, attachment style, and stress management competence. How significant age contributes to the level of stress management competence of the Indonesians is also influenced by the attachment style of the individuals.

**Conclusion and limitation**

This study found that the relationship of demographic factors to EI competence can be mediated by attachment style. To be more specific, age can be a predictor for the level of stress management competence. Age also makes contribution to establish attachment style, specifically N for A and preoccupation. Attachment styles, specifically N for A and preoccupation can be a predictor for the level of stress management.

We consider the importance of more cross-ethnic studies and also cross-national studies in the future in which the more ethnic groups of Indonesian society and the more countries will be encouraged to participate in the study. It will possibly contribute to draw a more globally and a wider conclusion about interrelation of attachment style and EI competence. We think the limitation that should be noted for future research. The generalization about the models of Indonesians cannot be made only based on the data from Indonesians who live in the west area of Indonesia.
The future studies on the middle and east areas of Indonesia expectantly could give a stronger contribution to the models in Indonesian society. As an initial study about the interrelation between attachment and EI, this recent study tested only one conceptual model. Therefore, other possible models should be studied and tested in future research.
References


McDonald, R. P & Ho, M–HR (2002). *Principles and practice in reporting structural equation analyses*. Psychol Methods, 7, 64–82.


Chapter 7

General Conclusion
This thesis examined the interaction of attachment style, emotional intelligence (EI) competences, and demographic factors including living-with-family experience, age, ethnicity, and gender. Four key steps represented the empirical analysis. First, the Indonesian versions of the attachment style questionnaire (ASQ) and the BarOn emotional quotient inventory (EQ-i) were psychometrically adapted and tested. Second, the attachment styles and EI competence profiles of the Indonesians were generated. By performing these two adapted measurements, the extent to which cultural value contributes to attachment and EI competence in the Indonesian society was also examined. Third, comparative analyses on attachment style and EI level were performed based on factors such as age, gender, ethnics, and countries. Forth, an interaction model of attachment, EI, and demographic factors was created based on the data collected and described in the previous steps.

This final chapter aims to discuss the theories and findings, to review the present research, and to suggest ideas for future research. Three sections divide this present chapter. The first section
General Conclusion

consists of the main empirical findings. In this section, we will discuss the concept of attachment and EI, their cultural context as introduced. The second section focuses on the discussion about the reliability and validity of the methods and measurements used in the present research. In the third section, we put the research findings in the broader context of other psychological and anthropological research.

Main empirical findings

The content of this section does not follow the chronology of the empirical chapters but, instead, focuses on the theoretical approach mentioned in the introductory chapter. First, we present the findings and conclusions related to attachment and EI theories— including the interaction among variables tested— and, second, those with regard to the cultural comparisons.

The theories of attachment and EI in the Indonesian setting

By implementing the eclectic approach mentioned in Chapter 1, we tried to combine psychological, biological, anthropological, and sociological aspects in examining attachment and EI in Indonesians setting. To be more explicit, this thesis aimed to build the relationship model between attachment and EI by considering the influential role of demographic factors of the participants—as presented in Figure 1 below. We think that an interaction model may be beneficial in explaining many factors within an individual in more extensive and comprehensive ways—instead of explain partially. To some extent it may be a nice complement to the other studies in this thesis that are more specific in terms of the topic of interest. The theoretical model presented in Figure1 has been illustrated how an individual’s behavior pattern is determined by many factors that can be connected to each other. We found that the variables within culture and family ties such as past experiences, age, and gender differences can be regarded as the contributing factors between attachment style and its psychological correlates, in this case is EI level. All these factors work together in an individual as an integrated
system. To be more specific, in this thesis we focused on the interaction model among demographic factors—consists of age and living with family experience, attachment style, and EI competences by explicitly including gender and ethnic differences as control variables. By building and testing the model, we expected to know to what extent each factor contribute to the Indonesians’ behavior pattern.

Following Bowlby and Ainsworth's basic theory of attachment (Cassidy & Shaver, 2016), Mikulincer and Shaver (2007) developed the theory into the adolescent and adult age periods. They posited that attachment behavioral system is an inborn regulation system with important implications for personality development and social behavior, and can be explained as a dynamic process that is influenced by the past attachment experience. In order to explain the continuity of attachment process, they developed a model of attachment that showed how the attachment system is activated in
adolescents and adults by threats and stressors, and then how its primary strategy works to achieve a sense of felt security that leads to personal growth, fully functioning of personality, and self-actualization. According to Feeney, Noller, and Roberts (1999), working models have a function to predict the behavior of others and to plan one’s own behavior to achieve relational goals. Like other attachment theorists, they also divided working models into models of self and models of other. These models refer to positive or negative schemas about one's capacity and expectations of others in relational settings and usually develop within the individual in relation to each other, usually in a complementary fashion. Different to Hazan and Shaver's (1987) idea about romantic attachment style, Feeney, Noller, and Hanrahan (1994) went back to Bowlby's and Ainsworth's basic theory of attachment in explaining close relationship and creating the measurement instrument. Thus, they conceptualized working model of adult attachment in a less “romantic” way. Through the Attachment Style Questionnaire (ASQ), Feeney et al. (1994) proposed the five factor-based of attachment, i.e. confidence (in self and others), discomfort with closeness, need for approval and confirmation by others, preoccupation with relationships, and viewing relationships as secondary. We notice that the theory of attachment can be applied to portray the relationships among people in a group of society. Attachment and personality development theory, established by Bowlby and Ainsworth, can be instrumental to explain the close relationship among attachment, emotion, and personality. The child expectations of caregiver's availability and responsiveness, which is named as an internal working model, form the core of attachment-related features of the child's personality (Cassidy & Shaver, 2016; Kobak, Cassidy, Lyons-Ruths, & Ziv, 2006).

In another side, El level can also help to predict individual's behavior pattern, including how people enhance health and well-being. Supported by previous findings (e.g. Ciarrochi & Diane, 2001; Davis & Humphrey, 2012; Keefer, Parker, & Saklofske, 2009; Metthough, Zieitner & Robert, 2017; Naz, Kamal, Mahmood, 2016; Slaski
& Cartwright, 2002), an individual with high levels of EI is reported to have low levels of psychological distress, to enjoy better general and psychological health, to be able to deal with the health providers well, to be willing to seek help from professionals and non professionals regarding health and personal problems, and also to be resilient against the influence of unhealthy behaviors pressure from peers. Schultz, Izard, and Abe (as cited in Schulze & Robert, 2005) posited that the adaptive functioning of emotion could be reflected by the level of EI that is shaped since an early childhood by a person’s social relationship and emotion experiences.

In this thesis we focused on the application of the BarOn mixed model of EI that was constructed by the concept of emotional-social intelligence (ESI). The ESI concept is a cross-section of interrelated emotional and social competencies, skills, and facilitators that determine how effectively individuals understand and express themselves, understand others and relate with them, and then cope with daily demands (BarOn, 2004; BarOn, 2006; BarOn & Parker, 2000; Schulze & Robert, 2005). By creating the BarOn Emotional Quotient Inventory (EQ-i), BarOn (2004, 2006) assessed the level of EI through a total EQ score and five composite scales that comprise 15 sub-scale scores, i.e. intrapersonal (comprising self-regard, emotional self-awareness, assertiveness, independence, and self-actualization); interpersonal (comprising empathy, social responsibility, and interpersonal relationship); stress management (comprising stress tolerance and impulse control); adaptability (comprising reality-testing, flexibility, and problem-solving); and general mood (comprising optimism and happiness). As presented in Figure 1, the five EI scales will be the main focus in the model.

BarOn (2006) posited that there were some differences in EI competencies between male and female. There are some previous findings that support the notion of gender differences in EI level. All of those studies have a similar general conclusion in which gender is the determinant factor of EI level differences (BarOn, 2004; BarOn,
2006; Schulze & Robert, 2005). Since early childhood, prevailing gender stereotypes already influence the socialization of gendered behavior. Cultural/ethnic customs and arrangements determine the structure and content of social interaction between boys and girls. These interactions become increasingly important during adolescence and adulthood. Berry, Poortinga, Segall, & Dasen (2002) posited that collecting indications of a particular culture/ethnic group, such as values, cultural beliefs (stereotypes), and expectations (ideology), swing into an action and lead to a male–female differences in socialization, a role differentiations and assignment, and eventually to differences in a number of psychological characteristics (abilities, aggression, intelligence, etc.).

We directed some attention in relation to the theoretical model constructed in this thesis. First, there is a close relationship between attachment and EI theories. This assumption is based on that both theories place the intrapersonal aspect and interpersonal function as main concepts to explain personality and behavior (BarOn & Parker, 2000; Cassidy & Shaver, 2016). Additionally, both theories put culture/ethnic value and family system as an important part of theories. The second attention is about gender that is supposed to play a considerable factor in explaining attachment and EI (Mikulincer & Shaver, 2007; Schulze & Robert, 2005). In this case, gender differences can be linked to cultural issue, particularly relating to the traditional Indonesian cultural value. The process of internalization of culture/ethnic values that have occurred since their early age has a considerable influence in the shaping accepted gender specific behavior (Koentjaraningrat, 2002). Third, we put attention to the age as a biological characteristic that can be assumed to have potential influence on attachment and EI. In the context of developmental stage, age may represent individual’s cognitive, social, and emotional maturity. Age is tied to culturally–significant indicators of maturity and independence that often vary as a result of social sentiments. For example, the status of maturity is distinguished by the shift away from reliance on guardianship and the oversight of an adult in decision–making acts (Sheldon & Kasser, 2001; Steinberg & Cauffman, 1996).
The theoretical model of attachment, EI, and demographic factors in Indonesian setting has been empirically tested and we found two key results to be discussed. First, the EI level, explicitly stress management competence—which consists of stress tolerance and impulse control (Baron, 2006), depends on both demographic factor and attachment style together. It means that to what extent the Indonesians can manage their stress depends not only on how old they are, but also on which attachment style demonstrate stronger. To be more specific, how the Indonesians show stress tolerance and impulse control in daily life are influenced by their age and how strong their need for approval from others and also their preoccupation with relationships developed as a part of their personality. Second, gender differences play a significant factor in explaining the interaction of attachment, EI, and age. The moderation effect of gender makes the different level of paramenters in the interaction model of men and women group possible. This result showed that the EI level of the Indonesian men and women is not only depends on their age, but also on their attachment style. In this case, we specifically found that the level of stress management competence of the Indonesians is not only influenced by how old they are, but also by how far they demonstrate their need for approval from others and also their preoccupation with relationships in their social life. As Indonesian society tends to be collectivist, it is possible that the Indonesian participants showed a strong need for approval from others and preoccupation with relationships. It can be linked to the importance of family for getting a feeling of being acceptance as a member of family with a strong relatedness, connectedness, and interdependence (Berry et al., 2002; Hazan & Shaver, 1987).

Attachment theory explicitly identified that attachment style develops from insecure to secure attachment along with the developmental age. Older people potentially have more secure attachment than younger as long as they do not have any development crisis in their early attachment development (Cassidy & Shaver, 2016; Kobak et al., 2006; Mikulincer & Shaver, 2007). The
previous studies on the link between insecure attachment and emotion regulation showed that adults with insecure attachment tend to be more stressful (Feeney et al., 1994; Mikulincer & Shaver, 2007). We think that the result came up with the fact that how much the Indonesian adults can manage their stress effectively are influenced by their age and also the level of insecure attachment developed since their early age.

Although ethnic variabilities do not play a significant role in the interaction among attachment, EI, and demographic factors as presented in Chapter 6, we think that culture, including ethnic value is still essential in discussing Indonesian people. At the individual level, ethnic values may be accepted, to some degree, as a part of an Indonesian's characteristic in the meaning of behavior stereotype. It may be expressed in attachment style and EI competence that are developed along the life time. It would be difficult to generalize Indonesians' behavior pattern since a sense of ethnic identity has been strongly internalized within Indonesians through their daily interaction with family and community (Alisyahbana, 1989; Matsumoto, 1984; Berry et al, 2002; Koentjaraningrat, 2002; Setiadi, Supratiknya, Lonner, & Poortinga, 2004; Schulze & Robert, 2005; Wood, Parker, & Keefer, 2009).

**Cultural comparison**

Next, we investigated the application of the attachment theory, which was developed in Western countries and by Western researches, in Eastern countries, specifically in the Indonesian setting. According to Metzger, Erdman, and Mun Ng (2010) and Wang and Song (2010), the cross-cultural study of attachment in a non-Western developing country is still considered necessary for developing a multicultural layer and an alternative framework to the development of the theory.

In the context of cross-country comparison, this thesis analyzed the contrast between the Indonesian and the Dutch participants as presented in Chapter 4. The finding showed that the
Indonesians' profile of EI appeared to be significantly lower than the Dutch. The assumption that Indonesians were expected to develop a high interpersonal competence could not be demonstrated here. This result showed that the independence orientation of the Dutch may support not only on their ability to know their own capabilities, but also on their skill in building interpersonal relationship. In view of that, we noticed that Western society, which is assumed to be more individualistic, possibly has a good interpersonal relationship which was assumed to be stronger in an Eastern society like Indonesia. Our results also demonstrated that there are shared characteristics regarding EI between Western and eastern societies such as in interpersonal competence. Within the specific context of Indonesia as a multiethnic society, the ethnic value variability in Indonesian community should become the essential factor to make a comprehensive overview of the Indonesians. For example, the Javanese may have difficulty to be assertive in introducing their idea in teamwork while the Batak may be more expressive and spontaneous. Furthermore, as an Eastern society, the Indonesian community was potentially characterized with the relational self, which is rooted in its tendency to become collectivistic. It may be embodied in Indonesians' behavior styles and seems a general characteristic of Indonesia society. We considered that the lower scores for intrapersonal and interpersonal competences of Indonesians than of the Dutch may demonstrate how the Indonesians identify their self in the social interaction with others in the neighborhood and formal settings. As an illustration, most Indonesians tend to assign priority to the role of authority figures as decision makers, dominant, respected, admired, and relied upon. In a formal setting, the Indonesians tend to be easy to feel reluctant in dealing with others. Most Indonesians, to some degree, tend to be shy, hesitant, or wary while the Dutch are possibly more confident.

Accordingly, this present thesis presented the Indonesians' profile of attachment style proposed by Feeney et al. (1994). As examined in Chapter 2, we found that Indonesians, who tends to be collectivistic, cannot strongly be claimed to develop a great secure
attachment style. For example, a very low confidence in self and others in the Minangkabau group may represent insecurity attachment style, referred to Hazan & Shaver's (1987) conceptualization adult attachment. According to the universality of the attachment development (Mikulincer & Shaver, 2007), the finding as reported in this chapter seemed to support more the presence of a group-specific than a universality of attachment, this suggestion is based on the differences in attachment style among the Javanese, Bataks, and Minangkabau. It means that ethnic value, which consists of family and community system of a particular ethnic group, may be a significant aspect in describing the attachment style of an Indonesian. To be more specific, for example, the Minangkabau appeared to show a strong discomfort with closeness and preoccupation with relationship styles, whereas the Bataks appeared to show a strong relationship as secondary style. In the other case, the finding in Chapter 5 showed that the Javanese, Bataks, and Minangkabau also differ in the levels of EI competences. For example, the Bataks tended to be more competent in intrapersonal, adaptability, stress management, emotional self-awareness, assertiveness, self-actualization, independence, stress tolerance, and impulse control compared to the Javanese and the Minangkabau. In contrast, the Minangkabau seemed to be the most underdeveloped group of society in terms of EI competences. Based on the cultural-comparison findings, this present thesis noticed that some ethnic values in Indonesia such as were found for the Bataks, may represent more an individualistic tendency, instead of a collectivistic counterpart—such as the Minangkabau, which mostly can be found in Western society.

In relation to the low effect size results, the large sample size of the studies in this thesis may not faithfully represent the general population of Indonesians. In view of that, a more careful calculation of sample size by determining the effect size in the beginning of data collection stage is highly recommended for future studies.
Reliability and validity of methods and measurements

Up until now, the ASQ and the EQ-i have not been translated and widely used in Indonesia. This thesis adapted the original English versions for the Indonesian versions. Through adopting the scientific procedure and evaluating the multiple source of evidence, this thesis established the ASQ and the EQ-i for the Indonesian speaking people (see Chapter 2 and Chapter 3) referring to the International Test Commission’s guideline for translating and adapting tests (International Test Commission, 2010).

We realized that the hundreds different local languages in Indonesia (Badan Pusat Statistik, 2009; “Indonesia - Ethnic groups”, 2012), to some degree, may influence the formal language proficiency in Bahasa Indonesia among the Indonesians. However, the difficulty can be at least partly overcome in view of the fact that many Bahasa Indonesia words have synonyms allowing to rephrase or to describe them. We assured that all participants were able to understand each item and filled out the questionnaire completely. As reported in Chapter 2 and Chapter 3, we tested the reliability and factor structure of the Indonesian version of the ASQ and the EQ-i on Indonesian normative sample. Here, by using strict psychometric principles, we demonstrated that the Indonesian version of the ASQ and the EQ-i can be appropriately used as reliable and validated scientific instruments in Indonesia.

Closing remarks

This final section relates the present research topics and findings to other research. The issue of the measurement development, generalization of the research findings, importance of a cross-national study, and availability of other demographic data such as marital status are the focus of discussion of this section.

Various limitations of this thesis should be noted. The first is related to the measurements development. To know to what extent our studies can be replicated in more culturally diverse and
multilingual societies, the future investigation of the language invariance of the translated versions of the ASQ and the EQ-i will be valuable. The adapted versions that will be compared to the original version from their ‘home’ country where the instrument was developed would make the measurements more valid and applicable in the future. Concerning the low factor scores of some subscales or items of the Indonesian version of the ASQ and the EQ-i, we may say that more psychometric studies on those two measurements are still needed to have the most favorable outcome. The second is about the generalization of the result. We think that the conclusion about the attachment and EI competence in the Indonesian society cannot be generalized only based on the study in the west part of the Indonesian archipelago. We suggest to conduct future studies that focus on the Indonesian ethnic society who live and grow in the middle and east areas of Indonesia such as the Madurese, Balinese, Timorese, Dayaks, Minahasa, Torajas, Makassarese, Papuanese, and Buginese. It can be safely assumed that these Indonesian ethnic groups have strong traditional values that possibly make a noticeable impact upon their behavioral characteristic. Future investigation could properly identify more about specific and general characteristic of the Indonesian society. Third, we consider the importance of a cross-national study in the future in which more countries will be encouraged to participate in the study of the Indonesian people. Our study on the EI comparison between Indonesia and the Netherlands in Chapter 4 may be seen as an initial cross-national study of EI in Indonesia. More cross-national studies are needed and are expected to contribute to a more globally conclusion about the attachment and EI competence. Some previous studies—in which there are many countries participated—can be used as a good reference to conduct future cross-national studies (Chhokar, Brodbeck, & House, 2007; House, Hanges, Javidan, Dorfman, & Gupta, 2004). Finally, we realize that our findings rely on an unmarried sample as the majority of our participants; in turn this factor possibly influences the development of attachment and EI. Accordingly, we suggest that future studies should include different marital status of the Indonesian participants.
Marital relationship may represent intimacy and commitment as a part of adult attachment and also the implementation of EI competence in marriage and family life. In addition, we also suggest that differences in SES of the Indonesian society should become another demographic factor to be examined in the future study about Indonesian people.

**Practical implication**

With regard to the health issue, the result in Chapter 4 can be linked to some previous studies on the connection between EI and health (e.g. BarOn, 2004; BarOn & Parker, 2000; Ciarrochi & Diane, 2001; Hansen, Llyod, and Stough, 2009; Keefer et al., 2009; Slaski & Cartwright, 2002). Those previous studies showed that the people with a low level of EI were predicted to be more prone to experience life burdens and health problems. In contrast, individuals with a high level of EI were reported to have less psychological distress and instead have better health.

As EI is a trainable ability of individuals, the idea of an intervention could also support health in Indonesia through applying the Indonesian version of the EQ-i as a scientific measurement in clinical psychology setting, for example, as a diagnostic tool (BarOn, 2006). Along the lines of our findings, we come up with the suggestion for creating an EI development program by considering gender, age, and also secure–insecure attachment style of the individuals. As Indonesians have some general characteristics that can be used to predict Indonesians' behavior—in the meaning of general population, it may be possible to create the program that can be applied to Indonesian people from any ethnic groups.
References


Summary
Summary

Attachment style, emotional intelligence (EI) competence, and the demographic factors ethnicity, gender, age, and family background are the main topics of this present thesis. In this thesis, we investigated whether the assumptions, theories, and previous findings of attachment and EI—that mostly developed and studied in Western countries—are supported in an Indonesian sample, one of the most populous Eastern countries in the world. This present thesis also reports the psychometric adaptation of the attachment style questionnaire (ASQ) and the BarOn emotional quotient inventory (EQ-i). As the relevant scientific measurements that are previously developed and used well in other countries, we examine whether these two measurements are applicable to the Indonesian society. We, furthermore, create the interaction model of demographic factor, attachment style, and EI competences in the Indonesian men and women sample, specifically those who grow and develop in Javanese, Bataks, and Minangkabau ethnic heritage. The empirical part consists of five independent studies that focus on each particular topic, these chapters are preceded by an Introduction and followed by a General Discussion.
Chapter 2, the first empirical study, describes the attachment development in Indonesian context by explicitly including demographic factors age and living-with-family experience, among the 1313 Indonesians participants from Javanese, Bataks, and Minangkabau ethnic groups. We firstly adapted the original English version of the ASQ to an Indonesian version. Next we established the Indonesian version of the ASQ as a valid and reliable instrument for Indonesian speaking people. With the Indonesian ASQ we could demonstrate the profile of the five attachment styles for the Indonesian participants; the profile illustrated the standard score of confidence, discomfort with closeness, need for approval and confirmation by others, preoccupation with relationships, and relationships as secondary of the Javanese, Bataks and Minangkabau. Negative correlations of the living-with-family experience and age with need for approval and confirmation by others, and preoccupation with relationships were found, nest to significant differences for all the five attachment styles for gender and the three ethnic groups.

The development and psychometric adaptation of the EQ–i in Bahasa Indonesia is the main topic in Chapter 3. We produced the Indonesian version of the EQ–i that was translated from English into Bahasa Indonesia and back-translated into English. Test–retest reliabilities and internal consistencies were calculated amongst 2801 Indonesians from several cities of Indonesia, specifically Jakarta, Tangerang, Bandung, Yogyakarta, Surakarta, Medan, and Padang. The individual's responses assess a total EQ score and five composite scales that comprise 15 sub-scale scores, i.e. intrapersonal (comprising self-regard, emotional self-awareness, assertiveness, independence, and self-actualization); interpersonal (comprising empathy, social responsibility, and interpersonal relationship); stress management (comprising stress tolerance and impulse control); adaptability (comprising reality-testing, flexibility, and problem-solving); and general mood (comprising optimism and happiness). The exploratory factor analysis supported the five-factor and 15-factor models of the Indonesian version of the EQ–i. These
results were sufficiently consistent as was established by a confirmatory factor analysis: The 15 factor loadings represent the five scales of the EQ-i. We established also the reliability of the Indonesian version of the EQ-i on Indonesian normative sample. Based on adequate psychometric evidence it was concluded that the Indonesian version of the EQ-i can be appropriately used as a scientific instruments in Indonesia.

The EQ-i profile of the Indonesians was compared to the Dutch in Chapter 4. We portrayed EI competences of Indonesians as the fourth most populous country, compared to Dutch normative samples. Psychological differences between Eastern and Western societies were anticipated. Through the concepts of collectivism and individualism that are traditionally used to characterize important differences between societies we focused on the contrast between Indonesian and Dutch. Eastern societies are usually contrasted with Individuals from Western societies are more individualistic, Indonesian people who grow and develop in an Eastern cultural collectivistic heritage are characterized by a strong interrelationship and interdependency among the members of group. By applying the EQ-i to Indonesians and Dutch participants—using the Indonesian and the Dutch versions for each country—it was found that the level of EI of Indonesians was generally lower than that of the Dutch. For example, interpersonal competence—that is assumed to be higher in Indonesian than Dutch—was not found in this study. This finding may indicate that the collectivistic tendency of the Indonesians as an Eastern society, to some extent, cannot automatically generate a high level of EI profile of the Indonesians.

To be more specific in the context of Indonesia, Chapter 5 reports the study on EI across Indonesian ethnic groups. This study focused on Javanese, Bataks, and Minangkabau as major ethnic groups in Indonesia because they are usually considered to differ from each other in terms of their attitudes and behavior styles in everyday life. 1313 Indonesian participated in this study. We firstly assessed the EQ-i invariance and the levels of the EQ total, the five
scales, and the fifteen sub-scales across the three ethnic groups and assessed the profile of EI of each ethnic group. We, further, performed a cross-ethnic comparison regarding the possibility of ethnic-specific features of EI competences among Indonesians. The result showed the invariance of the Indonesian version of the EQ-i across the three ethnic groups, suggesting that the use the EQ-i in Indonesia in case of group comparison will yield meaningful and interpretable data. The findings also showed that the Indonesian people have some shared characteristics in terms of interpersonal, assertiveness, empathy, social responsibility, flexibility, and problem solving competences. The Minangkabau is the most underdeveloped group in terms of EI competence. We recommend replications of this study for other Indonesian ethnic groups, especially the ethnic groups from the middle and eastern areas of Indonesia, such as Balinese, Dayaks, and Papuanese in order to find more communalities and differences among the various ethnics groups.

The last empirical Chapter, no 6, presents the development of interrelationship model of demographic factors and attachment to emotional intelligence in Indonesian context. The contribution of attachment style on the development of EI among Indonesian adults from three ethnically diverse samples was established. We put the demographic factor, which consists of age and living-with-family experience, as a predictor factor in the model. Gender and three ethnically diverse groups were entered as control variables. We expected to find different interrelationship model among the six gender-ethnic groups, the two gender groups within each ethnic group, and the three ethnic groups within each gender. The result showed that the all parameters in the models of the three ethnic groups were equal. The result also showed that the models of the six gender-ethnic groups and also the two gender groups within each ethnic group were significantly unequal. In view of that, further equality analyses were conducted in the case of gender differences. We also found that attachment style worked as the mediation factor between age and EI competence in Indonesian men and women in the relationship model. It was concluded that the development of EI
competence of Indonesian men and women will be influenced not only by age, but also by their attachment style. The result revealed also that the level of stress management competence of the Indonesians was not directly related to their age, but to the extent to which the Indonesians demonstrate their need for approval from others and preoccupation with relationships. It was proposed to extend the studies on other ethnic groups in order to investigate whether the model is also applicable to other ethnic groups.

Chapter 7 highlights the main findings, the discussion of some methodological issues and future directions, and the description of some practical implications. The main findings and conclusions are:

a) Adequate psychometric evidence supports the application of the Indonesian version of the ASQ and the EQ-i as scientific measurements in Indonesia.

b) The Indonesians’ profile of attachment style of the three ethnic groups showed a group specific feature of attachment in Indonesian society. Indonesians, who tends to be collectivistic, cannot be claimed to develop a great secure attachment style, especially in case of Minangkabau who were very low in confidence in self and others.

c) Indonesians' profile of EI appeared to be lower than the Dutch. Indonesians, who tend to be collectivistic, did not develop a higher interpersonal competence compared to the Dutch. The independence orientation of the Dutch, as a society with an individualistic tendency, supports not only their ability to know their own capabilities, but also their skill in building interpersonal relationship. Individuals from a Western society have good interpersonal relationships; this was assumed to be stronger in an Eastern society like Indonesia.

d) Javanese, Bataks, and Minangkabau differ in the levels of EI competences. Bataks tended to be more competent in intrapersonal, adaptability, stress management, emotional self-awareness, assertiveness, self-actualization, independence, stress tolerance, and impulse control compared to Javanese and Minangkabau. Minangkabau seemed to be the most underdeveloped group in terms of EI competences.
e) The interaction model showed that the level of EI competence of the Indonesian men and women is not only related to age, but also to their attachment style. Moreover, relatedness, connectedness, and interdependence with others become a characteristic for most Indonesian people who grow and develop for years as a collectivist Eastern society.

Our study has limitations and we propose some future directions concerning measurement development, generalization of the result, the cross-national study in the future, and demographic factors that can be considered in the future.

Psychological interventions might be promising in order to support psychological health in Indonesia.
Samenvatting

Dit proefschrift heeft betrekking op hechtingsstijl, emotionele intelligentie (EI) en competentie in relatie tot demografische factoren, bestaande uit etniciteit, geslacht, leeftijd en familie achtergrond. Gehechtheid en EI zijn vooral onderwerp van studie geweest in Westerse landen. In de artikelen gebundeld in dit proefschrift onderzoeken we of deze psychologische begrippen worden ondersteund in een Indonesische steekproef, een van de dichtst bevolkte Oosterse landen ter wereld. Ook doet dit proefschrift verslag van de psychometrische aanpassing van the attachment style questionnaire (ASQ) en the BarOn emotional quotient inventory (EQ-i). Beide psychologische tests zijn gekozen vanwege hun relevantie en het uitgebreide westers onderzoek tot nu toe.

Voorts ontwikkelen we een interactie model met de volgende ingrediënten gemeten in een steekproef van Indonesische mannen en vrouwen: demografische factor, hechtingstijl en emotionele intelligentie scores in een steekproef van, specifiek degenen die opgroeiden en zich ontwikkelden in een Javaanse, Batakse of Minangkabause etnische achtergrond. Dit proefschrift bestaat uit een
introductie, empirische studies en samenvattende en concluderend hoofdstuk. Het empirische deel bestaat uit vijf aparte studies die zich ieder op een specifiek onderwerp richten.

Hoofdstuk 2 beschrijft de ontwikkeling van hechting in een Indonesische context door expliciet demografische factoren te inclueren, namelijk leeftijd en inwonende gezinservaringen bij de 1313 Indonesische deelnemers van Javaanse, Batakse of Minangkabause bevolkingsgroepen. In deze studie hebben we eerst de originele Engelse versie van de ASQ aangepast voor de Indonesische bevolking. De score van de vijf hechtingstijlen van Indonésiërs komt ook in hoofdstuk 2 aan bod. Het meer gedetailleerder beeld presenteert de standaardscores met betrekking tot de schalen: vertrouwen, ongemakkelijk voelen bij nabijheid, behoefte aan goedkeuring, bevestiging door anderen, preoccupatie met relaties en ondersteunende relaties voor Javanen, Batak en Minangkabauers. De ASQ werd ontwikkeld als een betrouwbaar en valide meetinstrument voor Indonésisch sprekende mensen met behulp van de hiervoor gangbare procedures. Het resultaat laat inwonende gezinservaringen en leeftijd met behoefte aan goedkeuring, goedkeuring door anderen en preoccupatie met relaties. Ook vonden we significante verschillen voor alle vijf de hechtingstijlen tussen de twee geslachts- en de drie etnische groepen.

De ontwikkeling en psychometrische aanpassing van de EQ-i in de Indonésische taal is het belangrijkste onderwerp van hoofdstuk 3. We construeerden de Indonésische versie van de EQ-i volgens de daarvoor geldende procedure van vertaling en terug vertaling Test–hertest–betrouwbaarheid en interne consistentie werden berekend voor 2801 Indonésiërs uit verschillende Indonésische steden, meer specifiek Jakarta, Tangerang, Bandung, Yogyakarta, Surakarta, Medan en Padang. De antwoorden van de individuele respondenten werden ongezet in een totale EQ score en in vijf samengestelde schalen die 15–subscala scores bevatten, namelijk: intra–persoonlijk (zelfbeeld, emotioneel zelfbewustzijn, assertiviteit,
onafhankelijkheid, zelfactualisatie); interpersoonlijk (bestaande uit empathie, sociale verantwoordelijkheid, interpersoonlijke relaties; stress management (bestaande uit stress tolerantie, en impulscontrole); aanpassing (bestaande uit realiteitstoetsing, flexibiliteit en probleem oplossen); en algemene stemming (bestaande uit optimisme en geluk). De exploratieve factor analyse ondersteunde de vijf-factor en het 15-factor model van de Indonesische versie van de EQ-i. Deze resultaten zijn tot op zekere hoogte consistent met het resultaat van de de bevestigende factoranalyse, waarbij de 15-factor ladingen werden ondersteund als de representatie van de vijf schalen van de EQ-i. In hoofdstuk 3 testen we de betrouwbaarheid van de Indonesische versie van de EQ-i in een Indonesische normatieve steekproef met behulp van de gangbare procedures. De psychometrische resultaten laten zien dat de Indonesische versie van de EQ-i kan worden gebruikt als een voldoende onderbouwindstument in Indonesië. Nader onderzoek waarbij de EQ-i wordt geïmplementeerd in de Indonesische samenleving (erg) is zinvol en noodzakelijk.

Hoofdstuk 4 toont het EQ-i profiel van Indonesiërs in vergelijking tot dat van de Nederlanders middels het gebruik van een interculturele benadering. In deze studie beoogden we om de EI-competenties vast te leggen van Indonesiërs, inwoners van het vierde grootste land op aarde, vergeleken met de Nederlandse normatieve steekproef. De gevonden psychologische verschillen tussen Oosterse en Westerse samenlevingen zijn opmerkelijk. Met de concepten collectivisme en individualisme, die van oudsher worden gebruikt om belangrijke verschillen in samenlevingen te kenschetsen, richtte deze studie zich in hoofdstuk 4 op de tegenstelling tussen Indonesiërs en Nederlanders. Oosterse samenlevingen worden meestal gecontraasteerd met samenlevingen in het Westen, die meer individualistisch zijn. Indonesiërs die opgroeien en zich ontwikkelen in een Oosterse culturele collectivistische omgeving worden gekenmerkt door sterke onderlinge relaties en onderlinge afhankelijkheid tussen de leden van de groep. Door het gebruik van de EQ-i bij Indonesische en Nederlandse respondenten – waarbij
respectievelijk de Indonesische en de Nederlandse versie werden gebruikt — lieten de globale (algemene) bevindingen zien dat het niveau van EI van Indonesiërs over het algemeen lager is dan dat van de Nederlanders. Op basis van de resultaten van hoofdstuk 4 interpreteren we dat de collectivistische tendens van de Indonesiërs, als Oosterse samenleving, tot op zekere hoogte de ontwikkeling van EI competenties niet optimaal kan ondersteunen. De veronderstelde hoger scorende interpersoonlijke vaardigheden bij Indonesiërs dan bij Nederlanders werden niet aangetroffen.

groepen in de middel- en oostelijke regionen van Indonesië, zoals Balinezen, Dayaks en Papua's om tot meer generaliseerbare conclusies te komen.

Als laatste empirische studie in dit proefschrift presenteert hoofdstuk 6 de ontwikkeling van een interactie model voor demografische factoren, hechting en emotionele intelligentie in de Indonesische context. In deze studie onderzochten we de bijdrage van hechtingstijl op de ontwikkeling van EI bij Indonezische volwassenen van de drie etnisch verschillende steekproeven. We namen demografische factoren, bestaande uit leeftijd en inwonerende gezinservaringen, als voorspellende factor in het model. Geslacht en drie etnisch verschillende groepen werden in deze studie als controlevariabelen ingebracht omdat we verwachtten verschillende modellen te vinden onder deze groepen. Het resultaat in hoofdstuk 6 laat zien dat de interactie modellen significant verschillen voor de geslachtsgroepen, maar niet voor de drie etnische groepen. Ook vonden we dat hechtingstijl als intermediërende factor fungeerde tussen leeftijd en EI competentie in het relatiemodel met betrekking tot Indonezische mannen en vrouwen. Op basis van dit resultaat concludeerden we dat de ontwikkeling van EI competentie voor Indonezische mannen en vrouwen niet alleen wordt beïnvloed door leeftijd, maar ook door hun hechtingstijl. Het resultaat liet tevens ziendat het niveau van de stress management competentie van Indoneziërs niet direct gerelateerd is aan leeftijd, maar aan de mate waarin Indoneziërs (hun) behoefte aan goedkeuring door anderen en preoccupatie met relaties tonen. Replicatiestudie bij andere etnische groepen wordt aanbevolen om tot een representatieve uitkomst conclusie te komen.

De algemene conclusie in hoofdstuk 7 gaat nader in op de hoofdbevindingen, de discussie van enkelemethodologische kwesties, geeft aanbevelingen voor toekomstig onderzoek en biedt enige praktische consequenties. Door het gebruik van de empirische methodiek leveren we het een psychometrische ondersteuning voor de toepassing van de Indonezische versie van de ASQ en de EQ-i als meetinstrumenten in Indonesië. De hechtingstijl van Indoneziërs in
de drie etnische groepen liet een groepsspecifiek kenmerk zien voor de ontwikkeling van hechting n in dit land. We vonden dat van Indonesiërs, die over het algemeen collectivistisch zijn, niet gesteld kan worden dat ze een goede veilige hechtingstijl ontwikkelen, met als voorbeeld de Minangkabau groep die erg laag scoorden op vertrouwen in zichzelf en anderen. Wat betreft EI ontwikkeling vonden we dat het EI profiel van Indonesiërs significant lager is dan dat van Nederlanders. Dit resultaat laat zien dat Indonesiërs, die over het algemeen collectivistisch zijn, geen hogere interpersoonlijke competenties ontwikkelen dan Nederlanders. Vanuit een ander perspectief, laten onze bevindingen zien dat de onafhankelijke instelling van de Nederlanders, als een samenleving met een individualistische tendens, hen niet alleen inzicht in eigen kunnen lijkt te bieden, maar ook adequate vaardigheden om interpersoonlijke relaties op te bouwen. Nader beschouwd lijker er in de Westerse samenleving goede interpersoonlijke relaties te bestaan, terwijl deze verondersteld werden sterker te zijn in een Oosterse samenleving zoals Indonesië. Op etnische-groepsniveau toonden onze bevindingen aan dat Javanen, Bataks en Minangkabau verschillen in niveaus van EI competenties. Bataks zijn doorgaans meer competent in intra-persoonlijk opzicht, in stressmanagement, aanpassing, emotioneel zelfbewustzijn, assertiviteit, zelfactualisatie, onafhankelijkheid, strestolerantie en impulscontrole dan. Javanen en Minangkabau. Ook vonden we dat Minangkabau de meest onderontwikkelde groep in de samenleving is voor wat betreft EI competenties. Met behulp van het interactie model viel op dat het niveau van EI competenties van Indonesische mannen en vrouwen niet alleen gerelateerd is aan leeftijd, maar ook aan hun hechtingstijl. Onze bevindingen bieden een verdere uitleg voor de sterke verwantschap, verbondenheid en onderlinge afhankelijkheid de kenmerkend zijn voor de meeste Indonesiërs die jarenlang opgroeien en zich ontwikkelen in een collectivistische Oosterse samenleving. We constateerden enkele beperkingen en deden aanbevelingen voor de toekomst voor het ontwikkelen van metingen (meetinstrumenten), generalisering van resultaten, internationale (grensoverschrijdende) studies in de toekomst en de demografische
factoren die in toekomstig onderzoek overwogen kunnen worden. Onze bevindingen kunnenpsychologische interventies zinvolmaken. Er kan een EI ontwikkelingsprogramma worden opgesteld als preventieprogramma dat naar verwachting de (volks)gezondheid in Indonesië zal ondersteunen en wellicht bevorderen.
Ringkasan


Bab 2 menjelaskan perkembangan attachment dalam konteks Indonesia yang secara eksplisit meliputi faktor-faktor demografi, seperti usia dan pengalaman hidup dengan keluarga (living-with-family experience), pada 1313 partisipan Indonesia dari kelompok etnis Jawa, Batak, dan Minangkabau. Dalam studi ini, kami terlebih dahulu melakukan proses adaptasi versi asli bahasa Inggris dari ASQ ke dalam versi bahasa Indonesia. Profil dari lima attachment style pada orang Indonesia juga ditunjukkan dalam Bab 2. Untuk lebih detail, profil attachment akan menggambarkan skor standar untuk rasa percaya pada diri sendiri dan orang lain (confidence), ketidaknyamanan pada suatu kedekatan (discomfort with closeness), kebutuhan akan persetujuan dan konfirmasi dari orang lain (need for approval and confirmation by others), keterpakuana pada suatu hubungan (preoccupation with relationships), dan hubungan sebagai sekunder (relationships as secondary) pada orang Jawa, Batak dan Minangkabau. Dengan menggunakan prosedur ilmiah dan mengevaluasi beberapa sumber bukti, kami membuat ASQ versi Indonesia sebagai pengukuran ilmiah untuk orang-orang berbahasa Indonesia. Hasilnya mengungkapkan korelasi negatif antara living-with-family experience dan usia dengan need for approval and confirmation by others dan preoccupation with relationships. Kami juga menemukan perbedaan yang signifikan untuk kelima attachment style antara dua gender dan tiga kelompok etnis.

Pengembangan dan adaptasi psikometri dari EQ-i ke dalam Bahasa Indonesia merupakan topik utama dalam Bab 3. Kami telah membuat EQ-i versi Indonesia yang diterjemahkan dari bahasa Inggris ke bahasa Indonesia dan kemudian diterjemahkan balik ke dalam bahasa Inggris. Reliabilitas test-retest dan konsistensi internal telah dihitung pada 2.801 orang Indonesia yang berasal dari beberapa kota di Indonesia, khususnya Jakarta, Tangerang, Bandung, Yogyakarta, Surakarta, Medan, dan Padang. Respon individu akan
mengukur skor EQ total dan juga lima skala EQ yang terdiri 15 skor sub-skala, yaitu intrapersonal (terdiri dari self-regard, emotional self-awareness, assertiveness, independence, dan self-actualization); interpersonal (terdiri dari empathy, social responsibility, dan interpersonal relationship); stress management (terdiri dari stress tolerance dan impulse control); adaptability (terdiri dari reality-testing, flexibility, dan problem-solving); dan general mood (terdiri dari optimism and happiness). Hasil analisis faktor eksploratori mendukung adanya bentuk model lima faktor dan 15-sub faktor pada EQ-i versi Indonesia. Hasil ini relatif konsisten dengan hasil analisis faktor konfirmatori yang membuktikan bahwa kelima belas factor loadings sub-skala EQ-i merupakan representasi dari kelima skala EQ-i. Dalam Bab 3, kami menguji reliabilitas EQ-i versi Indonesia pada sampel normatif Indonesia dengan mengadopsi prosedur ilmiah dan mengevaluasi beberapa sumber bukti. Kami mempunyai bukti psikometri yang memadai dan dapat menunjukkan bahwa EQ-i versi Indonesia dapat dengan tepat digunakan sebagai instrumen ilmiah di Indonesia. Kami melihat bahwa penelitian lebih lanjut yang mengimplementasikan EQ-i dalam masyarakat Indonesia akan sangat berguna untuk mendukung hasil ini.

Bab 4 menggambarkan profil EQ-i orang Indonesia dibandingkan dengan orang Belanda dengan mengadopsi pendekatan lintas budaya. Dalam penelitian ini kami menggambarkan kompetensi kecerdasan emosi (EI) di Indonesia, sebagai negara keempat terpadat di dunia, dibandingkan dengan sampel normatif Belanda. Kami menemukan bahwa perbedaan psikologis antara masyarakat Barat dan Timur dapat terlihat. Melalui konsep kolektivisme dan individualisme yang secara tradisional digunakan untuk menggambarkan adanya perbedaan pada beberapa masyarakat, studi di Bab 4 berfokus pada perbedaan antara orang Indonesia dan orang Belanda. Masyarakat Timur biasanya dikontrasikan dengan masyarakat di Barat, yang lebih individualistis. Orang Indonesia yang tumbuh dan berkembang dalam warisan kolektivistik budaya Timur ditandai dengan relasi dan saling ketergantungan yang kuat antar anggota suatu kelompok. Dengan
menerapkan EQ-i pada partisipan Indonesia dan Belanda—dengan menggunakan EQ-i versi Indonesia dan versi Belanda untuk masing-masing negara—keseluruhan hasil menunjukkan bahwa tingkat EI orang Indonesia umumnya lebih rendah daripada orang Belanda. Sebagai contoh, kompetensi interpersonal—yang diasumsikan bahwa orang Indonesian akan mendapat level lebih tinggi daripada orang Belanda—ternyata tidak ditemukan dalam penelitian ini. Hasil penelitian ini mengindikasikan bahwa kecenderungan kolektivistik orang Indonesia sebagai masyarakat timur, dalam batas tertentu, tidak secara otomatis menghasilkan profil EI yang tinggi pada orang Indonesia.

Ringkasan

bahwa masyarakat Indonesia memiliki beberapa karakteristik umum dalam hal kompetensi interpersonal, assertiveness, empathy, social responsibility, flexibility, dan problem solving. Melalui perbandingan lintas etnis, kami menemukan bahwa orang Minangkabau adalah kelompok yang paling terbelakang dalam hal kompetensi EI. Kami merekomendasikan adanya penelitian serupa untuk kelompok etnis Indonesia lainnya, terutama kelompok etnis dari daerah tengah dan timur Indonesia, seperti Bali, Dayak, dan Papua untuk mendapatkan kesimpulan yang lebih baik.


Hasil dalam Bab 6 menunjukkan bahwa model interaksi untuk kelompok jenis kelamin secara signifikan berbeda, tetapi tidak untuk kelompok etnis. Kami juga menemukan bahwa attachment berperan sebagai faktor mediasi dalam model interaksi antara usia dan kompetensi EI pada pria dan wanita Indonesia. Berdasarkan hasil ini, kami menyimpulkan bahwa pengembangan kompetensi EI pada pria dan wanita Indonesia akan dipengaruhi tidak hanya oleh usia, tetapi juga oleh attachment style. Hasil penelitian menunjukkan bahwa tingkat kompetensi stress management orang Indonesia itu tidak terkait langsung dengan berapa tahun usia mereka, tetapi juga pada need for approval from others dan preoccupation with relationships. Penelitian replikasi pada kelompok etnis lainnya disarankan untuk dilakukan untuk dapat membuat kesimpulan yang lebih representatif.
Kami juga menemukan bahwa orang Minangkabau tampaknya menjadi kelompok yang paling terbelakang dalam hal kompetensi EI. Kami menunjukkan model interaksi di mana tingkat kompetensi EI dari pria dan wanita Indonesia tidak hanya berhubungan dengan usia, tetapi juga attachment style mereka. Temuan kami juga menjelaskan lebih lanjut di mana keterkaitan, keterhubungan, dan saling ketergantungan yang kuat dengan orang lain menjadi ciri khas kebanyakan orang Indonesia yang tumbuh dan berkembang selama bertahun-tahun sebagai masyarakat Timur yang kolektivis. Kami menemukan beberapa keterbatasan dan juga mengusulkan beberapa saran yang dapat dipertimbangkan tentang pengembangan pengukuran, generalisasi hasil penelitian, dilakukannya studi lintas nasional di masa depan, dan mengikutsertakan faktor demografis lain dalam penelitian di masa datang. Temuan kami menunjukkan bahwa intervensi psikologis merupakan sesuatu yang menjanjikan untuk dilakukan. Program pengembangan EI dapat dibuat sebagai program pencegahan yang diharapkan dapat turut mendukung kesehatan masyarakat di Indonesia.
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You alone do we worship, and You alone do we ask for help..
Guide us on the straight path, the path of those whom you blessed,
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About the author

Zahrasari Lukita Dewi was born on January 13, 1972 in Bandung, Indonesia. She finished her bachelor’s degree in Clinical Psychology (1997) from the Faculty of Psychology, Padjadjaran University, Bandung, Indonesia, and her master’s degree in Clinical Psychology (2004) from the Faculty of Psychology, University of Indonesia, Depok, Indonesia. Since her bachelor's and master's degrees, she has a growing interest in personality, emotions, and culture. In her bachelor's thesis, she investigated the profile of personality trait and emotion in the context of sexual harassment experience of Indonesians. In her master’s thesis, she continued to investigate personality, emotion, and culture by focusing her research on the anger antecedents, state, trait, and experience of Indonesians from two different ethnic groups, Javanese and Batak. She worked as a full-time lecturer at the Clinical division of Faculty of Psychology, Atma Jaya Catholic University of Indonesia since 1998. To express her passion and interest, she actively gets in the professional practice in psychological assessment, counseling, and
psychotherapy for persons with psychological problem, medical illness, and trauma. She also takes part in national and international workshop and conference on personality, emotions, and psychotherapy as a facilitator, presenter, and participant. She shares about psychological concept and application—in a more popular fashion—through her writing in national magazines and newspaper, and also by her speech on radio and television talk show. Since her teens, she has a strong passion for writing—fiction and non fiction. In line with her profession, she has produced unpublished writings with psychological phenomena as a dominant theme. Since the last three years she has started writing a semi-fiction story that mostly reflects her own experience as a person with a life-threatening illness. Besides her academic and professional career, she also really enjoys her life as a mom of two daughters, Jilan and Freya, and her great partnership with her loving husband, Aprijady.