# Lay Beliefs About Emotional Problems and Attitudes Toward Mental Health Care Among Parents and Adolescents: Exploring the Impact of Immigration

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Objective: Individuals' lay beliefs about mental health problems and attitudes toward mental health care are thought to be influenced by the cultural background of these individuals. In the current study, we investigated differences between immigrant Dutch and native Dutch parents and adolescents in lay beliefs about emotional problems and attitudes toward mental health care. Additionally, among immigrant Dutch parents, we examined the associations between acculturation orientations and lay beliefs about emotional problems as well as attitudes toward mental health care. Method: In total, 349 pairs of parents and their adolescent children participated in our study (95 native Dutch, 85 Surinamese-Dutch, 87 Turkish-Dutch, 82 Moroccan-Dutch). A vignette was used to examine participants' lay beliefs. Results: Immigrant Dutch and native Dutch parents differed in their lay beliefs and attitudes toward mental health care, whereas hardly any differences were revealed among their children. Turkish-Dutch and Moroccan-Dutch parents showed more passive and fewer active solutions to emotional problems compared to native Dutch parents. Additionally, Moroccan-Dutch and Surinamese-Dutch parents reported greater fear of mental health care compared to native Dutch parents. Furthermore, the results showed that immigrant Dutch parents who were more strongly oriented toward the Dutch culture reported less fear of mental health care. Conclusion: Our results showed clear differences in lay beliefs and attitudes toward mental health care between immigrant Dutch and native Dutch parents but not between their children. Substantial differences were also found between parents from different immigrant Dutch populations as well as within the population of immigrant Dutch parents.

Keywords: lay beliefs, attitudes, mental health care, immigration

Lay beliefs about mental health problems reflect people's own ideas and beliefs about the causes of and solutions to mental health problems and the treatments of those problems (Haslam, Ban, & Kaufmann, 2007; Kleinman, 1980). These lay beliefs are thought to influence people's decision to seek help when they experience mental health problems as well as people's attitudes toward mental health care (Haslam et al., 2007). It has also been suggested that people's cultural background influences lay beliefs about mental health problems and attitudes toward mental health care (Kleinman, 1980; Yeh, Hough, McCabe, Lau, & Garland, 2004).

Immigrant groups are confronted with the mental health ideology and systems of not only the receiving culture, but also the

culture of their country of origin. As a result, both cultures may influence their lay beliefs and attitudes toward mental health care. The current study aimed to examine differences between Moroccan-Dutch, Turkish-Dutch, Surinamese-Dutch, and native Dutch parents as well as their adolescent children in lay beliefs about adolescents' mental health problems and attitudes toward mental health care. More specifically, this study focused on emotional problems, such as symptoms of sadness, fear, loneliness, and worrying.

#### Lay Beliefs About Mental Health Problems

In the current study, we will use the individualism and collectivism distinction to explain the possible association of cultural background with lay beliefs about mental health problems. Although the individualism and collectivism constructs have been debated upon by some scholars (e.g., Kagitcibasi, 2005; Oyserman, Coon, & Kemmelmeier, 2002; Taras et al., 2014), the constructs can be helpful as a value dimension for the comparison of lay beliefs and attitudes toward mental health service use between the ethnic groups in our sample (Oyserman et al., 2002).

It has been proposed that among individuals originating from so-called "individualistic" or "independent" cultures, the self is

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This article was published Online First October 6, 2016.

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viewed as an autonomous entity, goals are phrased in terms of self-fulfillment and competence, and relationships are viewed as evolving across individuals (Hofstede, 1994; Kagitcibasi, 2005; Markus & Kitayama, 1991). As a result, members of individualistic cultures may be relatively likely to attribute problems (e.g., mental health problems) to internal causes. Related to this, these members may be relatively likely to perceive their problems as controllable (Haslam et al., 2007; Knipscheer, 2000; Leventhal, Leventhal, & Contrada, 1998). In contrast, individuals coming from "collectivistic" or "interdependent" cultures, may view the self as embedded within relationships, may phrase goals in terms of communal responsibilities, and stress the unity of group members in relationships (Hofstede, 1994; Markus & Kitayama, 1991). Consequently, these individuals may be relatively likely to formulate external attributions for their problems, such as causes in the environment (e.g., family, peers, school, culture).

The largest immigrant groups in the Netherlands (Moroccan-Dutch, Turkish-Dutch, and Surinamese-Dutch) can roughly be considered as originating from collectivistic cultures while the Dutch culture can be considered as individualistic (e.g., Komter & Schans, 2008). As a result, immigrants in the Netherlands may be more likely to make external and (therefore) less likely to make internal attributions to causes of mental health problems compared to their native Dutch counterparts. Consequently, compared to native Dutch, immigrant groups in the Netherlands may be more likely to suggest external and uncontrollable solutions for their problems and less likely to suggest solutions associated with individual changes.

However, differences in lay beliefs between these three different immigrant populations are to be expected as well. In general, differences between immigrant and nonimmigrant populations may be more pronounced when these populations are more culturally distant. Previous research has indicated that the perceived cultural distance between the Dutch culture and Surinamese-Dutch culture was smaller compared to the perceived cultural distance between the Dutch culture and the Turkish-Dutch and Moroccan-Dutch culture (Arends-Tóth & Van de Vijver, 2009; De Valk, 2010; Schalk-Soekar, Van de Vijver, & Hoogsteder, 2004). As Suriname is a former Dutch colony, Surinamese-Dutch are more familiar with Dutch language and culture compared to Turkish-Dutch and Moroccan-Dutch. In addition, Turkish-Dutch and Moroccan-Dutch are mostly Muslim by religion while the majority of the Surinamese-Dutch is Christian (De Valk, 2010; Van Ours & Veenman, 1999). As a result, compared to Dutch natives, larger differences in lay beliefs can be expected for Turkish-Dutch and Moroccan-Dutch than for Surinamese-Dutch.

In line with this notion, a (qualitative) study on ethnic differences in parental lay beliefs in the Netherlands indicated that native Dutch parents were more likely to mention genetic and biological causes as a possible explanation for the psychological problems of their child. Environmental causes were most often mentioned by Moroccan-Dutch, Turkish-Dutch, and to a lesser extent by Surinamese-Dutch parents (Bevaart, 2013). The latter group of parents was also relatively likely to mention the character of their child as an explanation for these problems.

In general, empirical research on cultural differences in lay beliefs about mental health problems has focused mainly on adults' lay beliefs and distinguished among causes, consequences, and preferred treatment for mental health problems (e.g., Lloyd et al., 1998; Bhui, Rüdell, & Priebe, 2006). In the adult literature, gaining insight in individual's lay beliefs about mental health problems has been considered to be of importance in the assessment and management of mental health problems, particularly in culturally diverse societies (Bhui et al., 2006). However, only few studies have examined parents' lay beliefs about their children's problems (Sood, Mendez, & Kendall, 2012; Yeh et al., 2004, 2005).

Overall, studies among parents found differences between ethnic minority and majority populations in parental beliefs about the causes of the child's problems (Sood et al., 2012; Yeh et al., 2004). More specifically, the results of these studies indicated that ethnic minority parents reported more medical causes of psychological problems (e.g., problems due to medical condition or illness; Sood et al., 2012) and fewer personality and relationship issues as causes of these problems compared to ethnic majority parents. Moreover, they more often ascribed problems to the receiving culture and to racial discrimination than ethnic majority parents (Yeh et al., 2004).

As far as we know, only one former study investigated lay beliefs about causes of depression in ethnic minority and majority adolescents, revealing more similarities than differences between ethnic minority and majority adolescents (Caporino, Chen, & Karver, 2014). More specifically, both minority and majority adolescents were found to endorse personality and cognition as causes of depression, whereas minority adolescents were less likely than majority adolescents to endorse trauma as a cause of depression.

There are also reasons to expect intergenerational differences in lay beliefs between immigrant parents and their adolescent children. According to the acculturation gap-distress model (Telzer, 2010), adolescents adapt to their new culture at a faster pace compared to their parents because they participate more intensively in and interact with members of the receiving society more frequently than do their parents (Szapocznik, Kurtines, & Fernandez, 1980). Also, while the development of children of immigrants is embedded in both the ethnic cultural background of their parents and the surrounding majority society, their first-generation immigrant parents were primarily socialized in the culture of origin (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Therefore, differences in lay beliefs about mental health problems may be much more substantial between nonimmigrant and (firstgeneration) immigrant parents than between children of immigrants and their nonimmigrant peers. However, to our knowledge, parents and adolescents' beliefs about mental health problems have not yet been examined in one study simultaneously.

# **Attitudes Toward Mental Health Care**

In addition to differences between immigrants and nonimmigrants in lay beliefs about mental health problems, differences between these groups in attitudes toward mental health care have also been found (e.g., Munson, Floersch, & Townsend, 2009). On the one hand, these differences in attitudes toward mental health care may result from cultural differences between immigrants and nonimmigrants. For example, in some cultures, people may feel more ashamed about their mental health problems or need for professional mental health care than in other cultures, which may decrease the likelihood to seek professional help (e.g., Snowden &

Cheung, 1990). Indeed, two studies performed in Turkey—traditionally perceived as a collectivistic culture—showed that Turkish college students hold negative attitudes toward psychological help (Koydemir, Erel, Yumurtaci, & Sahin, 2010; Seyfi, Poudel, Yasuoka, Otsuka, & Jimba, 2013). On the other hand, the ethnic minority position within the receiving culture may also negatively influence the attitudes toward mental health care of immigrants/ ethnic minorities (Grinstein-Weiss, Fishman, & Eisikovits, 2005). For instance, Grinstein-Weiss and colleagues (2005) suggested that ethnic minorities might be more reluctant to seek help due to a lack of trust in formal mental health care institutions from the receiving culture. Together, it may be expected that immigrant populations may have less favorable attitudes toward mental health care compared to nonimmigrants, because these health care institutions are perceived as belonging to the majority culture.

Previous research on differences in parents' and adolescents' attitudes toward mental health care either between immigrants and nonimmigrants or between ethnic minority and majority members is rather scarce. However, there are some studies to suggest that ethnic minority parents are more likely to have negative attitudes toward mental health care for their child's mental health problems compared to ethnic majority parents (e.g., Chandra et al., 2009). Empirical research on adolescents' attitudes toward mental health care has shown inconsistent findings. Some studies reported no differences between ethnic minority and majority groups or more positive attitudes among ethnic minority than among ethnic majority groups (Gonzalez, Alegria, & Prihoda, 2005). However, other studies reported that ethnic majority rather than minority adolescents are more likely to have positive attitudes toward mental health care (Kuhl, Jarkon-Horlick, & Morrissey, 1997; Munson et al., 2009).

# **Parents' Acculturation Orientations**

Within the population of immigrant parents, considerable within-group variation in lay beliefs and attitudes toward mental health care may be expected as well. To gain some insight into this variation, the current study also investigated the relationship between parental acculturation orientations toward the ethnic and receiving culture and lay beliefs about emotional problems and attitudes toward mental health care. People can be characterized according to their acculturation orientation or strategy, that is, the way in which they relate to their ethnic and the receiving culture (e.g., Berry, 2006). Previous research has indicated that the acculturation process should be perceived as bidimensional, with independent orientations to the ethnic and to the receiving culture (e.g., Berry, 2006; Nguyen, Messe, & Stollak, 1999; Ryder, Alden, & Paulhus, 2000).

In line with the above reasoning, immigrant parents with a relatively strong orientation toward the receiving culture can be expected to be relatively more likely to formulate internal attributions and solutions and less likely to formulate external attributions and solutions to emotional problems. Moreover, they may have relatively favorable attitudes toward mental health care. In contrast, opposite associations may be expected for parents with a relatively strong orientation toward the ethnic culture.

Research on the relationship between acculturation orientations and lay beliefs or attitudes toward care is again scarce. However, a previous study has shown an association between these phenom-

ena. Using a sample of children with separation anxiety, it was found that parents who had a stronger orientation toward the receiving culture were more likely to attribute psychological causes (i.e., internal causes) to problems (Sood et al., 2012).

# Mental Health Service Use

Various studies have indicated considerable ethnic differences in mental health service use by adolescents, with immigrant or ethnic minority adolescents being less likely to use mental health care than native or ethnic majority adolescents (Angold et al., 2002; Elster, Jarosik, VanGeest, & Fleming, 2003; Garland et al., 2005; Gudino, Lau, Yeh, McCabe, & Hough, 2009). In the Netherlands, immigrant Dutch adolescents have also been found to be less likely to receive mental health care than native Dutch adolescents (Verhulp, Stevens, Van de Schoot, & Vollebergh, 2013).

Theoretically, it has been proposed that lay beliefs and attitudes toward mental health care could influence the decision to seek help (Cauce et al., 2002; Rickwood, Deane, & Wilson, 2007). For example, mental health care may not be expected to fit the perceived causes of the mental health problem, accepting mental health care use may be perceived as too shameful, or there may be too little trust in the mental health institute (Cauce et al., 2002). Indeed, there is some empirical evidence to show that lay beliefs and attitudes toward mental health services are associated with the decision to seek help (Bhui et al., 2006; McKay, Pennington, Lynn, & McCadam, 2001; Starr, Campbell, & Herrick, 2002; Turner & Liew, 2010). In addition, ethnic differences in parental lay beliefs about causes of problems have been found to explain ethnic differences in mental health service use (Yeh et al., 2005). Therefore, in the current study, we examined whether ethnic differences in adolescents' mental health service use could be explained by potential ethnic differences in lay beliefs, attitudes toward mental health care as reported by parents or adolescents themselves, or both of these.

# **Current Study**

To sum up, in the current study, we examined ethnic differences in lay beliefs about mental health problems (specifically emotional problems) and attitudes toward mental health care among parents and adolescents. We hypothesized that immigrants are more likely to attribute causes and solutions to external (than to internal) sources and more likely to have negative attitudes toward mental health care compared to nonimmigrants. Differences were hypothesized to be larger for the Turkish- and Moroccan-Dutch than for the Surinamese-Dutch. Based on the acculturation gap-distress model, we also hypothesized that differences between immigrant Dutch and native Dutch groups would be larger among parents than among adolescents. Among immigrant parents, we expected that a stronger orientation toward the Dutch culture and a weaker association toward the ethnic culture would be associated with more internal (instead of external) attributions of causes and solutions and more positive attitudes toward mental health care. Finally, it was hypothesized that ethnic differences in mental health service use were mediated by ethnic differences in lay beliefs and attitudes toward mental health care.

#### Method

# Sample

The data are part of a larger two-phase study on ethnic differences in mental health service use for adolescents' internalizing problems (such as sadness, anxiety, loneliness, and worrying; see also Verhulp, Stevens, Van de Schoot, & Vollebergh, 2013). In the first phase of the study, a school-based screening of internalizing problems was performed among more than 3,000 adolescents. The aim of this phase was to include a sufficient number of adolescents who received mental health care because of internalizing problems for a second phase of the study (the response rate in the first phase of the study was 95%). For the second phase of the study, which took place on average 14 months after the first phase, parents and adolescents with a native Dutch, Surinamese-Dutch, Turkish-Dutch, and Moroccan-Dutch background were selected for participation (the latter three belong to the largest immigrant groups in the Netherlands; De Valk, 2010). In line with the definition from the Statistics Netherlands (2012), ethnicity was determined based on the country of birth of parents. Within each ethnic group, we randomly selected adolescents in the normal and borderline/clinical range on internalizing problems, as measured by the Youth Self-Report (Achenbach & Rescorla, 2001). In this phase of the study, we selected 50% of the adolescents within each ethnic group who scored in the borderline/clinical range and 50% in the normal range (as measured in the first phase).

In the second phase, interviews were conducted with these parents and adolescents. Parents were mostly biological mothers (91%) (n = 381; average response rate 64%; varying from 57% among the Surinamese-Dutch to 70% among the Moroccan-Dutch parents). Parents provided permission to interview their adolescent child (96% of the parents provided informed consent, which ranged from 92% for Moroccan-Dutch parents to 100% for native Dutch parents). Of the adolescents with parental consent, 96% agreed to participate, which resulted in a total sample of 349 parent and adolescent dyads (native Dutch n = 95, Surinamese-Dutch n = 85, Turkish-Dutch n = 87, and Moroccan-Dutch n = 82). Of the immigrant Dutch adolescents, 82% were second-generation immigrants (i.e., were born in the Netherlands, but have at least one parent who is born in Surinam, Turkey, or Morocco). The mean age of the adolescents was 15.2 years, and 43% of the adolescents were male. See Table 1 for demographic characteristics of the four ethnic groups. With regard to parental education level, Moroccan-Dutch and Turkish-Dutch parents were found to have a significantly lower mean education level than parents of native Dutch and Surinamese-Dutch origin. Surinamese-Dutch parents were found not to differ from the native Dutch parents in terms of education level.

#### **Procedure**

Adolescents' lay beliefs about causes of/solutions to emotional problems and attitudes toward mental health care were assessed at school during the first phase of the study, whereas parents' lay beliefs were assessed during the second phase of the study. Turkish-Dutch and Moroccan-Dutch parents were interviewed at home respectively by Turkish-Dutch and Moroccan-Dutch interviewers to prevent language difficulties (if necessary, parents could be interviewed and questionnaires could be administered in their mother tongue). Native Dutch interviewers interviewed Surinamese-Dutch parents and native Dutch parents. All adolescents completed questionnaires in Dutch. The local medical ethical committee approved the study, and all participants provided written informed consent for the data use.

Parents and adolescents were given a vignette about an adolescent with emotional problems (gender of adolescent in vignette was matched with the gender of the adolescent child), and they were then questioned on their lay beliefs about causes of and solutions to emotional problems, as presented in the vignette. The vignette was based on symptoms described in the Emotional Problems scale of the Strengths and Difficulties Questionnaire (Goodman, 1997). Mental health service use, internalizing problems, and psychological acculturation were assessed in Phase 2.

# **Instruments**

Lay beliefs about causes. Among parents and adolescents, the same instrument was used to assess lay beliefs. We used the trigger questions of Yeh and Hough's (1997) questionnaire "Beliefs About Causes" as a starting point to assess lay beliefs about causes of emotional problems. However, we slightly adjusted the questions to the Dutch context, resulting in 11 questions (see Table 2). Parents and adolescents were asked whether they thought that the problems described in the vignette could result from the causes listed in Table 2. Answer categories ranged from *definitely not* (0) to *definitely yes* (4).

Table 1
Demographic Characteristics of Total Sample and Four Ethnic Groups

Variable	Total sample $(N = 349)$	Native Dutch $(n = 95)$	Surinamese-Dutch $(n = 85)$	Turkish-Dutch $(n = 87)$	Moroccan-Dutch $(n = 82)$
% boys	43.3	41.1	48.2	40.2	43.9
% born in the Netherlands <sup>a</sup>	86.5	98.9	80.0	80.5	85.4
Highest education level of parents <sup>b</sup>					
% no education completed	7.4	2.1	2.4	1.1	25.6
% elementary school	16.0	4.2	5.9	41.4	13.4
% lower secondary education	26.9	29.5	35.3	25.3	17.1
% intermediate secondary education	33.2	32.6	42.4	23.0	35.4
% higher secondary education	16.3	31.6	14.1	9.2	8.5

<sup>&</sup>lt;sup>a</sup> No significant differences were found between immigrant Dutch groups in the number of adolescents born in the Netherlands. <sup>b</sup> Indicates significant differences between native Dutch and immigrant Dutch groups, with native Dutch and Surinamese-Dutch > Turkish-Dutch and Moroccan-Dutch.

Table 2
Four-Factor Structure and Factor Loadings of the Causes of
Emotional Problems

Cause	Parents	Adolescents
Individual		
Physical health problems	.37	.46
Personality	.73	.43
Developmental stage (adolescence)	.63	.32
Family		
Something that happened to you or your		
family	.94	.84
Parents (e.g., divorce or bad parenting)	.77	.86
Economic problems (e.g., not enough money) <sup>a</sup>	.51	_
Peer/school		
Peers (e.g., not enough friends)	.87	.74
School (e.g., atmosphere at school)	.65	.59
Environmental		
Dutch culture	.78	.45
Prejudices or discrimination	.72	.68
Supernatural powers (e.g., god(s), spirits,		
magic)	.41	.62
Economic problems (e.g., not enough money) <sup>a</sup>	_	.73

*Note.* Factor loadings among parents were derived from exploratory factor analysis and for adolescents from confirmatory factor analysis. Cronbach's alpha for parents and adolescents: .53 and .45 for individual causes; .73 and .80 for family causes; .67 and .58 for peer/school causes; and .58 and .73 for environmental causes.

<sup>a</sup> Economic problems as a cause of emotional problems belongs to the factor family factors among parents, whereas it belongs to environmental causes among adolescents.

Exploratory factor analysis in Mplus (Muthén & Muthén, 1998– 2012) yielded four factors for parents (i.e., the most parsimonious model with a sufficient model fit): Individual causes, Family causes, Peer/school causes, and Environmental causes (see Table 2 for items within the scales and factor loadings). The fit of the four factor model was  $\chi^2 = 47.34$ , p < .001; comparative fit index (CFI) = .986; Tucker-Lewis index (TLI) = .955; root-meansquare error of approximation (RMSEA) = .072. The same model was used to perform confirmatory factor analysis among adolescents. However, the initial model did not reach sufficient fit ( $\chi^2$  = 274.24, p < .001; CFI = .871; TLI = .798; RMSEA = .140). Model identification indices suggested that model fit would improve significantly if the item "economic problems" was added to the environmental factor. Therefore, we added this item to the environmental factor for adolescents, which resulted in a much better fit ( $\chi^2 = 139.450$ , p < .001; CFI = .944; TLI = .912; RMSEA = .092).

Lay beliefs about solutions. Based on a combination of items used in the existing literature to assess solutions to mental health problems, items on solutions to emotional problems were formulated (Cauce et al., 2002; Furnham, 1984; Stevens & Hosper, 2001). Parents and adolescents were asked whether they thought that the solutions listed in Table 3 would be applicable to the problems described in the vignette. Answer categories ranged from definitely not (0) to definitely (4).

Again, exploratory factor analyses were performed in Mplus on the parent data, which resulted in a three-factor model being the most parsimonious factor solution with sufficient fit ( $\chi^2 = 21.70$  p = .041; CFI = .990; TLI = .971; RMSEA = .048). Confirmatory factor analyses were performed on the adolescent data, result-

ing in sufficient fit for the same factor structure ( $\chi^2 = 77.97$ , p < .001; CFI = .923; TLI = .884; RMSEA = .080). The first factor described *passive solutions*, the second factor described *active solutions*, and the final factor consisted of *environmental solutions* (see Table 3 for items within the factors and factor loadings).

Attitudes toward mental health care. Again, existing questionnaires were used to formulate questions on attitudes toward mental health care (Kuhl et al., 1997; Stevens & Hosper, 2001; Yeh & Hough, 1997). Parents and adolescents were requested to try to imagine that their child/they had the same feelings as presented in the vignette. They were asked to indicate how they felt about mental health care and mental health providers by responding to nine items (see Table 4 for items), measured on a 5-point scale ranging from *fully disagree* (0) to *fully agree* (4).

Exploratory factor analyses on the parent data were performed using Mplus. The results indicated that a three-factor model was the most parsimonious model with an adequate fit ( $\chi^2 = 26.74$ , p = .008; CFI = .989; TLI = .967; RMSEA = .059). A reasonable fit was also found for the confirmatory factor analyses on the adolescent data ( $\chi^2 = 74.84$ , p < .001; CFI = .921; TLI = .881; RMSEA = .078). The three factors captured the extent to which the respondent preferred informal care to formal care and rejected care and the degree to which he or she showed a fear of care (see Table 4 for factor loadings).

Psychological acculturation. The Dutch version of the Psychological Acculturation Scale was used to assess immigrant parents' sense of belonging and emotional attachment to the Dutch culture and people as well as to their own ethnic culture and people (Stevens, Pels, Vollebergh, & Crijnen, 2004; Tropp, Erkut, Coll, Alarcón, & Vázquez García, 1999). The scale comprised six items measuring psychological acculturation orientation to the Dutch culture/people and six items assessing psychological acculturation orientation to the ethnic culture/people (Stevens et al., 2004; Stevens, Vollebergh, Pels, & Crijnen, 2007). Former research on the Dutch version of the Psychological Acculturation Scale has revealed that the psychometric quality is sufficient (Stevens et al., 2004). Sample items are "I feel comfortable with Dutch people"

Table 3
Three-Factor Structure and Factor Loadings of Solutions to Emotional Problems

Solution	Parents	Adolescents
Passive		
Will pass automatically	.79	.65
Nobody can do anything	.76	.73
Think about it as little as possible	.68	.39
Invest more in religion	.47	.30
Active		
Cope with difficulties	.95	.70
Learn how to deal with difficult things	.83	.92
Environmental		
Parents need to learn parenting skills	.52	.64
Teachers need to give more attention	.85	.81
Friends need to be more kind	.70	.69

*Note.* Factor loadings among parents were derived from exploratory factor analysis and for adolescents from confirmatory factor analysis. Cronbach's alpha for parents and adolescents: .75 and .58 for passive solutions; .88 and .78 for active solutions; and .71 and .75 for environmental solutions.

Table 4
Three-Factor Structure and Factor Loadings of Attitudes
Toward Mental Health Care

Attitude	Parents	Adolescents
Informal care		
Rather solve it myself than with care		
provider	.70	.65
Rather ask help to someone else than care		
provider	.88	.33
Rejection of care		
Weak to go to caregiver	.61	.53
Care providers have nothing to do with		
my problems	.97	.70
Care providers will determine too much		
what I can/can't do	.71	.78
Fear of care		
Scared to talk with care provider about		
myself	.71	.59
Afraid that care provider will pass the		
problems on	.75	.66
Worry what others will think about it	.80	.80
Talking with an outsider about problems,		
will bring shame on one's family	.71	.45

*Note.* Factor loadings among parents were derived from exploratory factor analysis and for adolescents from confirmatory factor analysis. Cronbach's alpha for parents and adolescents: .77 and .35 for informal care; .81 and .70 for rejection of care; and .82 and .72 for fear of care.

and "Moroccan people understand me." Answer categories ranged from fully *disagree* (0) to *fully agree* (4). In this study, Cronbach's alpha for psychological acculturation orientation to the Dutch culture was .83 and to the ethnic culture was .81.

Mental health service use. Parents and adolescents were asked whether the adolescents ever received formal mental health care for their internalizing problems from different professionals. Both parents and adolescents were given a list of possible professional providers, such as psychiatrists, (school) psychologists, or social workers. For both parents and adolescents, a dichotomous variable was created with 0 indicating that the adolescent had not received mental health care and 1 indicating that the adolescent had received such care at least once.

## **Statistical Analyses**

First, to correct for the fact that we used multiple dependent variables, multivariate analyses of (co)variance (MAN(C)OVA) were used to examine differences between immigrant Dutch and native Dutch in parents and adolescents' lay beliefs and attitudes toward care. For both parents and adolescents, three MAN(C)OVAs were performed with the scales measuring (a) lay beliefs about causes of emotional problems, (b) lay beliefs about solutions to emotional problems, and (c) attitudes toward mental health care as dependent variables. In the analyses among parents, we added parental education level as a covariate. Second, within the group of immigrant Dutch parents, separate regression analyses were conducted to investigate the relationship of acculturation orientation toward the ethnic and the Dutch culture with lay beliefs and attitudes toward care while controlling for ethnicity and parental education level. Third, among parents and adolescents, the relationship between their lay beliefs and attitudes toward mental health care and mental

health service use was investigated using logistic regression analyses. In the next step, we also included ethnicity in the model and examined whether lay beliefs and attitudes toward care mediated the ethnic differences in mental health service use. In these logistic regression analyses, we controlled for age, gender, parental education level, and adolescents' internalizing problems (reported by parents or adolescents on the Child Behavior Checklist or Youth Self-Report; Achenbach & Rescorla, 2001).

## Results

# Lay Beliefs About Emotional Problems

Differences between Dutch immigrants and Dutch natives in parents' lay beliefs were examined and multivariate analyses of covariance indicated significant differences in lay beliefs about causes of emotional problems, F(12, 1029) = 6.91, p < .001. The covariate, parental education level, was not significantly related to parents' lay beliefs about causes of emotional problems, F(4,(341) = 0.86, p = .486. Furthermore, univariate results showed that differences between Dutch immigrants and native Dutch were present for individual, F(3, 344) = 17.47, p < .001; family, F(3, 344) = 17.47, p < .001; family, P(3, 344) = 17.47, P(3, 3344) = 9.92, p < .001; peer/school, F(3, 344) = 4.81, p = .003; and environmental causes, F(3, 344) = 4.83, p = .003. As can be seen from Table 5, Moroccan-Dutch parents found all outlined causes of emotional problems less likely compared to native Dutch parents. Contrary to our hypothesis, Surinamese-Dutch parents were less likely to attribute causality to peer/school-related factors compared to native Dutch parents. Turkish-Dutch parents attributed greater causality to individual and family factors compared to native Dutch parents, which was inconsistent with our hypothesis.

Regarding parents' solutions to emotional problems, a multivariate effect of immigrant status was found as well, F(9, 1032) = 26.02, p < .001. Parental educational level was not significantly related to parents' lay beliefs about solutions to emotional problems, F(3, 342) = 2.53, p = .057. Univariate results showed differences between Dutch immigrants and native Dutch in passive solutions, F(3, 344) = 4.08, p = .007; active solutions, F(3, 344) = 86.49, p < .001; and environmental solutions, F(3, 344) = 5.28, p = .001. Post hoc tests showed that compared to the native Dutch parents, Turkish-Dutch, and Moroccan-Dutch parents scored significantly higher on passive solutions and also significantly lower on active solutions to emotional problems (see Table 5).

Among adolescents, no differences between Dutch immigrants and native Dutch emerged in lay beliefs about the causes of emotional problems, F(12, 1032) = 1.54, p = .104. However, differences between Dutch immigrant and native Dutch adolescents were found regarding solutions to emotional problems, F(9, 1035) = 2.70, p = .004. Univariate results indicated ethnic differences with regard to passive solutions, F(3, 345) = 4.58, p = .004, and environmental solutions, F(3, 345) = 2.98, p = .032, but not regarding active solutions, F(3, 345) = 0.22, p = .884. Post hoc tests revealed that Turkish-Dutch adolescents were more likely to agree with passive as well as environmental solutions to emotional problems compared to native Dutch adolescents (see Table 6). Consistent with our hypotheses, differences between Dutch immigrants and native Dutch were more pronounced among parents than among adolescents.

Table 5

Analyses of Covariance on Ethnic Differences in Parents' Lay Beliefs About Emotional

Problems and Attitudes Toward Mental Health Care (After Controlling for Parental Education

Level)

Belief/attitude	Native Dutch <i>M</i> ( <i>SE</i> )	Surinamese-Dutch <i>M</i> ( <i>SE</i> )	Turkish-Dutch <i>M</i> (SE)	Moroccan-Dutch <i>M</i> ( <i>SE</i> )
Beliefs about causes				
Individual (0–12)	6.57 (.21)	6.17 (.22)	7.72 (.22) <sup>a</sup>	5.57 (.23) <sup>a</sup>
Family (0–12)	6.23 (.24)	5.61 (.25)	7.06 (.25) <sup>a</sup>	5.33 (.25) <sup>a</sup>
Peer/school (0–8)	4.75 (.15)	4.10 (.15) <sup>a</sup>	4.63 (.15)	4.18 (.15) <sup>a</sup>
Environmental (0–12)	3.98 (.22)	4.09 (.23)	4.00 (.23)	2.98 (.24) <sup>a</sup>
Beliefs about solutions	` ′	` ′		` '
Passive (0–16)	2.43 (.37)	3.43 (.38)	4.17 (.38) <sup>a</sup>	3.98 (.39) <sup>a</sup>
Active (0–8)	6.79 (.22)	6.60 (.22)	2.26 (.22) <sup>a</sup>	5.47 (.23) <sup>a</sup>
Environmental (0-12)	7.54 (.31)	7.50 (.32)	8.40 (.32)	6.59 (.34)
Attitudes toward care	` ′	` ′		` '
Informal help (0–8)	4.60 (.26)	5.03 (.27)	2.54 (.27) <sup>a</sup>	3.57 (.28) <sup>a</sup>
Rejection of care (0–12)	1.83 (.32)	2.88 (.33)	2.40 (.32)	2.61 (.34)
Fear of care (0–16)	1.97 (.41)	3.56 (.43) <sup>a</sup>	2.70 (.42)	3.95 (.44) <sup>a</sup>

Note. In the left-hand column, the range of the possible scores are provided in parentheses.

# **Attitudes Toward Mental Health Care**

Regarding attitudes toward mental health care, multivariate analyses showed differences between Dutch immigrant and native Dutch parents,  $F(9,\ 1032)=8.72,\ p<.001.$  The covariate, parental education level, was not significantly associated with parents' attitudes toward mental health care,  $F(3,\ 342)=1.13,\ p=.335.$  The univariate results revealed ethnic differences in informal help,  $F(3,\ 344)=15.80,\ p<.001,$  and fear of care,  $F(3,\ 344)=4.40,\ p=.005.$  However, the effect of immigrant status on rejection of care was not significant,  $F(3,\ 344)=1.99,\ p=.116;$  indicating that immigrant Dutch and native Dutch parent had similar levels of rejection of care. Table 5 shows that Turkish-Dutch and Moroccan-Dutch parents scored significantly lower on informal help compared to native Dutch parents, which indicates

that native Dutch parents were more likely to report that they wanted to solve their problems themselves or to seek informal instead of professional help. Surinamese-Dutch and Moroccan-Dutch parents reported higher levels of fear of mental health care compared to native Dutch parents, indicating that these parents were more afraid of talking about their problems to care providers. This latter finding is partially in line with our hypothesis.

Multivariate results showed that immigrant status had no effects on attitudes toward mental health care among adolescents, F(9, 1029) = 0.88, p = .546. These results indicate that adolescents belonging to the four ethnic groups in our study (native Dutch, Surinamese-Dutch, Turkish-Dutch, and Moroccan-Dutch) did not significantly differ in their attitudes toward mental health care. Consistent with our hypotheses, differences between Dutch immi-

Table 6
Analyses of Variance on Ethnic Differences in Adolescents' Lay Beliefs About Emotional
Problems and Attitudes Toward Mental Health Care

Belief/attitude	Native Dutch <i>M</i> ( <i>SE</i> )	Surinamese-Dutch <i>M</i> ( <i>SE</i> )	Turkish-Dutch <i>M</i> (SE)	Moroccan-Dutch <i>M</i> (SE)
Beliefs about causes				
Individual (0–12)	5.73 (.22)	6.11 (.23)	5.85 (.23)	5.98 (.24)
Family (0–8)	4.54 (.18)	4.46 (.19)	4.13 (.19)	4.35 (.19)
Peer/school (0-8)	4.67 (.17)	4.20 (.18)	4.20 (.18)	4.28 (.18)
Environmental (0–16)	5.64 (.31)	6.04 (.33)	6.29 (.32)	6.12 (.33)
Beliefs about solutions	` '	, , ,	` ′	· · ·
Passive (0–16)	4.56 (.31)	5.41 (.33)	$6.23 (.33)^a$	5.39 (.34)
Active (0–8)	5.30 (.22)	5.22 (.24)	5.07 (.23)	5.31 (.24)
Environmental (0–12)	6.74 (.30)	6.57 (.31)	$7.60(.31)^{a}$	7.55 (.32)
Attitudes toward care	` '	, , ,	` ′	· · ·
Informal help (0–8)	4.82 (.20)	4.61 (.21)	4.51 (.21)	4.90 (.22)
Rejection of care (0–12)	4.93 (.31)	5.73 (.33)	5.48 (.33)	5.36 (.34)
Fear of care (0–16)	5.80 (.41)	6.26 (.43)	6.01 (.43)	6.05 (.44)

Note. In the left-hand column, the range of the possible scores are provided in parentheses.

<sup>&</sup>lt;sup>a</sup> Denotes a significant difference (p < .05) compared to the native Dutch reference group as indicated by post hoc tests (if the univariate results indicated significant differences between the ethnic groups).

<sup>&</sup>lt;sup>a</sup> Denotes a significant difference (p < .05) compared to the native Dutch reference group as indicated by post hoc tests (if the univariate results indicated differences between the ethnic groups).

grants and native Dutch were more pronounced among parents than among adolescents.

# Acculturation Orientations and Parental Lay Beliefs and Attitudes Toward Mental Health Care

Within the immigrant Dutch groups, multiple regression analyses were conducted to test whether orientations toward the Dutch or ethnic culture were associated with lay beliefs about emotional problems and attitudes toward mental health care (after controlling for ethnicity and parental education level). The results are shown in Table 7. Immigrant Dutch parents who were more strongly oriented toward the Dutch culture were less likely to agree with passive solutions to emotional problems and more likely to agree with environmental solutions to problems. Additionally, these parents reported less frequently that they wanted to solve their problems informally, and they were less likely to reject or to be afraid of mental health care. Immigrant Dutch parents who were more strongly oriented toward the ethnic culture were more likely to consider both passive and active solutions to cope with emotional problems and more likely to report that they wanted to solve their problems informally.

# Associations Between Lay Beliefs and Attitudes Toward Care and Mental Health Service Use

In three separate logistic regression analyses, beliefs about causes, beliefs about solutions, and attitudes toward care were added as predictors of mental health service use (i.e., among both immigrants and nonimmigrants). Among parents, results showed that neither the beliefs about causes nor the attitudes toward care were significantly associated with mental health service use after accounting for age, gender, parental education level, and Child Behavior Checklist (CBCL) internalizing problems. However, passive and active solutions of emotional problems were significantly

Table 7
Multiple Regression Analyses on the Associations Between
Dutch and Ethnic Culture Orientation Among Immigrant
Parents and Lay Beliefs and Attitudes Toward Mental
Health Care

Belief/attitude	Orientation Dutch culture β	Orientation ethnic culture β
Beliefs about causes		
Individual	ns	ns
Family	ns	ns
Peer/school	ns	ns
Environmental	ns	ns
Beliefs about solutions		
Passive	29	.16
Active	ns	.16
Environmental	.15	ns
Attitudes toward care		
Informal help	18	.14
Rejection of care	37	ns
Fear of care	38	ns

*Note.* Beliefs and attitudes were entered as dependent variables in separate regression analyses and were predicted by acculturation orientations toward the Dutch and ethnic culture (controlling for ethnicity and parental education level); ns = not significant.

associated with service use. Whereas passive solutions were negatively associated with service use, (odds ratio [OR] = 0.90, 95% confidence interval [CI] [0.82, 0.99]), active solutions were positively associated with mental health service use (OR = 1.12, 95% CI [1.00, 1.26]). Among adolescents, none of the lay beliefs nor attitudes toward mental health care were significantly associated with mental health service use.<sup>1</sup>

The next step was to examine whether parental beliefs about active and passive solutions could serve as a mediator of the association between ethnicity and mental health service use. In order to investigate this, we first analyzed the model with only the dummy variables of ethnicity (accounting for age, gender, parental education level, and CBCL internalizing problems) and then tested a model in which we also added the variables concerning beliefs about solutions to problems. As age, gender, and parental education level did not significantly predict mental health service use, these covariates were removed from the model again.

Results of the mediation analyses showed that the effects of ethnicity on mental health service use hardly decreased when adding lay beliefs about active and passive solutions to the model, Surinamese-Dutch: OR = 0.70, 95% CI [0.35, 1.41] to OR = 0.76, 95% CI [0.37, 1.55]; Turkish-Dutch: OR = 0.22, 95% CI [0.10, 0.52] to OR = 0.21, 95% CI [0.06, 0.70]; Moroccan-Dutch: OR = 0.39, 95% CI [0.16, 0.95] to OR = 0.42, 95% CI [0.16, 1.10]. Also, when accounting for ethnicity in the analyses, active and passive solutions did not significantly predict mental health service use anymore, passive: OR = 0.93, 95% CI [0.84, 1.03], and active: OR = 0.97, 95% CI [0.82, 1.14]. As a result, it can be concluded that the effects of ethnicity on mental health service use were not mediated by parental beliefs about active and passive solutions to emotional problems.

# Discussion

The current study was the first to show that Dutch immigrant and native Dutch parents rather than their adolescent children differ in lay beliefs about emotional problems and attitudes toward mental health care. For the parents, considerable differences between Dutch immigrants and native Dutch were found. In line with our hypothesis, differences were largest for those immigrant Dutch populations that were considered most culturally distinct from their native Dutch counterparts (i.e., Turkish-Dutch and Moroccan-Dutch). Finally, parents' acculturation orientations were found to be associated with their lay beliefs about emotional problems and attitudes toward mental health care.

# **Lay Beliefs About Emotional Problems**

Support for the hypothesis that immigrant Dutch parents would be more likely to make external causal attributions and less likely to make internal causal attributions to emotional problems compared to native Dutch parents was lacking. Turkish-Dutch reported higher scores on individual ("internal") causes and scored higher only on one out of three types of external causes compared to native Dutch parents (i.e., family causes). For Surinamese-Dutch parents, elevated scores were found only for one external cause

<sup>&</sup>lt;sup>1</sup> For reasons of space, nonsignificant results were not reported but can be requested from Esmée E. Verhulp.

(i.e., peers/school) as well. Finally, Moroccan-Dutch parents scored relatively low on all causes.

In line with the scarce literature available on this topic (Haslam et al., 2007; Sood et al., 2012; Yeh et al., 2004, 2005), our results suggest that a distinction between internal and external causes is too crude and variation between immigrant populations may be considerable. Lower scores on individual causes were found only for Moroccan-Dutch parents, but these parents showed a general tendency to score low on all outlined causes. In former studies, it has been proposed that thinking about causes of problems is only possible when the behaviors concerned are perceived as abnormal (Haslam et al., 2007). The lower likelihood of Moroccan-Dutch parents to pathologize the emotional problems of their children (Verhulp et al., 2013; Verhulp, Stevens, & Vollebergh, 2015) may result in a higher tendency of these parents to reject all outlined causes.

Turkish-Dutch parents, in contrast, scored relatively high on perceived individual and family causes of emotional problems. These findings may result from a more general tendency of Turkish-Dutch families to control and monitor their children, while at the same time stimulate their children to perform well and integrate into the Dutch society through achieving higher education (Pásztor, 2014). This, together with stressing the importance of the family may result in a strong tendency among Turkish-Dutch parents to focus on the individual capacities of their children and also to focus on the importance of family life (Arends-Tóth & Van de Vijver, 2008; Phalet & Güngör, 2009; Phalet & Schönflug, 2001). However, more research on lay beliefs about causes of emotional problems is needed to further understand the considerable differences between the immigrant populations. For example, future studies could also focus more specifically on proximal processes that may play a role in these lay beliefs, such as parenting behaviors.

Regarding the solutions to adolescents' emotional problems, our results were somewhat more in line with the expectation that immigrant parents would be likely to seek solutions in external instead of internal processes. In line with this notion, Turkish-Dutch and Moroccan-Dutch parents indicated, to a much lower extent compared to native Dutch parents, that trying to deal with the problems yourself (captured in the factor "active solutions") would be an effective way to solve emotional problems. In addition, Turkish-Dutch and Moroccan-Dutch parents more often advocated "passive solutions" (or solutions not directly associated with the problem itself) compared to native Dutch parents. On the one hand, and in line with the expectation formulated in the introduction, this result may reflect these parents' heightened notion of uncontrollability of emotional problems, which is consistent with a previous study conducted among Turkish college students in which participants indicated avoiding and ignoring the problem as strategies to deal with psychological problems effectively (Koydemir et al., 2010). However, as one of the items assessed the extent to which parents considered investing more in religion as a solution to this problem, this finding may also result from the important role religion plays in the lives of immigrant populations in the Netherlands (De Valk & Liefbroer, 2007; Merz, Özeke-Kocabas, Oort, & Schuengel, 2009).

## **Attitudes Toward Mental Health Care**

We also expected immigrant Dutch groups to have more negative attitudes toward mental health care compared to the native Dutch group due to cultural differences between the immigrant Dutch and native Dutch populations as well as the minority position of immigrants in the Dutch society. The results partly confirmed this hypothesis. Although no differences between ethnic groups were found with regard to the rejection of mental health care (providers, e.g., "mental health care providers have nothing to do with these problems"), Surinamese-Dutch and Moroccan-Dutch parents did report considerably higher levels of fear of mental health care compared to native Dutch parents. This fear partly focused on the expected shame it would bring to the family if others were to find out about these problems. More specifically, this fear of shame to the family has been suggested to be one of the reasons why immigrants or ethnic minority groups may be reluctant to use mental health care (Flink, Beirens, Butte, & Raat, 2013; Snowden & Cheung, 1990).

Remarkably, both Turkish-Dutch and Moroccan-Dutch parents also scored less on the items assessing the tendency to use informal networks to solve the problems or to solve them yourself. Whereas former theoretical notions as well as empirical research have suggested that immigrants may refrain from mental health care because they prefer help from their own informal network (Cauce et al., 2002; Health Council of the Netherlands, 2012; Koydemir et al., 2010; Seyfi et al., 2013), results from a focus group study in the same immigrant groups in the Netherlands revealed that sometimes, formal mental health care providers who provide anonymous and confidential help facilitate mental health care utilization. Due to (the fear of) shame and gossip, anonymous mental health care providers may sometimes be preferred to informal sources of help among ethnic minority groups (Flink et al., 2013; Flink, Beirens, Butte, & Raat, 2014).

# **Acculturation Orientations**

Furthermore, within the immigrant Dutch populations, parents' orientations toward the Dutch and ethnic culture were clearly associated with their lay beliefs and attitudes toward mental health care. As lay beliefs about mental health problems are thought to be influenced by one's cultural background (e.g., Kleinman, 1980), it is not surprising that orientations toward the receiving and ethnic culture are related to these lay beliefs and attitudes after accounting for ethnicity. In fact, these acculturation orientations are relevant to our understanding of the variation within immigrant groups. In this study, most associations were in the hypothesized direction. In line with our expectations, stronger orientations among immigrant Dutch parents toward the Dutch culture were associated with less-passive solutions to emotional problems, with less fear of care, with lower rejection of care, and with a lower preference for informal compared to formal help. Additionally, whenever immigrant Dutch parents were more strongly oriented toward their ethnic culture, they were more likely to agree with passive solutions to emotional problems and to prefer informal (instead of formal) help. Contrary to our expectations, a stronger orientation toward the Dutch culture was also associated with more environmental solutions to problems and a stronger orientation toward the ethnic culture was associated with a higher tendency to agree with active solutions to emotional problems.

## **Associations With Mental Health Service Use**

Although former research has found clear associations between lay beliefs as well as attitudes toward mental health care and mental health service use (Yeh et al., 2005), this study only found a relationship between active and passive solutions to emotional problems and mental health service use (as reported by parents). Active and passive solutions to adolescent emotional problems seem to relate rather directly to the intention to search for (professional) help (e.g., "learn how to deal with difficult things" and "nobody can do anything"). Therefore, it seems logical that the strongest associations were found for these variables and not for lay beliefs reflecting general parental ideas about the causes of adolescents' emotional problems. Still, there might be at least two reasons why we found no associations between both causes for emotional problems as well as attitudes toward care and mental health service use in the present study, and no evidence for mediation was found. First, the variation in the dependent variable was rather small for some ethnic groups (i.e., mental health service use was rather low in some ethnic groups), which made it rather difficult to find support for such associations. Second, we examined lay beliefs about emotional problems using a fictitious vignette while a previous study by Yeh and colleagues (2005), which revealed associations between lay beliefs and mental health service use, examined parental lay beliefs concerning their children's own problems. Parental beliefs regarding their children's own problems may be more strongly related to mental health service use, as these are concrete beliefs based on actual child problem behavior.

# Limitations

The findings of the present study need to be interpreted in the light of the following limitations. First, adolescents' lay beliefs about and attitudes toward care were assessed in the first phase of the study, whereas parents' lay beliefs were assessed in Phase 2. However, since we examined beliefs using a fictitious vignette, the answers can be considered to represent general health beliefs, which are thought to be relatively stable over time (Kleinman, 1980). This suggests that the fact that parental reports were retrieved more than 1 year later cannot explain the differential findings for the adolescents and their parents. Among parents, associations among lay beliefs, attitudes, and mental health service use were assessed at one point in time, whereas this was not the case for their children. As a result, stronger associations could be expected among parents. However, for both adolescents and their parents, the associations among beliefs, attitudes, and mental health service use were modest.

Second, as mentioned above, we used a vignette to examine lay beliefs. This might have influenced the associations with mental health service use, as the lay beliefs did not focus on the children's own emotional problems. Using a vignette enabled us to examine differences between ethnic groups, whereas examining lay beliefs about the children's own emotional problems may be hampered by ethnic differences in the extent to which parents recognize their children's emotional problems (Verhulp et al., 2013).

Furthermore, the number of items used to measure various constructs was rather limited in the current study (resulting in a few low internal consistencies), and we did not include a scale representing positive attitudes toward mental health care in our study. As a result, positive attitudes toward mental health care

could only be expressed by disagreeing with negative items. As we were primarily interested in ethnic differences in attitudes toward mental health care, the results still showed that native Dutch parents were less likely to endorse negative attitudes compared to the immigrant Dutch parents in our study. Future studies could incorporate a scale representing positive attitudes and use more items to measure different constructs, resulting in higher internal consistencies of the scales.

## Conclusion

In summary, the findings of the current study indicated that differences in lay beliefs and attitudes toward mental health care between Dutch immigrants and native Dutch are to be expected. Furthermore, differences in lay beliefs and attitudes toward mental health care also emerged between different immigrant groups, between generations, and within immigrant groups. Hence, this variation between immigrant groups, between generations, and within groups should be accounted for in future research to be able to study the multifaceted effect of culture on lay beliefs, attitudes toward, and use of mental health care more consistently.

Finally, the findings of the current study may also have several practical implications. On the one hand, our findings suggest that lay beliefs and attitudes toward mental health care may not be as important for the actual mental health care use of immigrant adolescents in the Netherlands as expected. Thus, interventions aimed at increasing the mental health care use of these adolescents should potentially focus on other processes (such as the extent to which parents identify emotional problems and disorders for their children; see Verhulp et al., 2013). Still, replication studies on this topic are necessary, especially considering the specific character of the current study (i.e., using a fictitious vignette about child problem behavior instead of asking parents about their lay beliefs on their children's own problems). On the other hand, our study did find considerable differences between immigrant and nonimmigrant (adult) populations in lay beliefs and attitudes toward mental health care. Gaining insight in these lay beliefs and attitudes may be of importance to provide successful mental health care (e.g., Bhui et al., 2006). The Cultural Formulation Interview, for example, may be a relevant instrument for assessing clients' lay beliefs and attitudes toward mental health care in clinical practice (American Psychiatric Association, 2013).

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